FIELDS OF CRISIS

(GS 3: Indian Economy and issues relating to planning, mobilization, of resources, growth, development)

Context:

- The farmers' movement invites country to revisit the trajectory of India's agriculture so as to understand its real problems.
- Beginning in the mid-1960s, India and, especially, Punjab experienced a massive productivity boom as a result of widespread adoption of Green Revolution technologies.
- This transition was driven by public investment in irrigation and market infrastructure.

The wheat rice monoculture:

- Green revolution essentially becomes successful because of minimum support price, which incentivized the cultivation of wheat and rice.
- Area under paddy cultivation in Punjab jumped from 4.8 per cent of total cropped area in 1960-61 to 39.19 per cent in 2018-19.
- Similarly, wheat area share increased from 27 per cent to 45 per cent.
- The production of wheat in Punjab during the Green Revolution period increased by over 7 per cent annually, with yield increases accounting for a little over half of that growth.
- By contrast, other crops began to decline. In 1960-61, Punjab had a total of 21 crops in the cropping system which fell to nine in 1991.
- The Green Revolution had other adverse long-term economic and ecological effects.
- Partly because of water scarcity, growth rates of yield have decreased to 2 per cent per year for wheat; and are stagnant or negative for rice.
- The wheat-rice cropping monoculture has not only led to depletion of groundwater levels, but also to the excessive use of chemical pesticides, posing a threat to biodiversity.

Land reform: An unachieved target:

- The absence of proper land reforms has worsened the challenges in rural India.
- In Punjab and Haryana, the bottom 50 per cent of the smallholders owned 0.47 per cent of the land in 1953-54.
- The figure increased to 0.52 per cent in 1961-62 but fell to 0.28 per cent by 1971-72 before increasing marginally over the next decade to end at 0.32 per cent by 1982.
- The number of households in Punjab without land or on sub-marginal land holdings (50.99 acres) has only grown.
- In the same period, "middle peasants" saw their share of land holdings rise from 22.69 per cent to 34.19 per cent of total land under cultivation.
- The 10th agriculture census of 2015-16 shows that small and marginal farmers with less than two hectares of land account for 86.2 per cent of all farmers in India but own just 47.3 per cent of the crop area.
- In comparison, semi-medium and medium land holding farmers (owning between 2-10 hectares of land) account for 13.2 per cent of all farmers, but own 43.6 per cent of crop area.

Consumer expenditure decline:

- The National Statistical Office's (NSO) household consumer expenditure survey for 2017-2018 shows that inflation-adjusted consumer spending in 2017-18 fell for the first time in four decades.
- India's monthly per capita consumption expenditure in FY 2017-18 was Rs 1,446, down 3.7 per cent from Rs 1,501 in 2011-12, the last time the NSO conducted this survey.
- The average money spent every month by rural residents in 2017-18 was 8.8 per cent less than six years earlier, while urban consumption was up 2 per cent.
- The disparity in land holdings coupled with an exacerbating rural-urban divide points to rural distress.

The Bihar experiment:

- A study by the National Council of Applied Economic Research (NCAER) shows that the Bihar experiment of scrapping APMC markets in 2006 has not improved its agricultural performance.
- Farm growth in the state averaged 2.04 per cent, lower than the all-India average of 3.12 per cent in the period between 2001-02 and 2016-17.
- However, the post-reforms period does show an increase in the average wholesale prices of major crops.
- The average price of paddy increased by 126 per cent, wheat by 66 per cent, and maize by 81 per cent, the authors remarked.

- But the simultaneous increase in volatility of prices affected the “stability of farmers’ income”, ultimately affecting their ability to invest and diversify.
- This instability in prices could be a reason for Bihar’s lower agricultural growth.
- Another analysis by the Chaudhary Charan Singh National Institute of Agriculture Marketing (CCSNIAM) conducted in 2011-12, states that after APMC market yards were abolished in the state, there has been hardly any private investment in new marketplaces.

Beyond new farm laws:

- The three contentious farm bills put together do not address these aspects properly but seek to deregulate and dismantle the APMC network.
- If market accessibility is a major issue, the state should help the smallholder farmers to have access to the market. For that, investments are needed.
- Public sector investment in agriculture, as per the Reserve Bank of India, has been around 0.4 per cent of the GDP between 2011-12 and 2017-18.
- This is woefully inadequate for a sector on which 60 per cent of the population directly or indirectly depends for livelihood.

Public investment: needed:

- Public investment on infrastructure and MSPs needs to increase to improve access of smallholder farmers to APMCs, as the private sector will not replace the state in this matter, as is evident from the Bihar example.
- This, coupled with an agroecological transition which includes crop diversification, will ensure sustainability for Indian agriculture.
- Here again, state intervention and public policy support could be a part of the solution.
- In June 2018, the Andhra Pradesh government announced an ambitious programme to bring all 80 lakh hectares of its cultivable land under agroecological farming by 2024.
- Agroecology emphasises minimising external, artificial inputs by using resources available in the local ecosystem.
- Only one year after its introduction in Andhra, a study by Azim Premji University showed that yields had increased by 11 per cent in paddy and 79 per cent in brinjal even while following sustainable agro-ecological principles.

Conclusion:

- Government need to bring the much-needed investments in agro-processing, warehousing and cold storage supply chains.
- Strategic and systematic technological support and government schemes will bring smart farming technologies and endorse its implementation.

- Thus by advancing agriculture and increasing public investment along with land reforms, will provide much needed thrust to agriculture.