Agro-Economic Alerts

Aiding the future of India's farmers and agriculture

Source: https://www.skymetweather.com/content/wp-content/uploads/2020/02/PMFBY-1-952x500.jpg

For kind attention of:

The Hon'ble Prime Minister's Office,
the Ministry of Agriculture and Farmers' Welfare,
and all others interested

Emerging Critical Situations and Threats in India's Agricultural Economy

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- Empirical and evidential inferences divulge to the fact that there exists huge difference between the premium collected and the amount disbursed. Further, it is the private insurance companies that mostly get benefited. In the last few years, the occurrence of natural calamities in Uttar Pradesh has become less frequent, although the farmers, state government, and central government have been paying hefty premiums benefiting mostly the private insurance companies. Consequently, there is need for the state governments to check the oligopolistic behaviour of these insurance companies. The state governments could set up vigilance or regulatory bodies to facilitate proper functioning as well as proper channelization of public resources.
- The 'Beed Model' initiative by the Maharashtra government could serve as template for wider replication. Under this concept the insurance firms need not entertain loss claims above 110 percent of the gross premium. The state government would bear the cost of claims above 110 percent of the premium collected to insulate the insurer from the losses (bridge amount). However, if the compensation is less than the premium collected, the insurance companies would keep 20 percent of the amount as handling charges and reimburse the rest to the state government (premium surplus). This will reduce the burden of financing PMFBY on the state.

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Breaking Ground: Leveraging West Bengal for National Edible Oil Self-sufficiency

Key Highlights

- Edible oils, a vital component of Indian cuisine, serve as significant sources of dietary fats essential for meeting human nutritional requirements. India stands as one of the major oilseed producers globally and concurrently ranks as the world's second-largest consumer of vegetable oil. Over the years, the average annual per capita consumption of edible oil in India has surged remarkably from 6.2 kg in 1986–1987 to 18.2 kg in 2020–21[1]. This upward trend is expected to persist due to factors such as population growth, rapid urbanization, and evolving dietary preferences.
- Oilseed production in India remains insufficient to meet the domestic demand for edible oil, despite a 43 percent increase between 2015–16 and 2020–21. This disparity necessitates significant imports of edible oil[2]. Over time, India's reliance on edible oil imports has surged—from 28 percent in 1986-87 to 54.9 percent in 2020-21[1]. Unfortunately, this heavy dependence has led to upward pressure on agricultural price[3] and contributed to domestic Wholesale Price Index (WPI) inflation[4]. To mitigate vulnerability to global pricing fluctuations, concerted efforts are required to boost domestic edible oil production.
- In India, the diverse agro-climatic conditions of West Bengal foster the cultivation of all nine oilseeds: Groundnut, Rapeseed-mustard, Soybean, Sunflower, Sesame, Safflower, Niger, Castor, and Linseed[5]. To assess West Bengal's current oilseed production status and explore

strategies for enhancing the state's contribution to the country's overall oilseed production, this study analyzed data from both the Reserve Bank of India[6] and the Government of West Bengal[7].

Figure 2: Mustard Cultivation in West Bengal

Source: Sreejit Roy, AERC Visva-Bharti

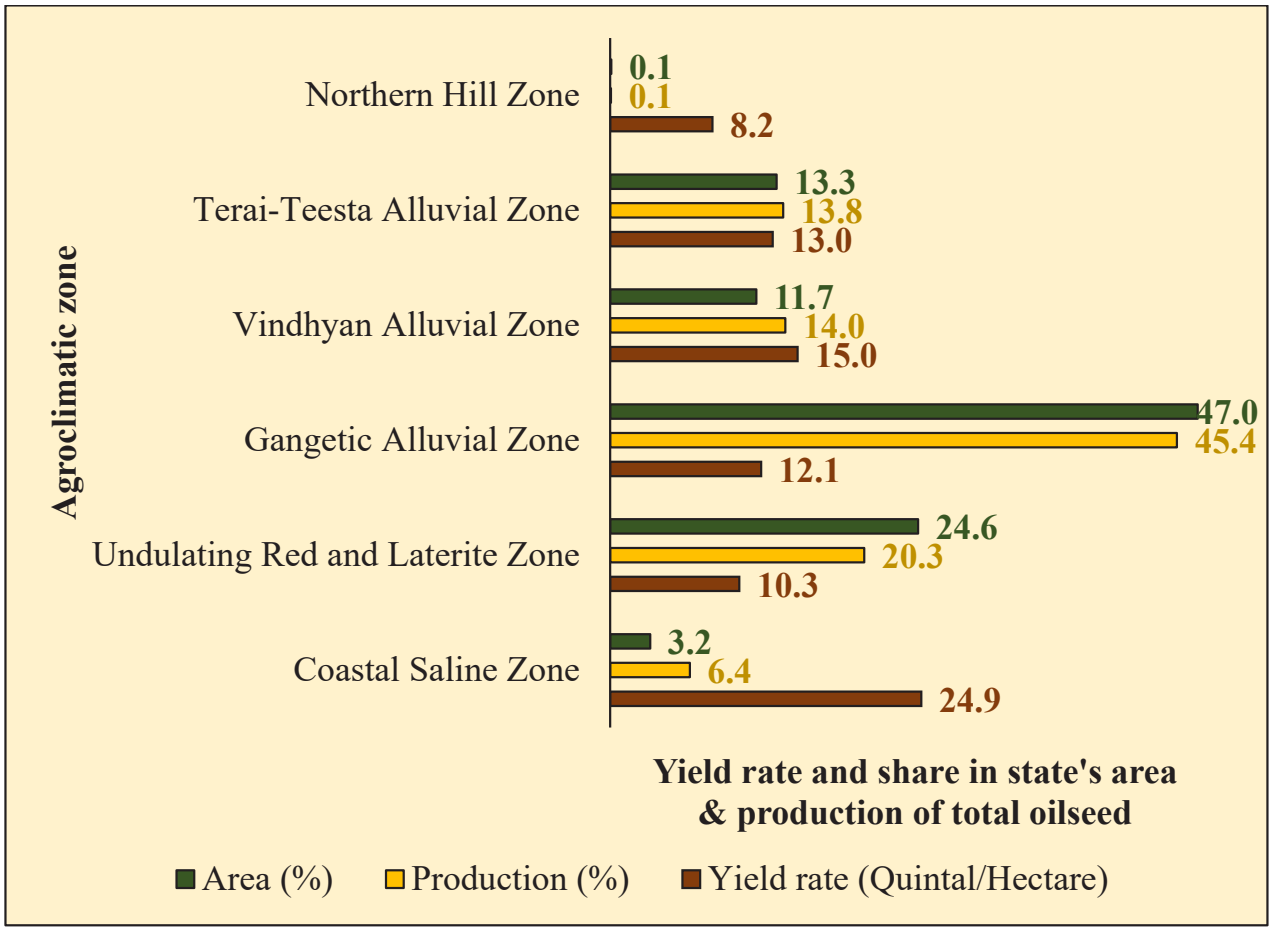
Observations

- West Bengal leads the top five Indian states in terms of the net value added to the economy by agriculture from 2013–2014 to 2020–2021, with the highest compound annual growth rate (CAGR) of both the area under oilseed cultivation and the production from 2010–2011 to 2019–2020, at 4.03 and 4.16 percent, respectively. Regrettably, the CAGR of oilseed production per hectare in West Bengal during the same period stands at a mere 0.13 percent.

- During the period from 2017-2018 to 2021-2022, the "Decomposition Analysis" reveals that the total oilseed production in West Bengal can be broken down into three components: Yield Effect, Area Effect, and Interaction Effect. Despite the positive contributions of both yield rate and area, it is the area effect that predominantly drives the increase in oilseed production. Consequently, West Bengal must focus on enhancing productivity to meet the competing demands of various crops on agricultural land.

- In 2021-2022, as shown in Figure 1, the yield rate of the Gangetic Alluvial Zone falls below that of the Coastal Saline Zone, the Vindhyan Alluvial Zone, and the Terai-Teesta Alluvial Zone. Remarkably, despite this lower yield rate, the Gangetic Alluvial Zone constitutes the majority of West Bengal's total oilseed cultivation area. Conversely, the undulating Red and Laterite Zone, while contributing the second-highest percentage to the overall production area, suffers from an alarmingly low yield rate of 10.3 quintals per hectare. These disparities underscore the need for targeted efforts to enhance productivity and optimize resource allocation across different agricultural zones.

Graph 1: Agroclimatic zone-wise yield rate and share in state's area & production of total oilseed in 2021-2022



Source: Directorate of Agriculture, Government of West Bengal

- Moreover, the Coastal Saline Zone contributes a mere 3.2 percent to the state's total oilseed farming area despite boasting the highest yield rate of 24.9 quintals per hectare.
- In summary, it becomes evident that, with the exception of the Northern Hill Zone, agroclimatic zones with a larger share of oilseed cultivation areas tend to exhibit lower oilseed productivity and vice versa. Consequently, policy efforts should prioritize enhancing oilseed productivity in the Gangetic Alluvial Zone and the Undulating Red and Laterite Zone, which collectively account for over 70 percent of the state's total oilseed cultivation area. Additionally, expanding oilseed cultivation in the Coastal Saline Zone, known for its remarkable oilseed productivity, would be a strategic move.

Actions Suggested

Strategies recommended for enhancing oilseed productivity and expanding cultivation in different zones of West Bengal

- **Gangetic Alluvial Zone and Undulating Red and Laterite Zone:**
- High-Yielding Varieties: Introduce high-yielding, early-maturing oilseed varieties that thrive in these zones.
- Pest and Disease Resistance: Develop varieties resistant to common pests and diseases prevalent in these regions.
- Selective Mechanization: Encourage the adoption of selective mechanization to improve production efficiency.

- Crop Management: Disseminate information about improved crop management practices.
- Micronutrient Utilization: Educate farmers on optimal micronutrient usage for healthier crops.
- **Coastal Saline Zone:**
- Diversification to Oilseeds: Promote diversification by encouraging farmers to cultivate oilseeds.
- Input and Price Support: Provide effective input subsidies and fair price support to incentivize oilseed cultivation.
- Irrigation Expansion: Increase the area under irrigation by optimizing water resources.
- Market Opportunities: Create avenues for selling oilseed produce at fair prices.
- Warehouse Receipt-Based Financing: Facilitate financing through warehouse receipts.

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