

Cultivating Tomorrow: India's Agricultural Transformation in 2024-25

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Introduction

The agricultural sector in India, a cornerstone of the national economy and the primary source of livelihood for a significant portion of its population, demonstrated robust performance and strategic advancements in 2024-25. This period was marked by record foodgrain production, substantial progress in farmer welfare initiatives, widespread adoption of digital technologies, and a deepening commitment to sustainable agricultural practices. The Government of India's multi-faceted approach aligns with the ambitious vision of "Viksit Bharat@2047" and the imperative of "Doubling Farmers' Income," focusing on integrated development across the agricultural value chain.

Key strategic directions have included strengthening financial inclusion through direct income support and accessible credit, accelerating technological integration for enhanced efficiency and transparency, promoting resource efficiency and climate resilience, and fortifying value chains and market linkages. These efforts collectively aim to foster a more productive, sustainable, and inclusive agricultural ecosystem, capable of addressing both domestic food security and global trade demands. The report details the significant strides made in these areas, underscoring a dynamic period of transformation for Indian agriculture.

India's Agricultural Landscape: Overview 2024-25

Agriculture's Contribution to the National Economy

Agriculture continues to play a pivotal role in India's economic fabric, serving as a foundational sector that sustains a large segment of the population. In 2022-23, the sector engaged 54.6% of the total workforce, highlighting its immense social significance. Furthermore, provisional estimates for 2023-24 indicate that the agriculture and allied sectors contributed approximately 17.7% to India's Gross Value Added (GVA) at current prices.

The substantial proportion of the workforce engaged in agriculture, contrasted with its GVA contribution of less than one-fifth, points to an underlying challenge concerning per-worker productivity within the sector. This disparity

underscores the necessity for sustained efforts to enhance agricultural output per individual, alongside strategies for diversifying income sources for farmers. Such an approach is crucial for facilitating the transition of surplus labor into more productive non-farm sectors, a key objective articulated within the broader vision of doubling farmers' income. Addressing this structural imbalance is fundamental to achieving comprehensive rural prosperity and equitable economic development.

Land Use and Irrigation Statistics

Analysis of land use patterns for 2022-23 reveals that approximately 59% of the country's reported area is dedicated to agriculture. The net sown area stood at 140,705 thousand hectares, with a cropping intensity recorded at 155.9%. Irrigation plays a critical role in agricultural productivity, with the net irrigated area reaching 79,312 thousand hectares during 2022-23. This accounted for 55.75% of the gross cropped area, underscoring the significant reliance on irrigated farming practices across the nation.

Empowering Farmers: Financial Security and Welfare

The scale of PM-KISAN's impact is substantial. Over Rs. 3.46 lakh crore has been disbursed through 18 installments since its inception, benefiting more than 9.58 crore farmers during the 18th installment period (August – November 2024).

Kisan Credit Card (KCC) scheme, introduced in 1998, has been instrumental in providing timely and hassle-free access to affordable credit for farmers. Its scope was expanded in 2018-19 to include the working capital needs of fisheries and animal husbandry sectors, with the collateral-free loan limit increased to ₹1.6 lakh. As of March 31, 2024, the country reported 7.75 crore operational KCC accounts, with a total loan outstanding of Rs. 9.81 lakh crore.

Recognizing the importance of innovation in modern agriculture, the AgriSURE (Agri Fund for Start-ups & Rural Enterprises) Fund was launched in collaboration with NABARD. This blended capital fund, with a corpus of Rs. 750 crore, aims to support agri-startups and rural enterprises, thereby attracting

private investment into the sector and fostering technological advancements.

The Restructured Weather Based Crop Insurance Scheme (RWBCIS) complements PMFBY by providing protection against adverse weather incidences, such as deficit/excess rainfall or temperature fluctuations, for crops where traditional yield assessment is challenging.

The implementation of PMFBY is increasingly technology-driven to reduce delays in claim payments. The CCE Agri App facilitates the real-time capture of Crop Cutting Experiments (CCEs) data on smartphones, ensuring prompt and accurate yield assessment. Furthermore, the Weather Information Network & Data System (WINDS) is a pioneering initiative to establish a comprehensive network of Automatic Weather Stations (AWS) and Rain Gauges

Cultivating Productivity: Production Milestones and Diversification

The agricultural year 2023-24 witnessed significant production milestones. Total foodgrain production in the country is estimated at a record 3322.98 Lakh tonnes, surpassing the previous year's output and the average production over the last five years. This achievement includes record production of Rice at 1378.25 Lakh tonnes and Wheat at 1132.92 Lakh tonnes. Total oilseeds production for 2023-24 is estimated at a record 396.69 Lakh tonnes, although this figure is slightly lower than the production achieved in 2022-23. The Mission for Integrated Development of Horticulture (MIDH) operates as a Centrally Sponsored Scheme, dedicated to fostering the holistic growth of the horticulture sector, encompassing fruits, vegetables, root & tuber crops, mushrooms, spices, and flowers. For 2024-25, a substantial budget allocation of Rs. 2065.99 crore has been earmarked for MIDH, underscoring the government's commitment to this high-value segment of agriculture.

Sweet Revolution: Advancements in Beekeeping and Honey Production

The National Beekeeping & Honey Mission (NBHM), launched under the AatmaNirbhar Bharat initiative, is driving the "Sweet Revolution" in India. This Central Sector Scheme, extended until 2025-26 with a substantial remaining budget, focuses on the overall promotion and development of scientific beekeeping. The mission's comprehensive approach

includes awareness campaigns, capacity building and training programs, with a particular emphasis on empowering women through beekeeping activities.

Sustainable Agriculture: Nurturing Land and Resources

The National Mission for Sustainable Agriculture (NMSA) is a pivotal initiative aimed at promoting climate-resilient and sustainable agricultural practices across India. The NMSA, complemented by initiatives like Rainfed Area Development (RAD) and Agroforestry, forms a cohesive and comprehensive strategy for fostering sustainable and climate-resilient agriculture. The VCM initiative, in particular, represents an innovative approach to creating new income streams for farmers by incentivizing the adoption of sustainable practices that sequester carbon or reduce greenhouse gas emissions.

Water Use Efficiency: Per Drop More Crop (PDMC)

This initiative has demonstrated substantial impact, with a total area of 90 lakh hectares brought under micro irrigation from 2015-16 to 2023-24. This represents a remarkable 92% increase compared to the coverage achieved in the nine years prior to the PDMC period.

Promoting Organic and Natural Farming

Paramparagat Krishi Vikas Yojana (PKVY)

The Paramparagat Krishi Vikas Yojana (PKVY) promotes organic farming through a cluster-based approach, typically involving a minimum cluster size of 20 hectares, with states encouraged to adopt 1000 hectares in plain areas and 500 hectares in hilly regions to facilitate organic produce marketing. The Mission Organic Value Chain Development for North Eastern Region (MOVCDNER) is specifically designed for the North Eastern states. It focuses on developing commodity-specific, certified organic production clusters in a value chain mode, aiming to connect growers with consumers and support the development of export markets for organic produce.

Digital Agriculture Mission: Building the AgriStack

This initiative represents an evolution from the earlier National e-Governance Plan in Agriculture (NeGP-A) and is strategically aligned with the broader vision of "Viksit Bharat@2047". The mission's core objective is to establish a robust digital agriculture ecosystem that fosters innovative, farmer-centric

digital solutions and ensures the timely provision of reliable crop-related and farmer-specific information. Digital Crop Estimation and Data-Driven Decision Making -Advancements in digital technology are also transforming crop estimation and enabling more data-driven decision-making in agriculture. The integration of advanced technologies like remote sensing, AI/ML models (such as those under FASAL 2.0), and real-time ground data collection through DGCEs and Krishi-DSS for forecasting and monitoring signifies a strong move towards evidence-based policymaking.

Strengthening the Value Chain: Infrastructure and Market Linkages

The Agriculture Infrastructure Fund (AIF), launched under the Aatmanirbhar Bharat Package, serves as a crucial mechanism for mobilizing investment in agricultural infrastructure. It provides medium-to-long-term debt financing for viable projects related to post-harvest management infrastructure and community farming assets, offering interest subvention and credit guarantee support.

Agricultural Marketing Reforms and e-NAM Integration

To foster a more accessible and competitive agricultural market, reforms have been actively promoted by encouraging states to adopt the Model Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017 (APLM Act). This act aims to provide farmers with greater choices for selling their produce and ensures transparent bidding processes. To encourage widespread adoption of these reforms, a system of Reform Indexing has been introduced, fostering healthy competition among states. Formation and Promotion of 10,000 Farmer Producer Organizations (FPOs)

Quality, Research, and Human Capital Development

Maintaining the quality of agricultural inputs is paramount for ensuring productivity and

safeguarding farmer investments. The Central Fertilizer Quality Control & Training Institute (CFQC&TI) plays a vital role in this regard, responsible for the inspection and analysis of both indigenous and imported fertilizers. It also provides essential training to State Enforcement Officers on fertilizer quality control. In 2024-25 (up to January 31, 2025), CFQC&TI achieved 100% of its targets for inspection and analysis of fertilizer samples and exceeded its training targets by 122%, demonstrating its commitment to quality assurance.

Conclusion

The 2024-25 period marks a significant chapter in India's agricultural journey, characterized by transformative growth and a steadfast commitment to building a resilient and prosperous sector. Record foodgrain production, coupled with strategic interventions in farmer welfare, underscores the nation's dedication to ensuring food security and enhancing rural livelihoods. The substantial disbursement of funds through schemes like PM-KISAN, benefiting millions of small and marginal farmers, has provided crucial income stability and liquidity. The accelerated adoption of digital technologies, exemplified by the Digital Agriculture Mission and its components like AgriStack, AI-powered chatbots, and advanced crop estimation systems, is fundamentally reshaping agricultural governance and empowering farmers with real-time information and service. Looking ahead, the Indian agricultural sector is poised for continued growth, driven by sustained digital transformation, enhanced climate resilience strategies, and farmer-centric policies. The synergistic impact of these diverse initiatives is expected to foster a more productive, sustainable, and equitable agricultural landscape, contributing significantly to the vision of a developed India.
