



## Government Schemes for Agriculture and Farmers Strengthening India's Agricultural Backbone

**Abdulgani Nabooji<sup>1</sup>, Mr.  
Mallikarjun Koli<sup>2</sup>, Anil  
Kumar<sup>3</sup>, Sudha Darbha<sup>4</sup>**

<sup>1</sup>SMS (Scientist) Department of  
Agronomy, Agriculture  
Extension Education Centre  
Bheemarayangudi, University of  
Agriculture Science Raichur  
Karnataka

<sup>2</sup>Assistant Professor, Department  
of Agronomy, R.C.S.M College  
of Agri. Business Management,  
Sangli. (M.S)-416416

<sup>3</sup>Assistant Professor, Department  
of Agronomy, School of  
Agriculture, Eklavya University  
Damoh, Madhya Pradesh-  
470661

<sup>4</sup>Founder, Orion Consultants,  
Near NIT Garden, Nagpur (MS)  
– 440022



Open Access

### Article History

Received: 04. 04.2025

Revised: 08. 04.2025

Accepted: 13. 04.2025

This article is published under the  
terms of the [Creative Commons  
Attribution License 4.0.](https://creativecommons.org/licenses/by/4.0/)

### INTRODUCTION

Agriculture is the backbone of India's economy with over half the population being employed in farming and contributing massively to GDP and food security. In appreciation of the key position occupied by farmers and agronomy-the art of agriculture and soil use-the government of India has initiated several schemes aimed at improving farming communities and developing agriculture. These programs try to overcome the fundamental challenges like low productivity, disintegrating land holdings, climate change, poor market linkages, and inadequate infrastructure. This article presents a holistic view of the key government programs that are committed to enhancing agronomic practices and farmer wellbeing in India.

#### 1. Financial Assistance and Income Support

##### 1.1 PM-Kisan Samman Nidhi (PM-KISAN)

Released in 2019, PM-KISAN gives direct income support of ₹6,000 annually in the form of three equal installments to all concerned small and marginal farmers. This cash transfer brings flexibility and ensures liquidity to undertake sudden and recurring farm and household expenditures, particularly at sowing and harvesting time.

##### 1.2 Kisan Credit Card (KCC) Scheme

The KCC program 1998, provides short-term farm credit to farmers at reduced interest rates, allowing them to buy seeds, fertilizers, pesticides, and other inputs. Interest subvention and insurance cover are provided by the government under this scheme, reducing reliance on informal sources of credit.



Source: Tractor Guru

## **2. Technological and Agronomic Improvement**

Technological advancements and enhanced agronomic techniques are essential for enhancing agricultural productivity and promoting sustainability. The Government of India has launched various schemes to make farming modern and assist farmers in embracing scientific approaches and technologies.

### **2.1 Paramparagat Krishi Vikas Yojana (PKVY)**

Paramparagat Krishi Vikas Yojana (PKVY) was initiated in 2015-16, As part of the National Mission for Sustainable Agriculture, PKVY encourages organic farming based on traditional knowledge and agro-ecological principles. The scheme provides incentives for cluster-based organic cultivation, typically in groups of 20 hectares, to facilitate group-level management of inputs and marketing. Assistance with organic inputs, certification, training, and awareness activities is provided. PKVY ensures a decreasing reliance on chemical fertilizers and pesticides, enhanced fertility of the soil, and following eco-friendly agricultural practices, ultimately leading to the improvement of crop quality and getting premium market price.

### **2.2 National Mission on Sustainable Agriculture (NMSA)**

National Mission for Sustainable Agriculture (NMSA) was initiated in April 2014. NMSA addresses agriculture-related climate change issues through climate-resilient agricultural practices. Precision irrigation (e.g., drip and sprinkler), soil management through Soil Health Cards, rainwater harvesting, and integrated farming systems are its key components. The mission is premised on judicious use of resources, crop diversification, and adaptive technology to reduce vulnerability and enhance the sustainability of farm systems.

### **2.3 Sub-Mission on Agricultural Mechanization (SMAM)**

SMAM seeks to provide small and marginal farmers access to modern farming machinery. It provides financial assistance for the procurement of tools and equipment and establishes custom hiring centers and mechanization centers. Such initiatives reduce the dependency on labor, enhance efficiency, and improve productivity in overall farming operations.

## **3. Soil and Water Management**

Soil and water management is essential to enhance productivity and sustain long-term

agricultural sustainability. The Government of India has initiated a number of schemes to fulfill these basic requirements.

### **3.1 Soil Health Card Scheme**

In 2015, the Soil Health Card (SHC) Scheme is a flag ship program for promoting judicious use of fertilizers and improving soil fertility. It involves taking the soil samples and testing them in government-approved laboratories and giving a comprehensive card to farmers along with some recommendations on nutrient management. It supports balanced application of fertilizers, minimizes the cost of inputs, and improves crop quality and yield. Through the promotion of soil health awareness, the scheme plays an important part in enhancing productivity as well as sustaining agriculture.

### **3.2 Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)**

PMKSY, which was launched in 2015 with the objective of "Har Khet Ko Pani", focuses on enhancing irrigation coverage and water use efficiency. Micro-irrigation techniques such as drip and sprinkler systems are promoted by the scheme to reduce wastage of water and enhance the use of resources. It also facilitates the construction of water harvesting structures, canal rejuvenation, and watershed development. Convergence with other rural development schemes enables PMKSY to enhance the irrigation system, particularly for marginal and small farmers.

## **4. Insurance and Risk Management**

Indian agriculture is extremely prone to natural and climatic risks. To ensure minimum financial losses and increase resilience for farmers, the government has initiated insurance-based schemes that would ensure timely relief in the event of crop failures.

### **4.1 Pradhan Mantri Fasal Bima Yojana (PMFBY)**

Introduced in 2016, PMFBY offers insurance coverage to farmers for crop loss on account of natural disasters, pests, and diseases. At minimal premium rates (2% for Kharif, 1.5% for Rabi, and 5% for commercial/cultivation crops), the program makes coverage inexpensive. It delivers assured settlement of claims within a time frame, thus offering an essential safety net to farmers and triggering sustained investment in agriculture.

## 4.2 Restructured Weather-Based Crop Insurance Scheme (RWBCIS)

RWBCIS Launched in 2016 offers weather-index-based insurance such as rainfall, temperature, humidity, and wind. It insures farmers against natural calamities like drought, floods, unseasonal rains, and frost. With the use of real-time weather data for claim assessment, the scheme ensures transparency, efficiency, and quicker disbursement of compensation.

## 5. Marketing, Infrastructure, and Digital Empowerment

Successful marketing, strong infrastructure, and digital penetration are key pillars for the change that Indian agriculture needs. The government has introduced various visionary schemes to empower farmers, enhance supply chains, and promote access to markets and technology.

### 5.1 e-NAM (National Agriculture Market)

launched on 14 July 2022, e-NAM is a pan-India electronic trading platform that connects APMCs to enable online trade of farm products. It facilitates transparent bidding, improved price discovery, and middlemen dependency reduction. e-NAM increases farmers' incomes by providing real-time prices and allowing interstate market integration.

### 5.2 Agri Infrastructure Fund (AIF)

The Agri Infrastructure Fund was launched in 2020. It is a ₹1 lakh crore programme offering medium- and long-term finance for the development of post-harvest infrastructure. It funds warehouses, cold chains, grading and sorting units, and primary processing units. It focuses on farmer producer organizations (FPOs), cooperatives, startups, and agri-entrepreneurs. By curbing post-harvest losses and enhancing value addition, AIF enhances the value chain of agriculture and increases farmers' incomes.

### 5.3 Digital Agriculture Mission

Digital Agriculture Mission September 2, 2024 uses new technologies such as Artificial Intelligence (AI), Machine Learning, GIS, drones, and blockchain for bringing precision and efficiency to farming. It aids in data-driven decision-making, customized advisories, and real-time monitoring of crops. The mission foresees a smart agriculture ecosystem that maximizes input use, increases productivity, and makes farming predictive, profitable, and sustainable.

## 6. Special Initiatives for Marginal and Small Farmers

Marginal and small farmers, who form the majority of India's agrarian population, frequently suffer from resource constraints and market disadvantage. Understanding their key contribution to food security and rural livelihoods, the government has initiated a number of schemes aimed specifically at improving their income, resilience, and diversification.

### 6.1 Atma Nirbhar Krishi (Self-Reliant Agriculture)

Atma Nirbhar Krishi, one of the components of the Atma Nirbhar Bharat Abhiyan initiated in May 2020, focuses on making Indian agriculture self-sufficient, diversified, and market-oriented. The scheme supports value addition, post-harvest infrastructure, and income diversification through allied activities like food processing, animal husbandry, poultry, fisheries, and beekeeping. It motivates small and marginal farmers to embrace agri-enterprises, thereby improving rural livelihoods. FPOs and agri-startups are supported by financial assistance, training, and market connections. The scheme promotes rural entrepreneurship, enhances the agricultural value chain, and increases farm-level income and sustainability.

### 6.2 Mission for Integrated Development of Horticulture (MIDH)

The Mission for Integrated Development of Horticulture (MIDH), launched in 2014-15, is a centrally sponsored scheme aimed at the holistic growth of the horticulture sector in India. It focuses on enhancing the production, post-harvest management, processing, and marketing of fruits, vegetables, spices, mushrooms, and floriculture crops. MIDH provides technical support and financial assistance for quality planting material, cold storage, pack houses, and transport infrastructure. The scheme benefits small and marginal farmers by promoting income diversification, employment generation, and their integration into domestic and global value chains through better crop quality and market access.

## 7. Farmer Producer Organizations (FPOs) Scheme

The "Formation and Promotion of 10,000 Farmer Producer Organizations (FPOs)" scheme, initiated by the Government of India in 2020, intends to empower farmers through collective empowerment. This Central Sector Scheme proposes to form 10,000 FPOs with the aim to

enhance the bargaining power of farmers, lower input and transaction costs, and improve income. FPOs bring together small and marginal farmers to ensure improved access to inputs, credit, technology, processing, and markets. The scheme encourages group-based production, marketing, and procurement, ensuring self-sufficiency and sustainability in agriculture. It is crucial for doubling farmers' incomes and inclusive rural development.

### CONCLUSION

Government schemes are key to empowering the farmer, enhancing agronomic technology, and making Indian agriculture more productive, resilient, and sustainable. From credit and input support to digital agriculture and climate-resilient practices, these schemes are revolutionizing the farm sector. But their success lies in implementation, awareness among the farmers, and strong monitoring. Ongoing investment in education, extension, and innovation is imperative to ensure that the gains from these schemes percolate down to all farmers and make agriculture a viable and respectable vocation.

### REFERENCES

- Acharya, S. S. (2006). Agricultural marketing and rural credit for strengthening Indian agriculture.
- Prabha, R. K., Rai, B. N. J. P., & Singh, S. R. (2016). Role of government schemes in Indian agriculture and rural development. *Indian Agriculture and Farmers*, 92-102.
- Rao, N. H. (2007). A framework for implementing information and communication technologies in agricultural development in India. *Technological Forecasting and Social Change*, 74(4), 491-518.
- Taylor, B. M., & Van Grieken, M. (2015). Local institutions and farmer participation in agri-environmental schemes. *Journal of Rural Studies*, 37, 10-19.
- Tripathi, G., Dhodia, A., Giri, A., Rathore, V., Verma, A., Shukla, A., & Verma, L. K. (2023). Government agriculture schemes in India: a review. *Asian J Agric Extens Econ Soc*, 41(11), 58-67.
- Wani, S. P., Jakkula, V. S., & Singh, D. (2017). *Doubling Farmers' Income: KISAN-MITrA, Proceedings of National Workshop on Doubling Farmers' Income through Scalingup: KISAN-MITrA (Knowledge-based Integrated Sustainable Agriculture Network-Mission India for Transforming Agriculture)*. ICRISAT.