

3. Per Drop More Crop – Schemes

PDMC Scheme Boosts Water Efficiency, Farmer Income Goals. The government has allowed States and UTs more flexibility under the Per Drop More Crop (PDMC) scheme to plan local water storage and conservation projects beyond previous funding limits, aiming to enhance water-use efficiency and farmer income.

Per Drop More Crop (PDMC) Scheme

Introduction and Background

The Per Drop More Crop (PDMC) scheme is a key component of India's efforts to achieve sustainable and efficient use of water resources in agriculture. It was launched in 2015–16 as part of the broader Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) with the motto "Har Khet Ko Pani" and "Per Drop More Crop." The scheme promotes micro-irrigation technologies such as drip and sprinkler irrigation, which ensure optimal water use and higher agricultural productivity. From 2022–23 onwards, PDMC has been implemented under the Rashtriya Krishi Vikas Yojana (RKVY) framework, continuing its core mission of improving on-farm water-use efficiency and enhancing farmers' income.

Objectives of the PDMC Scheme

1. **Enhance water-use efficiency** at the farm level by promoting micro-irrigation technologies.
2. **Reduce water wastage** and ensure equitable distribution of water resources across farms.
3. **Increase crop productivity and farmer income** by improving irrigation coverage and precision.
4. **Encourage resource conservation** by reducing input costs such as fertilizers, labor, and energy.
5. **Promote climate-resilient agriculture** by adopting scientific and technology-driven irrigation practices.
6. **Integrate water management** through convergence with other schemes like PMKSY–Watershed Development and Accelerated Irrigation Benefit Programme (AIBP).

Nodal Agencies and Implementation

Nodal Department – Department of Agriculture and Farmers Welfare (DA&FW), Government of India.

Implementation – The scheme operates as a Centrally Sponsored Scheme (CSS).

Financial Sharing Pattern – 55% subsidy for small and marginal farmers. 45% subsidy for other farmers.

Additional Support –

North Eastern (NE) and Himalayan States receive a 25% higher unit cost.

Low micro-irrigation penetration States receive a 15% higher unit cost to boost adoption.

Institutional Support

NABARD manages the Micro Irrigation Fund (MIF) with an initial corpus of ₹5,000 crore to support innovative and large-scale micro-irrigation projects through subsidized loans to States.

ICAR (Indian Council of Agricultural Research) provides scientific and technological support including rainwater harvesting systems, fertigation methods, smart irrigation scheduling, and resource conservation technologies.

Recent Changes in the PDMC Scheme (2025 Update)

To enhance flexibility and responsiveness to local needs, the Department of Agriculture and Farmers Welfare introduced new provisions under the scheme –

1. **Increased Flexibility for States and UTs** – States and Union Territories can now plan micro-level water storage and conservation projects under the category "Other Interventions (OI)" beyond earlier fund limits. Previously, spending under OI was capped at 20% of the total allocation (and 40% for NE and Himalayan States, J&K, and Ladakh). Under the new norms, States/UTs may exceed these limits based on specific regional requirements.
2. **Purpose of Reform** – To address local water scarcity, promote innovative irrigation models, and support community-based micro water structures. Encourage adoption of integrated water conservation practices alongside micro-irrigation.

3. **Expected Benefits** – More customized and context-specific projects. Increased participation of local agencies and farmers. Improved water sustainability and drought resilience.

Financial and Technological Framework

Funding Pattern – Central assistance is shared with States as per the prescribed ratio (60 – 40 for most States, 90 – 10 for NE and Himalayan States). Farmers can receive direct benefit transfer (DBT) for micro-irrigation equipment.

Technology Integration – Smart irrigation systems with IoT sensors and automated drip systems. Integration with solar-powered pumps for energy-efficient irrigation. Promotion of rainwater harvesting, farm ponds, and small check dams for localized water storage.

Achievements and Impact (2015–2024)

1. **Area Covered** – From 2015–16 to 2023–24, a total of 83.06 lakh hectares have been brought under micro-irrigation coverage across the country.
2. **Water Conservation** – Micro-irrigation systems have led to 30–50% savings in water use, particularly in water-intensive crops like sugarcane, cotton, and banana.
3. **Cost Efficiency** – Reduction in fertilizer consumption (up to 30%), labor costs, and energy usage.
4. **Farmer Income** – Increased crop productivity and diversification into high-value crops such as horticulture, vegetables, and spices have boosted farm income levels.
5. **Environmental Benefits** – Reduced water table depletion, minimized fertilizer runoff, and lower greenhouse gas emissions due to efficient water-energy use.
6. **Institutional Impact** – NABARD's Micro Irrigation Fund has facilitated the scaling up of state-level projects such as those in Gujarat, Karnataka, Tamil Nadu, and Andhra Pradesh.

Challenges

1. Uneven adoption across States, with higher coverage in western and southern India but limited progress in eastern and NE regions.
2. Initial capital cost of micro-irrigation systems remains high for small farmers despite subsidies.
3. Maintenance and training issues limit long-term sustainability.
4. Lack of convergence between irrigation, watershed, and agricultural extension schemes in some areas.

Future Prospects

The government aims to bring an additional 10 million hectares under micro-irrigation by 2030. Expansion of Digital Agriculture Mission tools like mobile-based irrigation advisory systems. Greater integration with climate-resilient agriculture and crop diversification initiatives. Promotion of Public–Private Partnerships (PPP) and Farmer Producer Organizations (FPOs) to improve outreach.

Conclusion

The Per Drop More Crop scheme represents a major step towards achieving efficient, equitable, and sustainable water use in Indian agriculture. The recent flexibility granted to States and UTs marks a crucial reform, empowering local governments to tailor irrigation and conservation strategies to regional needs. By blending technology, institutional support, and farmer participation, PDMC is shaping the foundation of water-smart agriculture and contributing to India's broader goal of Doubling Farmers' Income and ensuring Water Security.

Source – <https://www.newsonair.gov.in/pdmc-scheme-boosts-water-efficiency-farmer-income-goals/>