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Pradhan Mantri Krishi Sinchai Yojana: Per Drop More Crop

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The Ministry of Agriculture and Farmers Welfare, Government of India, has launched the PMKSY(Pradhan Mantri Krishi Sinchai Yojana) to address India's key agricultural challenges in the 21st century i.e., to reduce poverty, increase the production and ensure food security for the growing population in the face of climate change, scarce, limited water, and land resources for production. The Pro-farmer measure of the NDA Government, the Pradhan Mantri Krishi Sinchai Yojana has been drawing up amalgamating ongoing scheme viz. This initiative proposes to provide irrigation water to every farm to everyone in the country (Har Khet Ko Pani) and improve WUE (Water Use Efficiency), (Per Drop More Crop and Income). It aims to bring together various schemes and programs for water conservation, water harvesting, and efficient management in order to ensure there is enough water for agriculture production. This program also aims to harness the potential of agriculture by blue water (irrigation) for improving efficiency, effectively utilizing green (soil moisture), equity, sustainability and resilience at the farm level, especially in marginal, rainfed, and fragile areas, using an integrated approach.

Process of PMKSY

1. Objective
2. Scheme Components
3. Scheme Duration
4. Scheme Overview
5. Objective of Components
6. Targets
7. Relative Resources

1. Objectives of PMKSY include

- Achieve convergence of investments in irrigation at the field level (preparation of district level and, if required, sub district level water use plans).
- Integration of water source, distribution and its efficient use, to make best use of water through appropriate technologies and practices.
- Enhance the physical access of water on the farm and expand cultivable area under assured irrigation (Har Khet ko pani).
- Enhance the adoption of precision - irrigation and other water saving technologies (More crops per drop).
- Improve on - farm water use efficiency to reduce wastage and increase availability both in duration and extent.

- Enhance recharge of aquifers and introduce sustainable water conservation practices. ⎫ Ensure the integrated development of rainfed areas using the watershed approach towards soil and water conservation, regeneration of ground water, arresting runoff, providing livelihood options and other NRM activities.
- Explore the feasibility of reusing treated municipal waste water for peri - urban agriculture.
- Promote extension activities relating to water harvesting, water management and crop alignment for farmers and grass root level field functionaries.
- Attract greater private investments in irrigation.

2. PMKSY Scheme Components:

Components of PMKSY Scheme implemented by various ministries this are as follows:

A. Department of Land Resources, Ministry of Rural Development Component: Watershed Development

B. Department of Agriculture and Farmers Welfare, Ministry of Agriculture & Farmers welfare

Component: Per Drop More Crop

C. Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti

Components: Har Khet Ko Pani (HKKP)

Sub component: Command Area Development (CAD)

Sub component: Surface Minor Irrigation (SMI)

Sub component: Repair, Renovation and Restoration (RRR) of Water Bodies

Sub component: Ground Water Development

Components: Accelerated irrigation benefits programme (AIBP)

3. PMKSY Scheme duration

Krishi Sinchayee Yojana duration is for a period of 5 years (2015-16 to 2019-20) with a financial outlay of Rs.50, 000 crores. Har Khet ko Paani (HKKP), Accelerated Irrigation Benefit Programme (AIBP) and Watershed Development components have been approved for continuation during (2021-26) with a financial outlay of Rs. 93,068 crores, including Rs.37,454 crores central assistance to States.

4. PMKSY Scheme overview:

- All the States and Union Territories including North Eastern States are covered under the programme.
- PMKSY seeks to achieve convergence of investments in irrigation at the field level.
- PMKSY has been formulated amalgamating schemes viz. Accelerated Irrigation Benefit Programme (AIBP) of Ministry of Water Resources, River Development & Ganga Rejuvenation; Integrated Watershed Management Programme (IWMP) of Department of Land Resources; and On Farm Water Management (OFWM) component of National Mission on Sustainable Agriculture (NMSA) of Department of Agriculture and Cooperation.
- PMKSY is to be implemented in an area development approach, adopting decentralized state level planning and projectised execution, allowing the states to draw their irrigation development plans based on district/blocks plans with a horizon of 5 to 7 years. States can take up projects based on the District/State Irrigation Plan.
- The National Steering Committee (NSC) of PMKSY under the chairmanship of Hon'ble Prime Minister, will provide policy direction to programme framework and a National Executive Committee (NEC) under the chairmanship of Vice Chairman of NITI Aayog will oversee the programme implementation at national level.

5. Objectives of Components:

PMKSY has the following scheme components:

1. **Accelerated Irrigation Benefit Programme (AIBP)**

To focus on faster completion of ongoing Major and Medium Irrigation including National Projects

2. **PMKSY (Har Khet ko Pani)**

- Creation of new water sources through Minor Irrigation (both surface and ground water).
- Repair, restoration and renovation of water bodies; strengthening carrying capacity of traditional water sources, construction rain water harvesting structures (Jal Sanchay);
- Command area development, strengthening and creation of distribution network from source to the farm;
- Creating and rejuvenating traditional water storage systems like Jal Mandir (Gujarat); Khatri, Kuhl (H.P.); Zabo (Nagaland); Eri, Ooranis (T.N.); Dongs (Assam); Katas, Bandhas (Odisha and M.P.) etc. at feasible locations.
- Ground water development in the areas where it is abundant, so that sink is created to store runoff/ flood water during peak rainy season.
- Improvement in water management and distribution system for water bodies to take advantage of the available source which is not tapped to its fullest capacity (deriving benefits from low hanging fruits). At least 10% of the command area to be covered under micro/precision irrigation.
- Diversion of water from source of different location where it is plenty to nearby water scarce areas, lift irrigation from water bodies/rivers at lower elevation to supplement requirements beyond IWMP and MGNREGS irrespective of irrigation command.

3. **PMKSY (Per Drop More Crop)**

- Programme management, preparation of State/District Irrigation Plan, approval of annual action plan, Monitoring etc.
- Promoting efficient water conveyance and precision water application devices like drips, sprinklers, pivots, rain - guns in the farm (Jal Sinchan);
- Topping up of input cost particularly under civil construction beyond permissible limit (40%), under MGNREGS for activities like lining inlet, outlet, silt traps, distribution system etc.
- Construction of micro irrigation structures to supplement source creation activities including tube wells and dug wells (in areas where ground water is available and not under semi critical /critical /over exploited category of development) which are not supported under AIBP, PMKSY (Har Khet ko Pani), PMKSY (Watershed) and MGNREGS as per block/district irrigation plan.
- Information Communication Technology (ICT) interventions through NeGP - A to be made use in the field of water use efficiency, precision irrigation technologies, on farm water management, crop alignment etc. and also to do intensive monitoring of the Scheme.
- Secondary storage structures at tail end of canal system to store water when available in abundance (rainy season) or from perennial sources like streams for use during dry periods through effective on - farm water management;
- Water lifting devices like diesel/ electric/ solar pumpsets including water carriage pipes, underground piping system.
- The extension workers will be empowered to disseminate relevant technologies under PMKSY only after requisite training is provided to them especially in the area of promotion of scientific moisture conservation and agronomic measures, improved/

innovative distribution system like pipe and box outlet system, etc. Appropriate Domain Experts will act as Master Trainers.

- Extension activities for promotion of scientific moisture conservation and agronomic measures including cropping alignment to maximise use of available water including rainfall and minimise irrigation requirement (Jal sarankchan);
- Capacity building, training and awareness campaign including low cost publications, use of pico projectors and low cost films for encouraging potential use water source through technological, agronomic and management practices including community irrigation.

4. PMKSY (Watershed Development)

- Effective management of runoff water and improved soil & moisture conservation activities such as ridge area treatment, drainage line 5 treatment, rain water harvesting, in - situ moisture conservation and other allied activities on watershed basis.
- Converging with MGNREGS for creation of water source to full potential in identified backward rainfed blocks including renovation of traditional water bodies.

1. Targets:

A. Har Khet Ko Pani (HKKP)

Under HKKP, surface minor irrigation and repair-renovation-restoration of water bodies component of PMKSY is targeted to provide additional 4.5 lakh hectare irrigation.

Ground Water component of HKKP, approved provisionally for 2021-22, targets creation of irrigation potential of 1.52 lakh hectare.

In view of importance of rejuvenation of water bodies, a paradigm shift in funding of their rejuvenation in both urban and rural areas, with significant expansion of their inclusion criteria, and enhancement of central assistance from 25% to 60% in general area.

B. Watershed Development

- A specific provision for development of springsheds has been included in the program
- Completion of sanctioned projects covering 49.5 lakh hectare rainfed/ degraded lands to bring additional 2.5 lakh hectare under protective irrigation,

C. Accelerated Irrigation Benefit Programme

- Central funding of 90% of water component for two national projects, namely Renukaji Dam Project (Himachal Pradesh) and Lakhwar Multipurpose Project (Uttarakhand) has been provisioned. The two projects would provide beginning of storage in Yamuna basin benefitting six states of upper Yamuna basin, augmenting water supply to Delhi as well Himachal Pradesh, Uttarakhand, UP, Haryana, and Rajasthan and a major step towards rejuvenation of Yamuna.
- Total additional irrigation potential creation targeted during 2021-26 under AIBP is 13.88 lakh hectare. Apart from focused completion of 60 ongoing projects including their 30.23 lakh hectare command area development, additional projects to also be taken up. The inclusion criteria have been relaxed for projects under tribal and drought prone areas.

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