

Water resources projects are planned, funded, executed and maintained by the State Governments themselves as per their own resources and priorities. In order to supplement the efforts of the State Governments, Government of India provides technical and financial assistance to State Governments through various schemes and programmes.

I. Pradhan Mantri Krishi Sinchayee Yojana is one such scheme which was launched in 2015-16 with an aim to enhance physical access of water on farm and expand cultivable area under assured irrigation, improve on farm water use efficiency, introduce sustainable water conservation practices etc. It is an umbrella scheme having different components.

The components being dealt in WP&P wing of CWC are detailed below:

1 Pradhan Mantri Krishi Sinchayee Yojana- Accelerated Irrigation Benefit Programme (PMKSY-AIBP)

Accelerated Irrigation Benefit Programme (AIBP) was launched by Government of India during 1996-97 which was later subsumed under PMKSY during 2015-16. Under PMKSY-AIBP, 99 ongoing projects and 7 phases under AIBP were prioritized in consultation with concerned States for their implementation along their CAD&WM works with cost estimate of Rs. 77,595 crore (Central share-Rs. 31,342 crore; State share-Rs 46,253 crore).

Out of 99 projects and 7 phases (total -106), 46 MMI projects have been reported as completed as on date. Further, out of balance projects, 27 projects have progress of more than 90% and 14 projects have progress in between 80% to 90%. The Ultimate Irrigation Potential of these 99 projects is 76.03 Lakh Ha., out of which 41.39 Lakh Ha. had been created upto March,2016. Out of balance 34.63 Lakh Ha, additional potential of 24.34 Lakh Ha has been created through these projects during 2016-2022.

1.2 Pradhan Mantri Krishi Sinchayee Yojana- Har Khet ko Pani (HKKP)- Surface Minor irrigation (SMI) and Repair, Renovation and Restoration (RRR) of Water Bodies

The schemes of Repair, Renovation & Restoration (RRR) of Water Bodies and Surface Minor Irrigation (SMI) are under implementation under Ministry of Jal Shakti (erstwhile Ministry of Water Resources, RD&GR), Government of India. These Schemes are now part of Har Khet Ko Pani (HKKP) component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).

Under the scheme of RRR of Water Bodies, rural water bodies having minimum water spread area of 2 hectares (1 hectare for North Eastern, Sikkim and Hilly States including UTs. of J&K and Ladakh), and urban water bodies having minimum water spread area of 1 hectare (0.5 hectare for North Eastern, Sikkim and Hilly States including UTs of J&K and Ladakh) are eligible for inclusion with the objectives of restoration of water bodies, assured supply of water for irrigation, increased availability of drinking water, ground water recharge and water conservation.

Surface Minor Irrigation (SMI) component targeting to provide financial assistance to the identified minor irrigation (irrigation potential less than 2,000 hectare) projects using surface water, was included under Accelerated Irrigation Benefit Programme (AIBP) since 1999-2000 for special category States. Subsequently the scheme was extended to areas covering DPAP, Tribal, DDP, Flood prone, Left Wing Extremism and Koraput, Bolangir and Kalahandi (KBK) region of Odisha, Bundelkhand region of UP and MP & Marathwada & Vidharbha

region of Maharashtra. Main objective of SMI schemes is to expand cultivable area under assured irrigation.

The details of projects included under SMI & RRR during the period 2014-19 & 2019- 2022 are as below:

Name of Scheme	2014-2019		2019-2022	
	Projects Included	Target CCA (Lakh Ha)	Projects Included	Target CCA (Lakh Ha)
SMI	1692	1.56	1517	1.13
RRR	2065	1.70	451	0.34

3 Continuation of PMKSY scheme:

PMKSY scheme was valid till March, 2021. The proposal for its extension for the period 2021-26 has been approved by the Expenditure Finance Committee (EFC) and subsequently the Cabinet Committee on Economic Affairs (CCEA) too has approved the continuation of PMKSY for 2021 to 2026 with an outlay of Rs. 93,068.0 crore including Rs. 37,454 crore Central Assistance to States.

Under the continuing scheme it is planned to provide financial assistance for completion of 60 ongoing Major/Medium Irrigation projects under PMKSY-AIBP, 85 ongoing CADWM projects and financial assistance to new Major/Medium irrigation projects including ERM projects. Further, scope has also been enhanced with provision of inclusion of water bodies other than irrigation such as percolation tanks and the water bodies used for providing drinking water and for other community purposes. The scheme also aims to provide protection works to avoid encroachment, environmental benefits etc.

4 **National Project Scheme:** The **scheme of National Projects** was approved by Government of India for implementation during XI Plan with a view to expedite completion of identified National Projects for the benefit of the people. Central Assistance of 60% of the cost of balance works of Irrigation and Drinking Water Component are provided for identified National Projects except in the case of projects in eight North Eastern States and three Himalayan States which get 90% of the cost as Central grant. The provision of financial assistance for **National Project** is presently continuing under "**Pradhan Mantri Krishi Sichanyee Yojana**".

The Government of India initially declared 14 projects as National Projects in February, 2008. Later, Cabinet Committee on Infrastructure approved inclusion of Saryu Nahar Pariyojana in the scheme of National Project on 3rd August, 2012. Subsequently, Govt. of India under Section 90 of 'Andhra Pradesh Re-Organization Act' dated 01.03.2014, declared Polavaram Irrigation Project as 'National Project'. Further, two projects namely Kosi – Mechi Link Scheme of Bihar and Upper Bhadra Project of Karnataka has been recommended for inclusion in the scheme of National Projects in the 12th meeting held on 24th Nov, 2020 & 14th meeting held on 15.02.2022 of High Powered Steering Committee (HPSC) for implementation of the scheme of National Projects, respectively. Approval of Union Cabinet is required for inclusion of aforesaid two projects under scheme of National Project.

The list of National Projects is attached as **Annexure-I**.

5. Apart from PMKSY, a **Special Package for completion of irrigation projects to address agrarian distress in Vidarbha, Marathwada and other chronically drought prone areas of Rest of Maharashtra** has been

approved during 2018-19. Under the Special Package, 8 MMI projects and 83 SMI projects with a balance cost of Rs. 13,651.607 crore as on 1st April, 2018 are planned to be completed in a phased manner up to 2022-23. The targeted additional potential through these projects is 3.77 lac ha. All these projects have created 1.11 lac ha of potential during 2018-19 to 2020-21. Twenty six (26) SMI projects have been completed.

6 Further, Cabinet in August 2017 approved proposal to complete **balance works of the North Koel Reservoir Project** in Jharkhand and Bihar at an estimated expenditure of Rs. 1622.27 crore to be incurred during three FY from the start of project. The project is located in the most backward tribal areas in Palamau and Garwah district of Jharkhand. The project aims to provide irrigation to 1,11,521 hac of land in draught prone areas of Palamau, Garwah, Aurangabad (Bihar) and Gaya (Bihar). The common components amounting to Rs. 1013.11 crore of balance works would be funded by Central Government as grant from PMKSY fund. The Central Govt. will also fund 60% of the cost of balance works amounting to Rs. 365.5 crore from LTIF under PMKSY as grant from the States of Bihar and Jharkhand. The State of Bihar and Jharkhand will arrange 40% of the remaining cost of balance works amounting to Rs. 243.66 crore.

7. Additionally, in November, 2018, Government of India also approved the implementation of **“Relining of Sirhind Feeder (RD 119700 to 447927) and relining of Rajasthan Feeder (RD 179000 to 496000)”** with the approved cost of Rs. 1976.75 crore (Rs. 671.478 Cr for Sirhind Feeder and Rs. 1305.267 Cr for Rajasthan Feeder). Out of the total estimated cost, Rs. 826.168 crore would be provided as Central Assistance (Rs. 205.758 Cr for Sirhind Feeder and Rs. 620.41 Cr for Rajasthan Feeder) in addition to Rs 156 crore of central assistance, earlier released for these projects. Relining of Rajasthan Feeder envisages to save 560 cusec of water leading to stabilization/ improvement of irrigation in 98,739 ha of area in Rajasthan. Relining of Sirhind Feeder envisages to save 256 cusec of water leading to stabilization/ improvement of irrigation in 69,096 ha of area (20740 ha. in Rajasthan and 48356 ha. in Punjab). Completion of relining works would address water-logging in 84800 Ha of land in Muktsar, Faridkot and Ferozpur districts in South-West Punjab.

II. Use of latest technology

1. The study on **‘Reassessment of Water Availability in India using Space Inputs’** was completed by CWC in 2019 using fully science based state-of-the art modelling tools and satellite data. The most distinguishing features of the study are incorporation of rainfall, land use, land cover, proper estimation of demand, evapo-transpiration, soil moisture and development of basin and sub-basin wise models with the help of a customised software. The average annual water resource of the 20 basins of the country has been assessed as 1999.20 Billion Cubic Meters (BCM).. The report can be accessed through the CWC website under the Tab ‘Publications’. The web-link of reports of the study is as follows:

Main Volume: <http://cwc.gov.in/sites/default/files/main-report.pdf>

Volume-I: <http://cwc.gov.in/sites/default/files/volume-i-compressed.pdf>

Volume-II: <http://cwc.gov.in/sites/default/files/volume-ii-compressed.pdf>

2. **Sedimentation Assessment studies using Remote Sensing:** CWC has carried out 179 Sedimentation Assessment studies both in-house and by outsourcing using Remote Sensing. Since 2020, the in-house studies are conducted using Microwave data. Satellite remote sensing technologies have demonstrated proven capabilities in estimation of Sedimentation in Live Storage Zone of Reservoirs.