# Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

Manual for District- Level Functionaries

2017

### **PREFACE**

The purpose of this Development Manual for Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) is to create an enabling mechanism for improved implementation of the Centrally Sponsored Scheme (CSS) at the cutting edge, leading to enhanced outcomes in nature and extent. Accordingly, it would act as a guidefor implementation by the **District Collector and key District-level functionaries**, enable quick learning about the Scheme, implementation modalities, roles and responsibilities of the various functionaries as well as stakeholders.

This Manual is prepared with inputs from a combination of sources, such as review of extant scheme guidelines and circulars issued by the Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR, RD & GR), the nodal Ministry for administration of the scheme, interaction with nodal officers from Ministry of Agriculture; Cooperation and Farmers Welfare (MOA,C &FW) and Department of Land Resources (DoLR), Ministry of Rural Development (MoRD), Government of India (GoI) and discussions with the key personnel involved in the implementation of the Scheme.

For greater direction, the guidelines cited must be referred to along with the scheme website (http://pmksy.gov.in/) for guidance and clarifications on implementation from time to time.

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# 1. Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

#### 1.1 About the Scheme

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) has the vision of assured irrigation access; "Har Khet Ko Pani" and improving on farm water use efficiency; "More Crop Per Drop" in a focused manner with an "Integrated Value Chain" approach encompassing source creation, distribution, management, field application and extension activities.

Major objectives of the scheme are<sup>1</sup>

- Achieve convergence of investments in irrigation at the field level
- Enhance the physical access of water on the farm and expand cultivable area under assured irrigation (Har Khet Ko Pani)
- Integration of water source, distribution and its efficient use, to make best use of water through appropriate technologies and practices
- Improve on-farm water use efficiency to reduce wastage and increase availability both in duration and extent
- Enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop)
- Enhance recharge of aquifers and introduce sustainable water conservation practices
- Ensure the integrated development of rain-fed areas using the watershed approach towards soil and water conservation, regeneration of ground water, arresting runoff, providing livelihood options and other NRM activities
- 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

### 1.2 Strategy and Key Focus Areas

Creation of a comprehensive irrigation supply chain under PMKSY comprises of the following strategies and key focus areas, as shown in the **Figure 1**.



Figure 1: PMKSY - Strategies and Focus Areas

# 1.3 Components & Convergence

PMKSY envisages convergence of water sector activities in a focused manner. The Scheme components are organized in such a manner that an integrated irrigation supply chain is created at the cluster level and components of the chain draw

synergies from each other. For optimal augmentation of resources, convergence is desired with other schemes such as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Rashtriya Krishi Vikas Yojana (RKVY), Rural Infrastructure Development Fund (RIDF), Member of Parliament Local Area Development (MPLAD), Member of Legislative Assembly Local Areas Development (MLALAD) and other Local body funds. The four components of PMKSY are shown in the **Figure 2**.

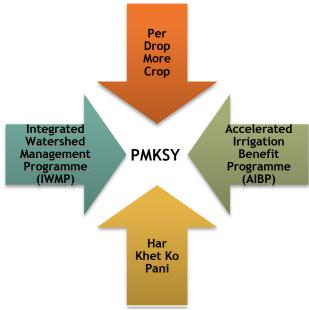


Figure 2: Components - PMKSY

For detailed guidelines on each component including the funding pattern, www.pmksy.gov.in may be referred to.

#### 1.3.1 Accelerated Irrigation Benefit Programme (AIBP)

Objective of AIBP component of PMKSY is to expedite the implementation of ongoing major and medium irrigation projects, including national projects. Details on the mode of disbursement, pre requisites for proposal submission, guidelines of AIBP are available at http://www.wirmin.nic.in.

#### 1.3.2 Har Khet Ko Pani

Irrigation capacities created under AIBP must translate into utilization through Command Area Development works and creation of new water sources. Focusing on expanding cultivable area under assured irrigation, "Har Khet Ko Pani" component is funded through the ongoing Command Area Development & Water Management (CADWM) program. The component is implemented by the States through the Department that implements AIBP, in general. Detailed scheme guidelines can be accessed at http://www.wirmin.nic.in.

#### 1.3.3 Per Drop More Crop

"Per Drop More Crop", an integral component of PMKSY focuses on maximizing water use efficiency at the farm level. Major activities under Per Drop More Crop can be categorized into "Micro Irrigation" including Drip, Sprinkler, Micro Sprinklers etc and "Supplementary Water Management Activities (SWMA)/ Other Interventions". SWMA activities include farm level secondary storage structures

such as individual or community water storage, Drought proofing structures such as water harvesting or recharge or ground water development, renovation of existing water bodies, enhancing water conveyance efficiency and water lifting devices. Pattern of assistance to beneficiaries under the component will be 55% for small and marginal farmers and 45% for other farmers. Funding pattern is 60% from the Central Government and 40% from the State. For North East and Himalayan States, the cost share is 90: 10 from the Centre and State. For UTs, the programme is funded 100% by the Central Government.

Detailed operational guidelines may be referred to at http://pmksy.gov.in/microirrigation/Archive/GuidelinesMIRevised260417.pdf.

### 1.3.4 Integrated Watershed Management Programme (IWMP)

IWMP is being implemented as per Common Guidelines for Watershed Development Projects 2008, revised in 2011<sup>2</sup>. Unit cost for watershed development is Rs. 12,000 per ha in plains and Rs. 15,000 per ha in difficult/ hilly areas. Funding pattern is 60% from the Central Government and 40% from the State Government.

For details on the pattern of assistance, tranches of fund release, operational guidelines available at http://www.dolr.nic.in/dolr/downloads/pdfs/Common%20Guidelines\_2011[1].pdf may be referred to.

#### 1.4 Institutional Framework

#### A. National Level Implementation

PMKSY Mission Directorate is established in Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR, RD & GR) for mission mode implementation of the programme. National Steering Committee (NSC) and National Executive Committee (NEC) are the key committees functioning at the National level, that oversee the implementation of the programme, allocate resources, undertake monitoring and performance assessment etc. At the execution level, AIBP and CADWM are implemented by the Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR, RD & GR), Per Drop More Crop and IWMP are administered by the Department of Agriculture & Cooperation (DAC) and Department of Land Resources (DoLR) respectively. National Rainfed Area Authority (NRAA) supports DoLR in implementation of IWMP.

#### B. State Level Implementation

State Department of Agriculture is the nodal department for implementation of PMKSY. However, the implementing departments for the four components are decided by the respective programme Ministry / Department. State Level Sanctioning Committee (SLSC) is constituted under the chairmanship of Chief Secretary of the State to sanction projects and activities as recommended by Inter Departmental Working Group (IDWG) chaired by the Agricultural Production Commissioner / Development Commissioner.

#### C. District Level Implementation

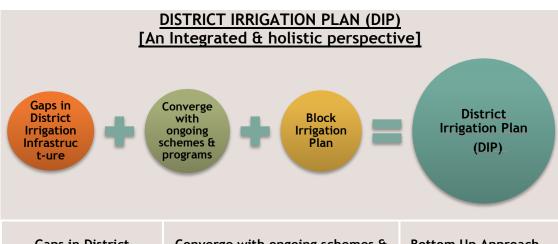
At district level, District Level Implementation Committee (DLIC) oversees the implementation of PMKSY. DLIC is chaired by the District Collector / Magistrate/CEO of Zilla Parishad/ Project Director (PD), District Rural Development Agency

(DRDA). Members of DLIC include the Joint Director / Deputy Director of line departments (Agriculture/ Rural Development) in the district, progressive farmers, representatives from Micro Irrigation Industry and leading NGOs. Project Director (PD), Agricultural Technology Management Agency (ATMA) is the Member Secretary of DLIC.

# 1.5 District Irrigation Plans (DIPs) under PMKSY

District Irrigation Plans (DIPs) are prepared taking into account the water resources available in the district, demand for water, unleashed potential in the district and gaps thereof. DIPs are consolidated into State Irrigation Plans (SIPs). Annual Action Plans (AAP) and Detailed Project Reports (DPRs) submitted to SLSC (State Level Sanctioning Committee) essentially emanate from DIPs.

DIPs are medium to long range plans with a timeframe of 5-7 years; consisting of list of projects/ activities/ initiatives covering the entire irrigation supply chain of the district. DIPs are prepared following a "bottom up approach" in planning and comprise of a strategic plan with key activities and estimated costs. Template for preparation of DIPs is available at http://pmksy.gov.in/pdfLinks/DIPTemplate.pdf.



#### Gaps in District Irrigation Infrastructure

#### Mapping of

- · Water Sources
- Distribution Network
- Water Use
   Applications
   (drinking, domestic, irrigation & industrial)

# Converge with ongoing schemes & programs<sup>3</sup>

- Integrate with the District Plan developed by the District Planning Committee (DPC)
- Align with District Agriculture Plan (DAP) under Rashtriya Krishi Vikas Yojana (RKVY) and consult Indian Council of Research Institutes (ICAR) and Krishi Vigyan Kendras (KVKs) for technical inputs
- Dovetail resources from other schemes including MGNREGA, RKVY, RIDF (NABARD), MPLAD, MLALAD and other Local body funds

#### Bottom Up Approach -Block Level Irrigation Plan

- Participatory consultation with Panchayati Raj Institutions (PRIs)
- Consultations with State Agricultural Universities (SAUs)

Figure 3: District Irrigation Plan (DIP)

### 1.6 Annual Action Plan (AAP) under PMKSY

Annual Action Plan (AAP) flows from DIP and is prepared at the district level and submitted to the State Nodal Agency for approval by the State Level Sanctioning Committee (SLSC). AAP includes component wise irrigation potential targeted during the upcoming Financial Year (FY) along with the financial resources required. AAP should strategically target and prioritize blocks/ mandals/ tehsils that are water stressed and critically water scarce, based on the Central Ground Water Board Statistics. Such an intensive and focused approach in preparation of AAP would be the responsibility of the DLIC. Once the AAPs are approved at the State level, they are submitted for release of fund by the respective Ministries / Departments (MoWR, DAC & FW & DoLR) implementing the PMKSY components. Tentative timelines for preparation and finalization of AAP at the district/ state/ national level is shown in the Figure 4.

By December	By February	By 15th March	By mid April	By April
AAP for upcoming AAP	at the state apel completed the sum of the s	onduct of SLSC & pproval of AAP at he State level and ubmission to the espective line hinistries/epartments	•Approval by the respective Ministries/ Departments and release of funds to the State	<ul> <li>Release of funds from State</li> </ul>

Figure 4: Annual Action Plan under PMKSY - Tentative Timelines<sup>4</sup>

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# 2. Roles and Responsibilities of Key District Level Functionaries

# 2.1 PMKSY Implementation - Key District Level Functionaries

Organization structure of key departments and personnel involved in implementation of PMKSY from District through Gram Panchayat level is shown in **Figure 5**.

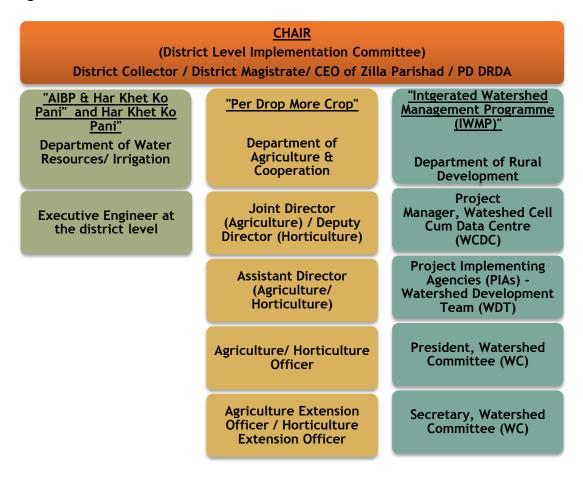


Figure 5: PMKSY - Organization Structure at the district level

#### 2.2 Chair of District Level Implementation Committee (DLIC)

# [District Collector / District Magistrate / CEO of ZP / PD, DRDA]

District Collector/ District Magistrate / CEO of ZP / PD, DRDA , the Chair of DLIC is envisaged to play a crucial role at the district level to bring in convergence, both amongst the scheme components and other external resources. Though the components under PMKSY are implemented by the Departments of Agriculture, Rural Development and Water Resources, DLIC is strategically positioned as a facilitating arm to initiate convergence at the district level.

Table 1: Roles and Responsibilities of District Collector/ Magistrate/ CEO - Zilla Panchayat- Chair, DLIC

	Panchayat- Chair, DLIC
Role	Responsibilities
PLANNING	<ul> <li>Facilitate preparation of District Irrigation Plan (DIP) by the Dept of Agriculture at the district level (State Nodal Department of PMKSY is Dept of Agriculture in general)</li> </ul>
• • •	Hold consultations with Members of Parliament (MP) and Members of Legislative     Assembly (MLA) while preparing DIP
P.T.P	<ul> <li>Facilitate preparation of Annual Action Plan (AAP) and Detailed Project Reports (DPRs<sup>5</sup>) [IWMP] at the district level</li> </ul>
	Ensure AAPs emerge from DIP
	PMKSY in general
	<ul> <li>Finalize and approve DIP and submit to State Nodal Department / SLSC for integration into SIP</li> </ul>
	Approve AAP annually and submit to State Nodal Department/ SLSC for approval
	Nominate water sector NGO representative as a member in DLIC
	Steer inter departmental coordination (Agriculture/ Horticulture/ Rural Development/ Irrigation) for implementation of DIP
	<ul> <li>Oversee public awareness on PMKSY by engaging farmers, Panchayati Raj Institutions(PRIs), media and other local stakeholders</li> </ul>
	Drive "geo tagging" of assets and project sitesat the district level
	<ul> <li>Encourage field personnel to use "Drishti"<sup>6</sup>, a mobile application developed for IWMP</li> </ul>
	Per Drop More Crop
	Accord administrative sanction for list of projects / beneficiaries (MI & SWMA)
IMPLEMENTATION	<ul> <li>Recommend to the State for issue of payment orders to Beneficiaries/ MI companies/ suppliers<sup>7</sup> based on the inspection reports and After Sales Service<sup>8</sup> by the MI companies</li> </ul>
W <sub>A</sub>	<ul> <li>Undertake "Aadhar Seeding drive" at the district level to facilitate Direct Benefit Transfer (DBT) for Micro Irrigation (MI) beneficiaries/ Farmers</li> </ul>
	Integrated Watershed Management Programme (IWMP)
	<ul> <li>Facilitate identification of Project Implementing Agencies (PIAs) for IWMP in consultation with Zilla Parishad/ Zilla Panchayat</li> </ul>
	<ul> <li>Maintain an exclusive account under WCDC for receipt (Project Funds<sup>9</sup> and Administrative Costs<sup>10</sup>) and expenditure</li> </ul>
	<ul> <li>Release of funds (both project and administrative) to Project Implementation Agencies (PIAs) and Watershed Committees (WCs)<sup>11</sup></li> </ul>
	<ul> <li>Ensure Convergence of Watershed Projects with MGNREGA -NRM works as part of the Labour Budget of MGNREGA to be included in the DIP</li> </ul>
	Bring in convergence with National Rural Livelihood Mission (NRLM) <sup>12</sup>
	• Submit expenditure statements and Utilization Certificates (UCs) to State Nodal Department
	AIBP / Har Khet Ko Pani
	<ul> <li>Facilitate Land Acquisition, Rehabilitation and Resettlement (LARR) activities in the district for new projects under AIBP and CADWM.</li> </ul>
	District Collector is the overall monitoring authority for the district
MONITORING& REPORTING	<ul> <li>Periodically review the PMKSY Dashboards/ MIS at the district level to monitor District's Physical and Financial progress vis a vis the targets</li> </ul>
$\sim$	<ul> <li>Ensure that physical and financial progress of all the components are reported in the respective MIS 5<sup>th</sup> of every month<sup>13</sup></li> </ul>
لئنا ا	Support external evaluation agencies in their monitoring activities
	• For IWMP, the district administration can use "Shristi" <sup>14</sup> , a portal developed to review the generate statistics, status and summary of ongoing and completed projects
	I

# 2.3 <u>Accelerated Irrigation Benefit Programme (AIBP) & Har Khet Ko</u> Pani/ Command Area Development & Water Management (CADWM)

# [Department of Water Resources / Irrigation]

Expeditious implementation of ongoing major and medium irrigation projects under AIBP and assured irrigation under CADWM are majorly handled at the State Level. Though the interventions at the district level for both these components are nominal, Land Acquisition, Rehabilitation and Resettlement (LARR) for new projects would be majorly handled by DLIC at the district level.

### 2.4 Per Drop More Crop

# [Department of Agriculture/ Horticulture]

#### (a) Micro Irrigation

Micro Irrigation under Per Drop More Crop component of PMKSY is implemented by the functionaries of Department of Agriculture / Horticulture in most of the States. Joint Director (Agriculture) or the Deputy Director (Horticulture) is the district technical in-charge for implementation of the Scheme. Assistant Director (Agriculture/ Horticulture) and Agriculture / Horticulture Officer are the officers responsible at the block and cluster level respectively. At the village level, Agricultural Extension Officer / Horticulture Extension Officer are involved in implementation of the component. Roles and responsibilities of District / Block / Village officers in implementation of "Micro Irrigation" under Per Drop More Crop is provided in the Table 2.

Table 2: Roles and Responsibilities of District/ Block/ Village level officers
- Micro Irrigation

Dalimanahla/	Williams I assal	Charter Level		District Laval					
Deliverable/	Village Level	Cluster Level	Block Level	District Level					
Officer Responsible*	Agricultural Extension Officer / Horticulture Extension Officer	Agriculture/ Horticulture Officer	Assistant Director (Agriculture/ Horticulture)	Joint Director (Agriculture)/ Deputy Director (Horticulture)					
		PLANNII	NG						
Preparation of DIP/ AAP			<ul> <li>Involve farmers and other stakeholders in planning for preparation of block level plan</li> <li>Identify demand for MI in the block</li> <li>Identify priority areas of implementation (GPs/ Crops)</li> </ul>	<ul> <li>Assess the districts' demand for micro irrigation by assessing the cropping pattern, water usage, soil type etc and integrate block level plan</li> <li>Translate the demand into MI Component of District Irrigation Plan (DIP) for submission to DLIC</li> <li>Periodic review of DIP is already made</li> <li>Prepare AAP from DIP</li> </ul>					
		IMPLEMEN <sup>-</sup>	TATION						
Pre Installation	Create awareness among the farmers	Supervise the activities of	Publicize the scheme among the	Promote the scheme among the Banks/					

Deliverable/ Officer	Village Level	Cluster Level	Block Level	District Level
Responsible*	Agricultural Extension Officer / Horticulture Extension Officer	Agriculture/ Horticulture Officer	Assistant Director (Agriculture/ Horticulture)	Joint Director (Agriculture)/ Deputy Director (Horticulture)
activities	on micro irrigation techniques • Encourage farmers to choose MI suppliers of their choice • Undertake pre installation field visits along with coordinators from MI companies	AEO/ HEO • Oversee pre installation activities at the village level	beneficiaries at the block level  Disseminate the list of MI suppliers and rate list approved by SLSC among the farmers  Undertake pre installation visits to farmers fields	Financial Institutions for facilitation of credit assistance to farmers  Organize district level capacity building programs, conferences and workshops for the stakeholders
Installation of MI Systems (Drip / Sprinkler / Micro Sprinkler)	Horticulture Extension Officer  on micro irrigation techniques		<ul> <li>Receive farmer applications through AO/HO at the cluster level or AEO/HEO at the village level</li> <li>Assign registration numbers to the applications</li> <li>Scrutinize the applications and supporting land documents and submit to MI Companies/ Suppliers for verification</li> <li>Validate the estimates/ quotations prepared by MI Companies/ Suppliers</li> <li>Submit to DLIC; the validated estimates along with beneficiary applications for administrative approval through JD (Agriculture) or DD (Horticulture)</li> </ul>	<ul> <li>Recommend to the Chair, DLIC for issue of approvals/ sanctions/ work orders for commencement of MI installations in the farmers' fields, after technical verification of the applications from farmers.</li> <li>Pass on the DLIC approved applications to the AD (Agriculture/ Horticulture) at the block level for commencement of installations</li> <li>Recommend for processing of advance payments to farmers/ MI Companies/ Suppliers</li> <li>Facilitate Aadhar enrollment of beneficiaries who have yet not enrolled, through blocks/ taluka/ tahshil to encourage Direct Benefit Transfer (DBT)</li> <li>Make biometric registration of farmers and geo tagging of sites mandatory</li> </ul>
	<u> </u>	INSPECTIONS AND	MONITORING	·
Post Installation Inspections and Monitoring	installation field visits in all the fields along with AO/ HO (100% installations to be covered)	installation field visits in all the fields along with AEO/ HEO (100% installations to	<ul> <li>Ensure post installation field visits are completed</li> <li>Submit Inspection Reports to DLIC</li> <li>Coordinate field inspections of Joint Inspection Teams</li> </ul>	<ul> <li>Monitor the quality of installations by MI companies &amp; initiate actions against violations as stipulated by the State (roughly 50% installations to be inspected at the</li> </ul>

Deliverable/ Officer	Village Level	Cluster Level	Block Level		District Level						
Responsible*	Agricultural Extension Officer /	Agriculture/ Horticulture	Assistant (Agriculture/	Director	Joint Director (Agriculture)/ Deputy						
	Horticulture	Officer	Horticulture)		Director (Horticulture)						
	Extension Officer										
	/ completion certificates from farmers • Collect declarations from farmers stating that they would not transfer the MI system to other farmers	Monitoring of after sales service by the MI companies	(JIT) <sup>15</sup>		<ul> <li>district level)</li> <li>Recommend release of final installment based on post installation inspection reports</li> <li>Responsible for district level MIS- Data entry and reporting by 5<sup>th</sup> of every month 16</li> <li>Periodically review MIS dashboards</li> </ul>						

<sup>\*</sup>Designations included in the table are indicative and generic in nature. States may have different administrative structures for implementation

#### (b) Supplementary Water Management Activities (SWMA)

Major responsibilities of the district officers in implementing SWMA activities are as follows

- To promote Farm Level Secondary Storage Structures / Drought Proofing structures among the farmers
- To identify demand (in hectares) and include SWMA projects/ activities in the DIP and AAP, in consultation with blocks
- To dovetail implementation with schemes such as MGNREGA/ RKVY by topping up assistance
- To promote installation of solar water pump sets under SWMA by planning convergence with the subsidy scheme of Ministry of New and Renewable Energy (MNRE)

### 2.5 Integrated Watershed Management Programme (IWMP)

#### [Department of Rural Development]

Watershed Cell cum Data Centre (WCDC)<sup>17</sup> is constituted at the district level to oversee the implementation of watershed programme in each district. WCDC is established in District Rural Development Agency (DRDA)/ Zilla Parishad/ District Level Implementing Agency / Department in all the programme districts. The Centre is chaired by the District Collector/ Magistrate/ PD (DRDA).District Development Officer from the Department of Rural Development is designated as Project Manager, WCDC.

At the cluster level, Project Implementing Agencies (PIAs) are identified by WCDC. PIAs may include relevant line departments, autonomous organizations under State/ Central Governments, Government Institutions/ Research bodies, Panchayats or Voluntary Organizations (VOs). Organizations having experience in watershed development projects can be appointed as PIAs. Each PIA should position a dedicated Watershed Development Team (WDT)<sup>18</sup> with the approval of WCDC.

Watershed Committee (WC) is the key interface of implementation at the village level. It is a registered Society under Societies Registration Act, 1980<sup>19</sup>. President /

Chair of the WC is usually the Gram Sarpanch and or Ward Member. President, WC and Secretary of the  $WC^{20}$ , exclusively appointed for implementation of IWMP are the crucial links at the cutting edge of implementation of the programme at the village level.

Table 3: Roles and Responsibilities of District / Cluster / GP level officers - IWMP

Dolivershie	CD / Village Lawel	- IVVMP	District Lavel
Deliverable/ Officer	GP / Village Level President/ Secretary,	Project / Cluster Level <sup>21</sup> Project Implementing Agency	District Level Project Manager, Watershed
Responsible*	Watershed Committee	(PIA) and Watershed	Cell Cum Data Centre (WCDC)
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Development Team (WDT)	
		PREPARATORY PHASE	
Resource		Project Implementing Agency	• Identify Project
identification		Constitute Watershed	Implementing Agencies (PIAs)
		Committees (WCs) at the GP	at the cluster level
		level	
		• Organize and nurture User Groups <sup>22</sup> and Self-Help Groups <sup>23</sup>	
		at the GP level	
		Position dedicated Watershed	
		Development Team (WDT) as	
		part of PIA	
Preparation of		Project Implementing Agency	Prepare plans for IWMP
DIP		Prepare project/ cluster level     plan for IWAR companions and	component, to be
		plan for IWMP component and submit to WCDC	incorporated in DIP
Preparation of	Prepare annual	Project Implementing Agency	Prepare district AAP based
AAP	development plans for	Provide technical guidance to	on inputs from cluster AAPs
	watersheds using	WCs for preparation of	and ensure it flows from DIP
	Participatory Rural	development plans for	- NRM works as part of
	Appraisal (PRA) <sup>24</sup> techniques	watershed using Participatory Rural Appraisal (PRA)	labour budget of MGNREGA to be included
	ccennques	techniques	in the DIP
		Prepare AAP for upcoming	- Plan for convergence
		financial year, based on inputs	with NRLM
		from WDTs and WCs and submit	S. Lacit AAB to the State
		to WCDC  • Undertake scientific planning of	Submit AAP to the State     Level Nodal Agency (SLNA)
		projects using IT, remote	for approval
		sensing and GIS	
		-	
		Watershed Development Team	
		(WDT)	
		<ul> <li>Conduct participatory base-line surveys (household/ village/</li> </ul>	
		project level survey)	
		Prepare detailed resource	
		development plans including	
		water and soil conservation or	
		reclamation etc. to promote sustainable livelihoods at	
		household level	
Preparation	Secretary, Watershed	Project Implementing Agency	Initiate preparation of DPRs
and Approval	Committee (WC)	Scrutinize DPRs prepared by	at the cluster level once AAP
of Detailed	Conduct Gram Sabhas     To approve DDDs	WDTs and share with GPs/ WCs	is approved and funds are
Project Reports (DPRs)	to approve DPRs prepared by PIAs	for approval	sanctioned • Review the Gram Sabha
after approval	prepared by FIAS	Watershed Development Team	approved DPRs and put up
of AAP		(WDT)	for approval of DLIC
		Prepare Detailed Project Report	

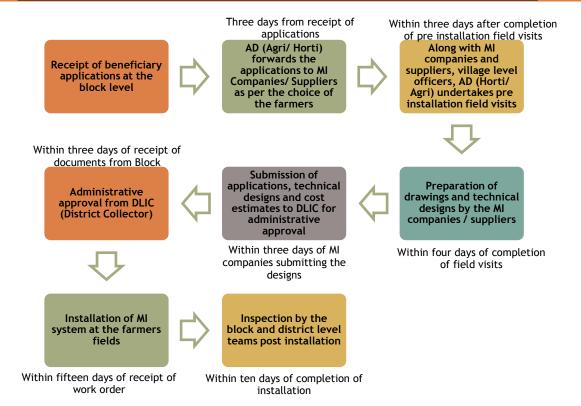
Deliverable/	GP / Village Level	Project / Cluster Level <sup>21</sup>	District Level
Officer	President/ Secretary,	Project Implementing Agency	Project Manager, Watershed
Responsible*	Watershed Committee	(PIA) and Watershed	Cell Cum Data Centre (WCDC)
		Development Team (WDT)  (DPR) for the consideration of	
		Gram Sabha.	
		IMPLEMENTATION	L
Works and Consolidation	Secretary, Watershed Committee (WC)  • Ensure timely implementation of watershed development works undertaken by the GP through User Groups (UGs), Self Help Groups (SHGs)  • Record and Book keeping (Muster Rolls and Measurement Books)	Project Implementing Agencies (PIAs)  Organize User Groups (UGs)/ Self Help Groups (SHGs) for implementation of watershed activities  Undertake community organization and trainings for village communities  Procurement of Inputs, equipments and materials for watershed development works  Documentation of works /	<ul> <li>Project Manager, WCDC</li> <li>Provide technical support to PIAs and Watershed Development Teams (WDTs) functioning under PIAs</li> <li>Facilitate identification of resource organizations for capacity building activities at the district level</li> <li>Supervise the functioning of WCDC team<sup>25</sup></li> <li>Coordinate on a daily basis with Project Implementing</li> </ul>
	Books)  • Maintain the proceedings of meetings of GP, WC and other institutions for watershed development project	<ul> <li>activities completed</li> <li>Mid-term evaluation of works/activities</li> <li>Keep stock of assets created</li> <li>Draw action plan for maintenance of assets including transfer of charge to community organizations at the end of 4 years</li> <li>Watershed Development Team (WDT)</li> <li>Undertake engineering surveys, prepare engineering drawings and cost estimates for all structures to be built</li> <li>Provide technical support to Gram Panchayats in execution</li> <li>One of the members from WDT to be the nominee member in the WC</li> </ul>	Agencies (PIAs)
Fund Flow and management <sup>26</sup>	President, Watershed Committee (WC)  Receive funds from PIA / WCDC  Operate the bank account of Watershed Development Fund (WDF) <sup>27</sup> Secretary, Watershed Committee (WC)  Maintain income and expenditure of the Watershed Development Fund (WDF)  Ensuring payments and financial	Project Implementing Agencies (PIA)  Receive funds from State Nodal Agency / WCDC  Release of funds to WCs	<ul> <li>Project Manager, WCDC</li> <li>Receive funds from SLNA (Dept of Rural Development)</li> <li>Release funds to PIAs/ WCs</li> <li>Responsible for payments and financial transactions from WCDC account</li> <li>Prepare expenditure statements and Utilization Certificates</li> </ul>

Deliverable/	GP / Village Level	Project / Cluster Level <sup>21</sup>	District Level
Officer	President/ Secretary,	Project Implementing Agency	Project Manager, Watershed
Responsible*	Watershed Committee	(PIA) and Watershed Development Team (WDT)	Cell Cum Data Centre (WCDC)
	transactions from WC account • Sign Cheques jointly with WDT nominee on behalf of WC	MONITORING	
A4	Beer Lead Western Lead		
Monitoring and Reporting	• Countersign on the quarterly progress reports prepared by PIAs	Project Implementing Agencies (PIAs)  Submit quarterly progress reports to WCDC  Arrange for physical, financial and social audit of the works undertaken  Watershed Development Team (WDT)  Monitor, Check, Assess and physical verification and measurements of the work done	<ul> <li>Ensure following entries in MIS at the district level<sup>28</sup></li> <li>Entry for release of project amount to PIA/ GP and WC</li> <li>Entry for expenditure of institutional amount at WCDC level</li> <li>Entry for financial target / achievement of a project at WCDC level</li> <li>Entry for capacity building plan/ achievement of a financial year at WCDC level</li> <li>Project Photographs</li> <li>Periodically review MIS dashboards</li> </ul>

<sup>\*</sup>Designations included in the table are indicative and generic in nature. States may have different administrative structures for implementation

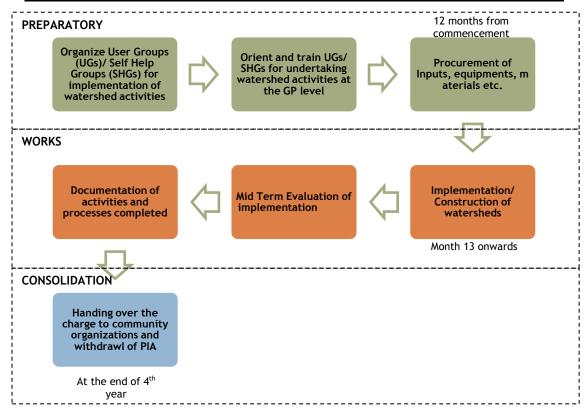
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# PMKSY - "Per Drop More Crop (MI)" - Work Flow (Tentative Timelines)<sup>29</sup>



### PMKSY -"IWMP" - Work Flow<sup>30</sup>

#### Implementation of Watershed Activities by PIAs- Tentative Timeline of 4 years



# PMKSY - IMPLEMENTATION MONITORING PROFORMA (MONTHLY REPORT) [For District Level Functionaries based on the Annual Action Plan (AAP)]

# (1) PER DROP MORE CROP

# 1.1 Installation of Drip / Sprinkler Irrigation

# 1.1.1 Physical progress (in hectares)

BLOCK		Drip Irrigation		Sprinkler Irrigation							
	TARGET (from AAP)	ACHIEVEMENT (during the month)	ACHIEVEMENT (Cumulative)	TARGET (from AAP)	ACHIEVEMENT (during the month)	ACHIEVEMENT (Cumulative)					
Block 1											
Block 2											
Block 3											
Block 4											
Block 5											
Total											

# 1.1.2 Financial progress (in Lakh Rupees)

BLOCK		Drip Irrigation		Sprinkler Irrigation							
	Budget (from AAP)	Expenditure during the month	Cumulative Expenditure as on date	Budget (from AAP)	Expenditure during the month	Cumulative Expenditure as on date					
Block 1											
Block 2											
Block 3											
Block 4											
Block 5											
Total											

#### (2) **INTEGRATED WATERSHED MANAGEMENT PROGRAMME (IWMP)**

#### 2.1 **Newly Created**

# 2.1.1 Physical progress

(Capacity in cum & Command Area in Ha)

PIA		•	Farm	Pond	S			Check Dams Na				Nalla	h Bunds Percolation Ponds					Ground water recharge structures												
	TARGET ACHIEVEMENT (from AAP/ DPR) (Cumulative)			TARG rom <i>A</i> DPR	AP/	ACHIEVEMENT (Cumulative)			TARGET (from AAP/ DPR)			ACHIEVEMENT (Cumulative)			TARGET (from AAP/ DPR)			ACHIEVEMENT (Cumulative)			TARGET (from AAP/ DPR)			ACHIEVEMENT (Cumulative)						
	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA
PIA 1																														1
PIA 2																														1
PIA 3																														
PIA 4																														
PIA 5																														
Total																														1

<sup>\*</sup>No - No of projects

# 2.1.2 Financial progress (in Lakh Rupees)

PIA	Farm Ponds			Check Dams						Nallah Bunds						Percolation Ponds						Ground water recharge structures							
	Budget (AAP / DPR)			Cumulative Expenditure		Budget (AAP / DPR)		/	Cumulative Expenditure		Budget (AAP / DPR)		Cumulative Expenditure		Budget (AAP / DPR))		Cumulative Expenditure		Budget (AAP / DPR)		AAP	Cumulative Expenditure							
PIA 1																													
PIA 2																													
PIA 3																													
PIA 4																													
PIA 5																													
Total																													

<sup>\*</sup>C- Capacity
\*CA - Command Area

#### 2.2 Renovated

# 2.2.1 Physical progress (Capacity in cum& Command Area in Ha)

PIA		Farm Ponds Check Dams								Nallah Bunds						Percolation Ponds						Ground water recharge structures									
		TARGE		_	HIEVE			TARG		_	IIEVEN		_	ARGE	-			MENT	_	ARGE	-	_		MENT		ARGE	Т	AC	HIEVE	MENT	
	( <i>A</i>	AAP / D	PR)	(C	umula	tive)	(A	(AAP / DPR)			(Cumulative)			(AAP / DPR)			(Cumulative)			(AAP / DPR)			(Cumulative)			(AAP / DPR)			(Cumulative)		
	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	No	С	CA	
PIA 1																															
PIA 2																															
PIA 3																															
PIA 4																															
PIA 5																															
Total																															

\*No - No of projects \*C- Capacity \*CA - Command Area

# 2.2.2 Financial progress (in Lakh Rupees)

PIA	Farm Ponds				Check Dams						Nallah Bunds					Percolation Ponds						Ground water recharge							
																											struc	tures	
	Bu	dget (/	AAP/	С	umula	tive	В	udge	t	Cu	mulat	ive	Bud	dget (	AAP	Cu	mulat	ive	Buc	lget (/	AAP	Cu	mulat	ive	Buc	lget (	AAP	Cui	mulative
	DPR)			Expenditure		(AAP / DPR)		Expenditure		/ DPR)		Expenditure		/ DPR)		Expenditure			/ DPR)		Expenditure								
PIA 1																													
PIA 2																													
PIA 3																													
PIA 4																													
PIA 5																													
Total																													

# **ABBREVIATIONS**

AD AEO AIBP	Assistant Director Agriculture Extension Officer Accelerated Irrigation Benefit Programme	JIT KVK MGNREGA	Joint Inspection Team Krishi Vigyan Kendra Mahatma Gandhi National Rural Employment Guarantee Act
AIP AO	Annual Irrigation Plan Agriculture Officer	MI MoA,C&FW	Micro Irrigation Ministry of Agriculture; Cooperation and Farmers Welfare
ATMA	Agricultural Technology Management Agency	MoRD	Ministry of Rural Development
CEO	Chief Executive Officer	MoWR, RD & GR	Ministry of Water Resources, River Development and Ganga Rejuvenation
DAC	Department of Agriculture and Cooperation	MNRE	Ministry of New and Renewable Energy
DAP	District Agriculture Plan	NGO	Non-Government Organization
DBT	Direct Benefit Transfer	NRAA	National Rainfed Area Authority
DD	Deputy Director	OFWM	On Farm Water Management
DIP	District Irrigation Plan	PD	Project Director
DLIC	District Level Implementation Committee	PIA	Project Implementation Agency
		PIM	Participatory Irrigation Management
DoLR	Department of Land Resources	PRI	Panchayati Raj Institutions
DPR	Detailed Project Report	SIP	State Irrigation Plan
DRDA	District Rural Development Agency	SLNA	State Level Nodal Agency
Gol	Government of India	SLSC	State Level Sanctioning Committee
GP	Gram Panchayat	UC	Utilization Certificate
GS	Gram Sabha	VO	Voluntary Organization
HEO	Horticulture Extension Officer	WC	Watershed Committee
HO	Horticulture Officer	WCDC	Watershed Cell cum Data Centre
ICAR	Indian Council of Agricultural	WDC	Watershed Development
	Research		Component
IDWG	Inter Departmental Working Group	WDT	Watershed Development Team
IWMP	Integrated Watershed Management Program	WUA	Water User Association
JD	Joint Director	ZP	Zilla Parishad

#### **ENDNOTES & REFERENCES**

- PMKSY Scheme guidelines are available at http://pmksy.gov.in/pdflinks/Guidelines\_English.pdf
- IWMP Detailed Operational Guidelines available at http://www.dolr.nic.in/dolr/downloads/pdfs/Common%20Guidelines\_2011[1].pdf
- Convergence with MGNREGA: Natural Resource Management (NRM) component of MGNREGA Labour Budget needs to be made part of the District Irrigation Plan (DIP) developed under PMKSY. Material intensive works can be taken up under IWMP while labour intensive works can be undertaken from MGNREGA.
- Consultation with officials from MoWR, RD & GR, DoLR and DAC & FW at DARPG on 6 June 2017
- Detailed Project Reports under CADWM & IWMP: DPRs form part of Preparatory Phase of implementation of CAD & Watershed projects, prepared based on the baseline data, feasibility studies and anticipated benefits along with timelines. DPRs shall be prepared as per the approved DIP. 1% of the project funds are earmarked for preparation of DPRs. Guidelines for preparation of DPRs under CADWM and IWMP are available at http://www.dolr.nic.in/dolr/downloads/pdfs/GSWMA\_DPR.pdf and http://mowr.gov.in/writereaddata/Guideline\_CADWM\_2017.pdf respectively.
- Link for downloading "Drishti" mobile application is http://bhuvan3.nrsc.gov.in/bhuvanapp/bhuvanapp iwmp v1.php
- MI Companies / Suppliers: State Nodal Agency undertakes registration of Micro Irrigation Companies / Suppliers with approval from SLSC. Detailed guidelines on registration of manufacturing companies are available in Section 14 of http://pmksy.gov.in/microirrigation/Archive/GuidelinesMIRevised260417.pdf
- After Sales Service: After Sales Service in Per Drop More Crop refers to training beneficiaries for operation of MI systems. Ref: Section 15 of http://pmksy.gov.in/microirrigation/Archive/GuidelinesMIRevised260417.pdf
- Project Funds: Project Funds indicate works related to watershed development, livelihood and production system activities and micro enterprises
- Administrative costs include costs towards capacity building, salaries of staff recruited in WCs, preparation of DPRs, monitoring activities etc
- Section 9.4; Procedure for release of installments. http://pmksy.gov.in/microirrigation/Archive/GuidelinesMIRevised260417.pdf
- Operational guidelines for convergence of various programmes with Integrated Watershed Management Programme (IWMP) are available at http://www.dolr.nic.in/dolr/downloads/pdfs/Integrated%20Watershed%20Management%2020.2.15.pdf
- MIS of PMKSY is available at http://pmksy.gov.in/mis/rptAchievement.aspx
- "Srishti" portal can be accessed at http://bhuvan.nrsc.gov.in/projects/iwmp/ and user manual for Srishti is available at http://www.dolr.nic.in/dolr/downloads/pdfs/Srishti\_Drishti\_Manual%20small%20size.pdf
- Joint Inspection Team (JIT): The SLSC shall form joint inspection teams for field inspection and frequent surveillance by inspection teams will be a regular feature under the Scheme. They will draw random samples periodically from the field, within a period of three years from the date of installation of the system. At the time of inspection, the system should be fully functional. The report should be submitted to the competent authority under SLSC for further action
- Link for MIS: http://pmksy.gov.in/mis/frmlogin.aspx
- 2011. Amendment in provision in Common Guidelines, 2008 regarding establishment of WCDC -Implementation of IWMP programmes in IAP Districts - reg
- Watershed Development Team (WDT): WDTs constitute specialists in Agriculture, Soil Science, Water Management and Social Mobilization. Major responsibilities of WDT include the following. For composition of WDT and key resources, section 5.1 of the extant operational guidelines may be referred to, available at http://www.dolr.nic.in/dolr/downloads/pdfs/Common%20Guidelines\_2011[1].pdf

- Watershed Committee (WC): Constitution of the WC is available in Section 6.3 of the IWMP guidelines at http://www.dolr.nic.in/dolr/downloads/pdfs/Common%20Guidelines\_2011[1].pdf.
- Secretary, WC: Secretary, Watershed Committee is an independent and dedicated resource for the watershed programme. He or she is selected in a Gram Sabha (GS) meeting based on his or her merit or experience and is assigned no other responsibility other than IWMP implementation work. He or She reports to the President of the Watershed Committee
- <sup>21</sup> Cluster / Project area in IWMP is about 5000 ha
- User Groups User Groups are constituted by the Watershed Committees at the village level. They are responsible for operation and maintenance of all assets created under the project by working in close collaboration with the Gram Panchayat (Ref: Section 6.2 of Reference 2)
- 23 <u>Self Help Groups</u> Constituted by WCs in the watershed area with the help of WDT from amongst poor, small and marginal farmer households, landless/ asset less poor agricultural labourers, women, shepherds, and SC/ ST persons. (Ref : Section 6.1 of Reference 2)
- Participatory Rural Appraisal (PRA): PRA is a planning approach that incorporates the views of rural people in the planning and management of development projects and programmes
- WCDC team comprises of 3-6 full time staff (3 in districts with less than 25,000 ha project area and 6 in districts with more than 25,000 ha project area) who are subject matter specialists on Agriculture/Water Management/ Social Mobilization/ others as appropriate / Management and Accounts / data entry operators.
- Standard Operating Procedures for registration of agencies and funds flow for IWMP available at http://dolr.nic.in/dolr/downloads/pdfs/SOP%20for%20Reg%20of%20Agencies%20on%20PFMS%20V1.pdf
- Watershed Development Fund (WDF) An exclusive fund created at the village level, separate from the account of WC. WDF is fund contributed by Villages to an extent of minimum of 10% of the costs of Natural Resources Management (NRM) works executed on private lands (Ref: Section 9.6 of the 2)
- Link for MIS data entry: http://iwmpmis.nic.in/index.jsp
- 2014. Impact Evaluation of National Mission on Micro Irrigation. Available at http://pmksy.gov.in/microirrigation/Archive/IES-June2014.pdf
- User Manual of Process Management Software for IWMP, available at http://dolr.nic.in/dolr/downloads/pdfs/user-manual-final%208.6.2015.pdf