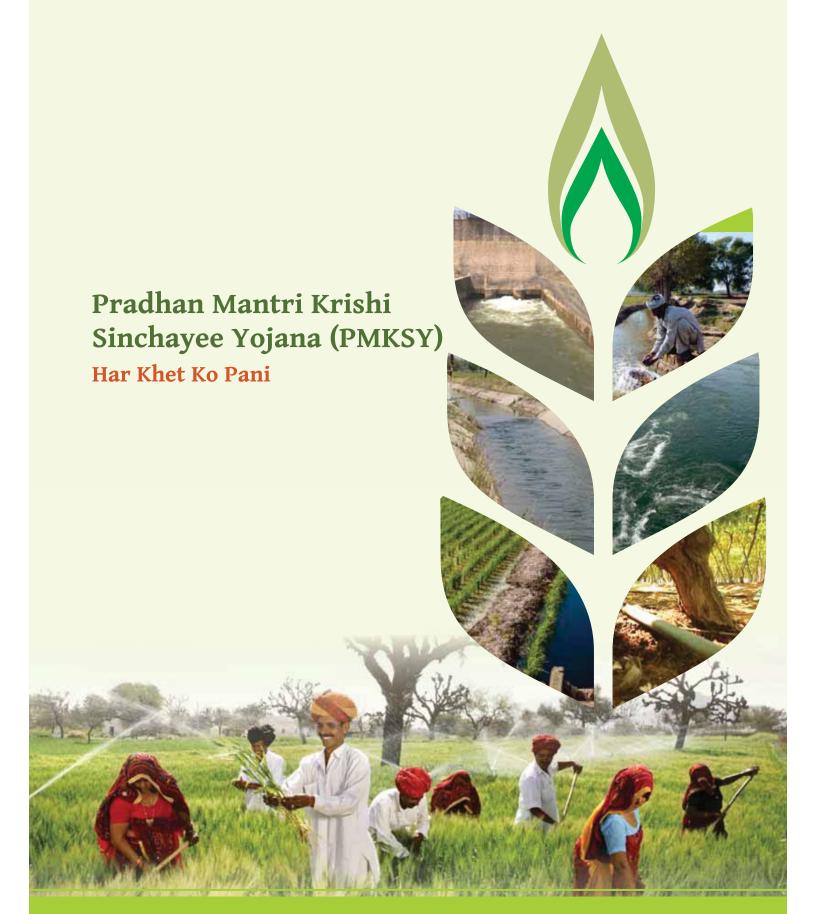


# Ministry of Water Resources, River Development and Ganga Rejuvenation Government of India



### Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

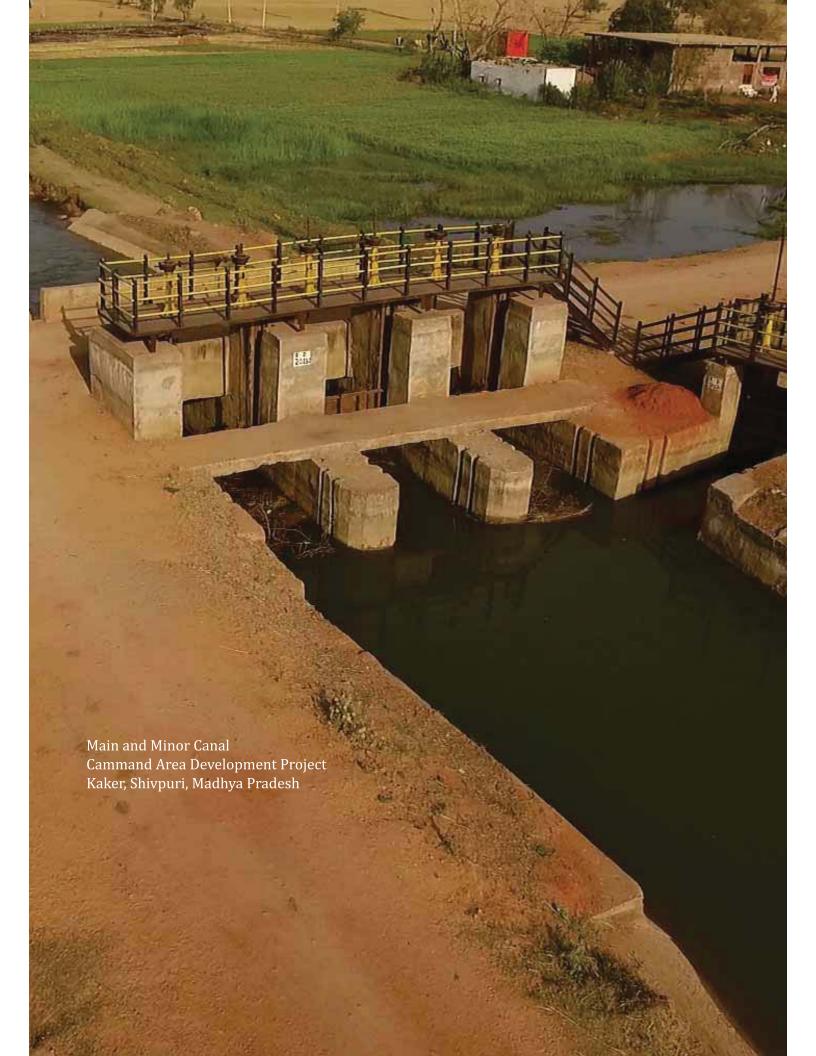
Har Khet Ko Pani

April, 2017



Ministry of Water Resources, River Development and Ganga Rejuvenation

Government of India



### Abbreviations

AIBP	- Accelerated Irrigation Benefits Programme	
ATMA	<ul> <li>Agriculture Technology Management Agency</li> </ul>	
ВСМ	- Billion Cubic Metre	
CAD	- Command Area Development	
CAD & WM	- Command Area Development and Water Management	
CEO	- Chief Executive Officer	
CGWB	- Central Ground Water Board	
CWC	- Central Water Commission	
DAC & FW	- Department of Agriculture, Cooperation and Farmers Welfare	
DDP	- Desert Development Programme	
DIPs	– District Irrigation Plans	
DLIC	- District Level Implementation Committee	
DoLR	- Department of Land Resources	
DPAP	- Drought Prone Area Programme	
DRDA	- District Rural Development Agency	
ERM	<ul> <li>Extension, Renovation and Modernisation</li> </ul>	
GoI	– Government of India	
ha	- Hectare	
HLEC	- High Level Empowered Committee	
IDWG	- Inter Departmental Working Group	
IPC	– Irrigation Potential Created	
IPPE	- Intensive Participatory Planning Exercise	
IPU	– Irrigation Potential Utilised	
IWMP	- Integrated Watershed Management Programme	
LTIF	- Long Term Irrigation Funds	
mha	- million hectare	
MIS	- Management Information System	
MGNREGA	– Mahatma Gandhi National Rural Employment Guarantee Act	
MGNREGS	- Mahatma Gandhi National Rural Employment Guarantee Scheme	
MMI	– Major and Medium Irrigation	
MNRE	- Ministry of Renewable Energy	
MoRD	– Ministry of Rural Development	
MoWR,RD&GR	– Ministry of Water Resources, River Development and Ganga Rejuvenation	
NABARD	– National Bank for Agriculture and Rural Development	

NCIWRD	- National Commission on Integrated Water Resources Development
NCT	– National Capital Territory
NEC	- National Executive Committee
NGOs	- Non-Governmental Organizations
NITI	– National Institution for Transforming India
NP	– National Project
NRLM	- National Rural Livelihood Mission
NSC	- National Steering Committee
PD	- Project Director
PERT	- Programme Evaluation and Review Technique
PIM	- Participatory Irrigation Management
PMKSY	– Pradhan Mantri Krishi Sinchayee Yojana
PRIs	– Panchayat Raj Institutions
RIDF	- Rural Infrastructure Development Fund
RKVY	– Rashtriya Krishi Vikas Yojana
RRR	- Repair, Renovation and Restoration
Rs.	- Rupees
SIP	- State Irrigation Plan
SLSC	- State Level Sanctioning Committee
Sq km	- Square Kilometre
UTs	- Union Territories
WUAs	– Water Users Associations

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Narmada Main Canal Sardar Sarovar Project Gujarat



#### Introduction

#### 1.0 Programme Objectives

During 2015-16, Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched by the Central Government with an overarching vision to ensure access to some means of protective irrigation for all agricultural farms in the country, and to produce 'per drop more crop', thus bringing much desired rural prosperity. The broad objectives of the approved programme are as under:-

- (a) Achieve convergence of investments in irrigation at the field level (preparation of district level and, if required, sub district level water use plans);
- (b) Enhance the physical access of water on the farm and expand cultivable area under assured irrigation (Har Khet Ko Pani);
- (c) Promote integration of water source, distribution and its efficient use, to make best use of water through appropriate technologies and practices;
- (d) Improve on-farm water use efficiency to reduce wastage and increase availability both in duration and extent;
- (e) Enhance the adoption of precisionirrigation and other water saving technologies (per drop more crop);
- (f) Enhance recharge of aquifers;
- (g) Introduce sustainable water conservation practices;
- (h) Ensure the integrated development of rain-fed areas using the watershed approach towards soil and water

- conservation, regeneration of ground water, arresting run-off, providing livelihood options and other NRM activities;
- (i) Promote extension activities relating to water harvesting, water management and crop alignment for farmers and grass-rootlevel field functionaries;
- (j) Explore the feasibility of reusing treated municipal waste water for peri-urban agriculture and
- (k) Attract greater private investments in irrigation.

All these objectives are expected to lead to substantial increase in agricultural production and productivity thereby enhancing farm income.

#### 1.1 PMKSY components

The approved programme has four components i.e.

- (i) Accelerated Irrigation Benefits Programme (AIBP),
- (ii) Har Khet Ko Pani,
- (iii) Per Drop More Crop, and
- (iv) Watershed Development.

AIBP includes Major and Medium Irrigation including National Projects. The programme component, 'Har Khet Ko Pani' covers Command Area Development and Water Management (CAD&WM), Minor Irrigation (both surface and ground water) and Repair, Renovation and Restoration (RRR) of water bodies.

The issues related to implementation of projects under PMKSY-AIBP including prioritization of projects were deliberated in the Committee headed by Minister (Water Resources) of Chhattisgarh. After consultation with the concerned States, the Committee prioritized 99 projects for completion upto 2019-20. 23 projects (Priority-I) have been identified to be completed by 2016-17 and another 31 projects (Priority-II)) have been identified to be completed by 2017-18. The balance 45 projects (Priority-III) have been identified to be completed by Dec., 2019.

The PMKSY (Per Drop More Crop) includes installation of micro-irrigation systems; use of efficient water conveyance and precision

water application devices like drips, sprinklers, pivots and rain-guns in the farm "(Jal Sinchan)"; and extension activities for promotion of scientific moisture conservation and agronomic measures including adoption of proper cropping patterns, to maximise use of available water including rainfall and minimise irrigation requirement "(Jal Sanrakshan)". Under 'Watershed Development', priority is accorded to effective management of run-off water and improved in-situ soil and moisture conservation activities such as ridge area treatment, drainage line treatment, rain water harvesting, in-situ moisture conservation and other allied activities on watershed basis.

#### **Implementation Structure**

#### 1.0 Institutional Mechanism

An Inter-Ministerial National Steering **Committee (NSC)** has been constituted under the Chairmanship of Hon'ble Prime Minister to provide general policy, strategic directions/advisories for programme implementation, protect inter-State issues, and provide overall guidance addressing the national priorities. The NSC has Hon'ble Union Ministers from concerned Ministries like Finance; Agriculture, Cooperation and Farmers Welfare; Water Resources, River Development & Ganga Rejuvenation; Rural Development; Urban Development; Drinking Water & Sanitation; Tribal Affairs; Panchayati Raj; Science & Technology; Environment, Forest & Climate Change; Commerce and Industry; Development of North Eastern Region (DoNER) and Vice Chairman, NITI Aayog as members. The NSC adopts its own working procedure and delegate such powers as it considers fit to the National Executive Committee. Secretary (Agriculture, Cooperation and Farmers Welfare) is the Member-Secretary of the National Steering Committee. The Secretaries for the Department of Rural Development, Ministry of Water Resources, River Development & Ganga Rejuvenation, Department of Land Resources and Department of Agriculture Research and Education are permanent invitees to the NSC.

An Inter-Ministerial **National Executive Committee (NEC)** has been constituted for PMKSY under the Chairmanship of Vice-Chairman, NITI Aayog to oversee programme implementation, allocation of resources, interministerial coordination, monitoring and

performance assessment, addressing administrative issues etc.

The scheme at the Central Level is now proposed to be completed in a mission mode and a mission in the Ministry of Water Resources, River Development and Ganga Rejuvenation has been established. The objectives of the Mission would be as given below:-

- i. To ensure completion of 99 prioritized projects under AIBP by December, 2019 including CAD&WM.
- ii. Overall coordination and outcomefocused monitoring of all components of PMKSY i.e. AIBP, Har Khet Ko Pani, MGNREGS, Watershed Development and Per Drop More Crop to:
- Realize full irrigation potential and ensure completion of projects as per targets set under PMKSY;
- Improve water use efficiency (Both Ground and Surface Water);
- Promote Participatory Irrigation Management, and formation of Water User Associations and NGOs:
- Promote convergence under various schemes;
- Provide platform to share best practices;
- Any other work required to achieve the objectives of PMKSY.
- iii. Development of Integrated monitoring framework and dashboard for reltime monitoring of outcome of all components of PMKSY.

A Council headed by CEO, NITI Aayog and having Secretary, Water Resources, River Development and Ganga Rejuvenation; Secretary, Agriculture, Cooperation and Farmers Welfare; Secretary, Rural Development; Secretary, Finance; and Chairman, NABARD as members, shall look after the overall implementation of the works and policy matters. Chief Secretaries (or their representative) of the States having a large number of projects to be completed under this programme i.e. Andhra Pradesh, Maharashtra, Madhya Pradesh, Odisha and Telangana shall also be members of the Council. Further, one of the Chief Secretaries (or her/his representative) from rest of the States implementing projects under this programme, shall also be a member by rotation. The Mission Director would be the Member Secretary of the Council. The Council would be responsible for overall supervision of the Mission to achieve the programme objectives and shall also undertake monitoring and midcourse corrections, whenever required, during implementation of the programme.

A High Level Empowered Committee (HLEC) comprising of Hon'ble Union Ministers of Finance; Water Resources, River Development and Ganga Rejuvenation; Agriculture, Cooperation and Farmers Welfare; Rural Development; and Vice Chairman, NITI Aayog would review the progress of the identified 99 MMI projects and other components under PMKSY and also provide policy guidance for mid-term course corrections.

At the State Level, Agriculture Department acts as the nodal department for implementation of

PMKSY as the final outcome of the programme is to ensure access to efficient delivery and application of water at every farm thereby enhancing agriculture production and productivity. All communication between the Department of Agriculture, Cooperation and Farmers Welfare, Government of India and the State Governments rests with and through the nodal department. However, implementing departments in the States for the four components of PMKSY i.e. AIBP, Har Khet Ko Pani, Per Drop More Crop and Watershed Development may be decided by the respective programme Ministry/ Department.

The State Level Sanctioning Committee (SLSC), already constituted under RKVY and chaired by the Chief Secretary of the State, is vested with the authority to sanction specific projects recommended by the Inter Departmental Working Group (IDWG). The IDWG comprising of Secretaries of the line departments such as Agriculture, Horticulture, Rural Development, Water Resources/ Irrigation, Environment and Forest etc. and chaired by the Agriculture Production Commissioner/ Development Commissioner are responsible for management of scheme activities within the State. It is also responsible for the scrutiny/ prioritization of the project proposals/ DPRs in conformity with PMKSY operational guidelines.

The **District Level Implementation Committee (DLIC)** forms the third tier of the PMKSY implementation structure in the State.
The DLIC is chaired by the District Collector/District Magistrate and comprise of CEO Zila Parishad/PD DRDA, Joint Director/Deputy Directors of Departments of Horticulture,

Agriculture, Rural Development, Surface and Ground Water Resources, Irrigation, District Forest Officer and Lead Bank Officer of the District, and any other line Departments in the district. The Project Director, Agricultural Technology Management Agency (ATMA) is the Member Secretary of the DLIC. In addition, DLIC may have two progressive farmers and a leading NGO working in the District, if any, as members. The farmers may be nominated for one year from District Farmers' Advisory Committee under ATMA. The NGO representative may be nominated by the District Collector. The DLIC is responsible for overseeing the programme implementation and inter-departmental coordination at the district level.

#### 1.1 Action Plan

District Irrigation Plans (DIPs) shall be the cornerstone for planning and implementation of PMKSY. DIPs will identify the gaps in irrigation infrastructure at the district level. Preparation of DIPs will be taken up by the District level Implementation Committee (DLIC) as a joint exercise of all participating departments. The DIPs would need to ensure

that all on-going schemes of the Central and the State Governments having similar objectives are duly converged at the district level. The inputs from the Intensive Participatory Planning Exercise (IPPE) conducted under MGNREGA in about 2,500 blocks may be useful in preparing DIPs. Existing literatures on irrigation may be studied and reliable information may be used for identifying various issues and formulating suitable strategies for addressing identified issues so as to achieve Har Khet Ko Pani in the districts. Agriculture Universities in the States and other reputed institutions may also be closely involved with the formulation and implementation of Detailed Project Reports (DPRs) and the District Level Plans. The DIPs would subsequently be incorporated in the State Irrigation Plan (SIP). The SIP will not only consolidate the DIPs but also outline definite annual action plan by prioritizing the implementation of DIPs/ Projects with available resources as per PMKSY guidelines. Irrigation-deprived districts/blocks/villages may be accorded priority for new projects (i.e. other than on-going sanctioned projects) under all components of PMKSY.

#### **Physical Targets and Financial Outlays**

#### 2.0 Targets and Outlays

The PMKSY was initially approved during 2015-16 for implementation across the country with an indicative outlay of Rs. 50,000 crore in five years (Table-2.1)

Assistance (CA) for AIBP and CAD components of 99 prioritized projects has been made through NABARD as per year-wise requirements which would be paid back in 15 years' time keeping a grace period of 3 years. Further, the State Governments, if required,

Table 2.1 - Projected physical target and indicative outlay (GoI share)					
Component	Implementing Ministry	Physical Target (in lakh ha) 2015-2020	Financial outlay (in Rs. crores) 2015-2020		
AIBP	MoWR,RD&GR	7.50	11060		
Har Khet Ko Pani	MoWR,RD&GR	21.00	9050		
Per Drop, More Crop	DAC&FW	100.00	16300		
Watershed Development	DoLR	11.50	13590		
TOTAL			50000		

It was further approved in July, 2016 to complete 99 prioritized projects under AIBP including their CADWM works; by December, 2019. Total requirement of funds for completion of identified 99 projects is estimated at Rs. 77,595 crore (Rs. 48,546 crore for project works and Rs. 29,049 for CAD&WM works) with Central Assistance (CA) of Rs. 31,342 crore. An area of 76.03 lakh ha is expected to get irrigation coverage with completion of these projects. The funds for both Central Assistance as well as State share completion of these 99 projects have been arranged through NABARD

# 2.1 Funding arrangement for completion of prioritized 99 projects

The arrangement of funds for Central share/

may also borrow funds from NABARD for the State Share.

In respect of State share, the Government has allowed NABARD to raise zero cost bonds, the interest of which shall be borne by the Central Government so that overall interest rate for State share comes to about 6% so as to make it attractive for the States and encourage them to raise requisite State share for early completion of projects.

#### 2.2 Funding Pattern

Ministry of Finance, vide letter dated 28.10.2015, has issued directions for funding pattern of various schemes including PMKSY. These directions have been issued after considering the report of the Sub-Group of Chief Ministers on Rationalisation of Centrally Sponsored Schemes constituted by the NITI Aayog.

The gist of the directions, which are applicable for PMKSY, is as under:

- (i) PMKSY has been included as one of the core schemes which form part of the National Development Agenda.
- (ii) The funding will be shared 60:40
- between the Centre and the State (90:10 for 8 North-Eastern and 3 Himalayan States).
- (iii) In case a scheme/sub-scheme of PMKSY has a central funding pattern less than the level mentioned in para (ii) above, the existing funding pattern will continue.

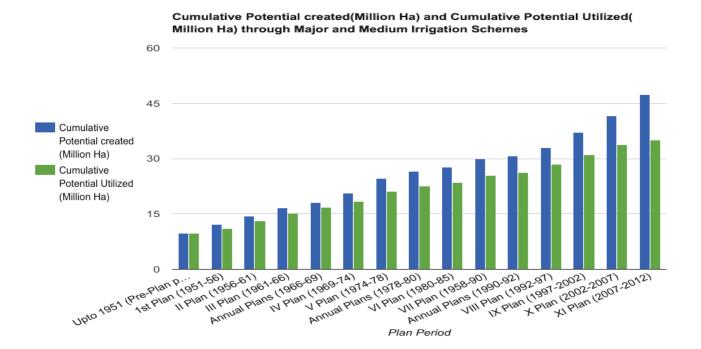
#### **Accelerated Irrigation Benefits Programme**

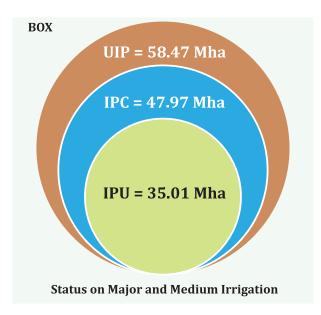
### 3.0 Achievements under Major & Medium Projects

Major and Medium irrigation sector has been at the core of strategies envisaged over the years for providing a sustainable solution to food security and agricultural growth. The irrigation potential created through various major and medium irrigation projects has increased from 9.70 million ha before pre-plan period (1951) to 47.41 million ha by the end of 11th plan (2012). The Plan wise potential creation and utilization (during the plan and cumulative up to the end of the Plan period) in respect of major and medium irrigation projects have been given in **Table-3.1.** 

A summary of existing potential, potential created and potential utilized for major and medium irrigation sector at the end of the XI Five Year Plan is given in box.

Table-3.1	Figures in million ha		
Plan Period	Potential Created	Potential Utilized	
	(during t	the plan)	
Upto 1951 (Pre-Plan period)	9.70	9.70	
I Plan (1951-56)	2.50	1.28	
II Plan (1956-61)	2.13	2.07	
III Plan (1961-66)	2.24	2.12	
Annual Plans (1966-69)	1.53	1.58	
IV Plan (1969-74)	2.60	1.64	
V Plan (1974-78)	4.02	2.70	
Annual Plans (1978-80)	1.89	1.48	
VI Plan (1980-85)	1.09	0.93	
VII Plan	2.22	1.90	
Annual Plans (1990-92)	0.82	0.85	
VIII Plan (1992-97)	2.21	2.13	
IX Plan (1997-2002)	4.10	2.57	
X Plan (2002-2007)	4.59	2.73	
XI Plan (2007-2012)	5.77	1.27	
Cumulative	47.41	35.01	





The irrigation potential being utilized is only 60 percent of the total available potential and 73 percent of the potential created through major and medium irrigation projects. Therefore, in terms of priority, it is imperative that the potential created is fully utilised. The ministry of WR, RD & GR is in the process of formulating a scheme to bridge the gap between irrigation potential created and utilised. The works related to system deficiencies in canal network, improvement in water use efficiency, command area development works would be taken up in the completed projects to reduce the gap between IPC and IPU.

# 3.1 Accelerated Irrigation Benefits Programme (AIBP)

Central Government launched the Accelerated Irrigation Benefits Programme (AIBP) in the year 1996-97 to provide Central Assistance to major/medium irrigation projects in the country, with the objective to accelerate implementation of such projects which were beyond resource capability of the States or were in advanced stage of completion. Priority

was given to those projects which were started in Pre-Fifth and Fifth Plan period and also to those which were benefiting Tribal and Drought Prone Areas. After launch of PMKSY in 2015-16, AIBP became a part of PMKSY.

Since its inception, 297 Irrigation / Multi Purpose Projects have been included for funding under AIBP. Out of this 143 projects have been completed and 5 projects were foreclosed. An irrigation potential of 24.39 Lakh ha has been created through the completed projects. The details of 143 completed projects are at **Annexure-I.** The cumulative Central Loan Assistance / Grant provided to States under AIBP (MMI) to all of above projects till 31.3.2016 was Rs. 55196 crore. Twenty five States got benefited from the programme. During 2016-17, Central Assistance (CA) of Rs. 3308 crore has been released for MMI projects under AIBP.



Champamati Irrigation Project (Major). at Nagdolbari Village, Dist. Chirang, BTC (Assam)



Indira Sagar Dam Project (Madhya Pradesh)

#### 3.2 Funding Pattern

Funding pattern for providing Central

#### Assistance under PMKSY-AIBP is as follows:

Category	Central : State
For North-Eastern and Hilly States	90:10
For area under Drought Prone Area Programme(DPAP), DDP area and National Projects	60:40
For General Category State	25:75

#### 3.3 Action Plan for AIBP

Under PMKSY (AIBP), 99 projects have been prioritized for implementation under PMKSY as these can be completed by Dec.,2019. The details of 99 prioritized projects is given in the **Annexure-II.** The abstract of these prioritized projects is given below in **Table-3.3.** 



Pench Project, Maharashtra



Lower Panzara (Akka Pada) Medium Project Tal Sakri, Dist. Dhule

	Table-3.3 : On-going 99 Projects Prioritized under AIBP with CAD&WM					
Sr. No.	State	No. of Projects	Balance Central Share to be released (Rs. in crore)	State Share (Rs. in Crore)	Irrigation Potential to be utilized (Thousand ha)	
1	Andhra Pradesh	8	610.59	1207.62	63.29	
2	Assam	3	307.31	524.95	124.93	
3	Bihar	2	199.05	259.75	37.27	
4	Chhattisgarh	3	199.07	516.14	7.63	
5	Goa	1	26.29	17.61	4.521	
6	Gujarat	1	3685.72	4421.39	1792.00	
7	Jammu & Kashmir	4	184.03	171.48	61.44	
8	Jharkhand	1	2232.81	1193.31	236.848	
9	Karnataka	5	1837.28	1347.37	252.80	
10	Kerala	2	98.28	121.25	38.08	
11	Madhya Pradesh	14	3624.85	8107.38	72.60	
12	Maharashtra	26	5503.25	14446.57	850.75	
13	Manipur	2	309.86	291.71	36.99	
14	Odisha	8	2300.15	2328.45	328.00	
15	Punjab	2	143.71	219.35	91.95	
16	Rajasthan	2	733.36	830.91	315.57	
17	Telangana	11	4226.32	623439.80	62585.103	
18	Uttar Pradesh	4	5120.84	6808.37	1653.00	
	TOTAL	99	31,342	46,253	7602.772	

#### 3.4 Monitoring of projects

The progress of the projects in physical as well as financial terms is monitored through the field units of Central Water Commission. Further, One nodal officer for each of the 99 priority projects has been identified who would be updating the physical and financial progress of the project regularly in the MIS developed for this purpose. Third party monitoring of these projects is also contemplated. NABARD can also carry out monitoring visits if desire for so.

Ongoing AIBP projects identified for completion by Dec., 2019 were inspected by the monitoring team of CWC during first half of 2016-17 for ascertaining their physical and financial progress. NITI Aayog also visited 31 of these projects. Balance 6 projects could not be visited due to floods, disturbance in the area etc.

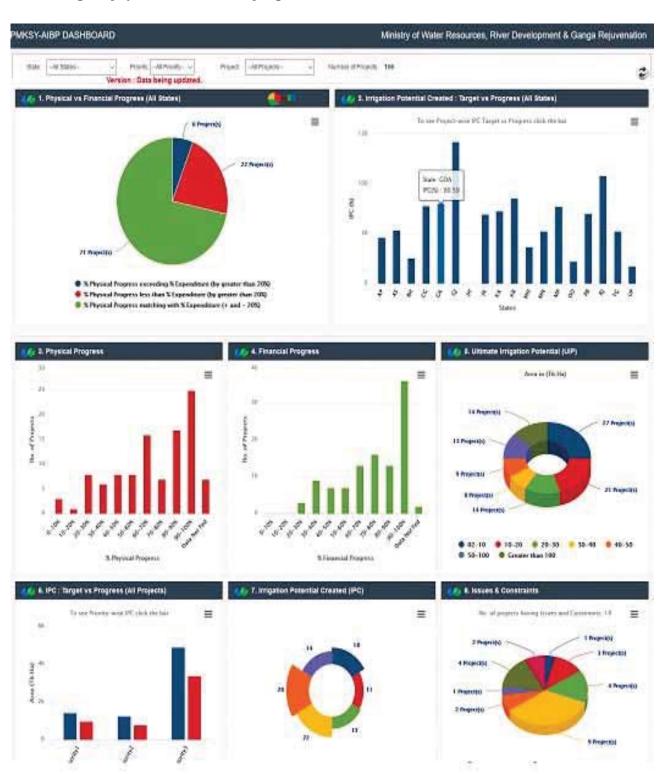
Second monitoring visits have started during Feb, 2017 and is expected to be completed shortly.





# 3.5 MIS system for monitoring progress of projects

An online MIS system has been developed for monitoring the physical and financial progress of the projects on regular basis. MIS system has been put in the public domain. The link of the MIS system has been put in the website of MoWR, RD & GR.



MIS System for monitoring progress of PMKSY-AIBP

### 3.6 Central Assistance released under PMSKY-AIBP

Statewise gist of Central Assistance released during 2015-16 and 2016-17 to the prioritized projects is given in the **Table-4.4.** 

Table-3.4 : Central Assistance Released under PMKSY- AIBP				
Sr. No.	State	2015-16	2016-17	
1	Andhra Pradesh	0.00	7.4	
2	Assam	107.92	0.00	
3	Bihar	41.51	0.00	
4	Chhattisgarh	0.00	13.29	
5	Gujarat	128.00	961.88	
6	Jammu & Kashmir	34.31	0.00	
7	Jharkhand	281.62	145.75	
8	Karnataka	208.16	135.47	
9	Madhya Pradesh	188.21	300.15	
10	Maharashtra	307.81	379.88	
11	Manipur	142.38	126.99	
12	Odisha	173.80	457.66	
13	Punjab	1.05	52.42	
14	<ul><li>14 Rajasthan</li><li>15 Telangana</li></ul>		45.90	
15			545.45	
16	Uttar Pradesh	555.04	135.63	
	TOTAL	2327.82	3307.87	

In addition to above, Central Assistance of Rs. 2514 crore was released during 2016-17 for the Polavaram project.

#### 3.7 Release of funds during 2016-17 through LTIF

Tabl	Table - 3.5 : Funds leveraged through LTIF during 2016-17				
Sr. No.	Item	Funds Released (Rs. in crore)			
1	AIBP	3308			
2	CAD	854			
3	Polavaram Project	2514			
4	State Share from LTIF	3334			
TOTAL		10010			

In addition to above, states are expected to spent Rs. 7870 crore through State budget during 2016-17. Therefore total funds leveraged through LTIF during 2016-17 are expected to be Rs. 17880 crore.

#### 3.8 Irrigation Potential Creation

Irrigation Potential of 3.96 Lakh Ha. has been reported to be created under ongoing prioritized projects under PMKSY-AIBP during 2015-16. Further 21 projects having total potential of 5.22 Lha. are likely to be completed by June, 2017. Details of these 21 projects are in the **Annexure-III.** Irrigation potential utilisation through 99 prioritized projects is likely to exceed 14.0 lakh Ha. during 2016-17.



Upper Indravati Extension-Trial run

Alongwith completion of these 21 projects, 22 projects of Maharashtra, 6 projects of Odisha, 17 projects (including phases) of Madhya Pradesh have been put on fast track and likely to be completed in advance of the scheduled time.

Further, issues in respect of many other projects which were at standstill such as Gosikhurd in Maharashtra state have been streamlined and are getting back on the track so as to meet the completion targets of Dec., 2019. This project is likely to create an irrigation potential of 2.50 lakh ha. Similarly, Polavaram Project has been put on a fast track

when completed this project is likely to irrigate 2.9 lakh ha.



Many States like Maharashtra have utilized innovative means such as installation of underground pressure pipelines to get over the difficulties of land acquisition.



Kandi Canal Project, Punjab

#### 3.9 Targets for 2017-18 to 2019-20

Out of 99 projects, 21 projects are expected to be completed by June-17. Further 33 projects are planned for completion by March, 2018. Balance 45 projects are targeted for completion by Dec., 2019.

### 3.10 Convergence with other schemes

MoWR, RD & GR have initiated integration of their activities with IWMP Programme of DoLR and MGNERGS being implemented by MoRD. A framework has been prepared taking into account 1068 overexploited blocks, 217 critical blocks and 112 irrigation deprived districts. The guidelines in this regard have been issued by MoRD. The framework has been shared with the states and the states are supposed to integrate for the labor component of the budget.

#### PMKSY (Har Khet Ko Pani)

#### 4.0 Programme components

The PMKSY (Har Khet Ko Pani) covers Command Area Development and Water Management (CAD&WM), Minor Irrigation (both surface and ground water) and Repair, Renovation and Restoration (RRR) of water bodies. It may include the following activities:-

- (a) Creation of new water sources through Minor Irrigation (both surface and ground water) and development of Lift irrigation Systems;
- (b) Repair, restoration and renovation of water bodies; strengthening carrying capacity of traditional water sources, construction of rain water harvesting structures (Jal Sanchay);
- (c) Command area development, strengthening and creation of distribution network from source to the farm;
- (d) Ground water development in the areas where it is abundant, so that sink is created to store run-off/ flood water during peak rainy season;
- (e) 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 is to be covered under micro or precision irrigation;
- (f) Diversion of water from source of different locations where it is plenty to nearby water scarce areas;

- (g) Improvement of water-use efficiency;
- (h) Rejuvenating traditional water storage systems like Jal Mandir (Gujarat); Khatri, Kuhl (Himachal Pradesh); Zabo (Nagaland); Eri, Ooranis (Tamil Nadu); Dongs (Assam); Katas, Bandhas (Odisha and Madhya Pradesh) etc..

### **4.1 Command Area Development Works**

The Centrally Sponsored Command Area Development (CAD) Programme was launched in 1974-75 for development of adequate delivery system of irrigation water up to farmers' field with an objective to enhance water use efficiency and production and productivity of crops per unit of land and water for improving socio-economic condition of farmers. The Programme envisages integration of all activities relating to irrigated agriculture in a coordinated manner with multi-disciplinary team under a Command Area Development Authority.

The Programme was restructured and renamed as Command Area Development and Water Management (CAD&WM) Programme w.e.f. 01-04-2004. The Programme is being implemented pari-passu with Accelerated Irrigation Benefits Programme (AIBP) during the XII Five Year Plan.

The activities covered under CAD component of a Project are broadly categorized as 'Structural' and 'Non-Structural' interventions. Structural Intervention includes survey, planning, design and execution of: (i) On-Farm Development (OFD) works;(ii) Construction of field, intermediate & link drains; (iii) Correction of system deficiencies; and (iv) Reclamation of waterlogged areas. Non-Structural Intervention includes activities directed at strengthening of Participatory Irrigation Management (PIM):(i) One time Functional Grant to the registered Water Users' Associations (WUAs); (ii) One time Infrastructure Grant to the registered WUAs; (iii) Trainings, demonstration, and adaptive trials with respect to water use efficiency, increased productivity, and sustainable irrigation participatory environment.

To promote water use efficiency in irrigation, financial assistance is provided to the States for development of infrastructure for micro-irrigation to facilitate use of sprinkler / drip irrigation as an alternative to construction of field channels. At least 10% CCA of each project is to be covered under micro-irrigation. Micro-irrigation infrastructure includes components of sump, pump, HDPE pipelines, and pertinent devices needed for bringing efficiency in water conveyance and field applications (through sprinklers, rain guns, pivots etc).

In case of micro-irrigation, other components such as land leveling, drainage works etc would be reduced, or entirely discarded; enabling certain cost savings which is expected to offset the higher cost of Micro-irrigation infrastructure. The devices – such as sprinkler/rain gun/Drip sets etc. – needed to be installed by individual farmers below farm outlets are not part of the micro-irrigation infrastructure. Farmers are expected to bear the cost of such devices or avail subsidies available in extant scheme of the Ministry of Agriculture.



All CAD works are planned, designed, tendered and executed by the State Governments through its pertinent Departments. Central Water Commission (CWC) through its CAD Cells in the Regional Offices of CWC and the Project Monitoring Organization (PMO) at it's headquarter provides the overall monitoring and coordination support. The Detailed Project Report (DPR) of the CAD component of prioritized Project prepared by the concerned State Government is submitted to CAD Cell of the pertinent Regional Office of CWC. CWC through its CAD Cell and the PMO appraises the DPR and forwards its recommendations to the CADWM Wing of the Ministry. CADWM Wing of Ministry processes the case for approval of competent level for inclusion of Project under CADWM Program.

#### 4.1.1 Funding Pattern

Table - 4.1 : Cost sharing for the CAD component			
Activities Eligible for Funding	Cost Sharing Ratio		
All activities of Structural interventions	50:50 (Centre : State)		
All activities of Non-Structural interventions excluding Functional Grant to WUAs	60:40 (Centre : State)		
Functional Grant to registered WUAs	45:45:10 (Centre: State: farmer)		
Incremental Establishment Cost	50:50 (Centre : State)		

Funds under PMKSY (HKKP) for the CAD component will be provided to the State Governments as per Cost Sharing Ratios (which will be applied on the Ceiling Costs) indicated previous page:

For eight North Eastern States and three Himalayan States of Himachal Pradesh, Jammu & Kashmir, and Uttarakhand, the cost sharing norms for 'All activities of Non-Structural interventions except Functional Grant to WUAs' will be 75:25 (Centre: State) in lieu of 60:40 norm applicable for other States.

### **4.1.2 Participatory Irrigation Management (PIM)**

National Water Policy stresses participatory approach in water resources management. It has been recognized that participation of beneficiaries will help greatly in the optimal upkeep of irrigation system and effective utilization of irrigation water. The participation of farmers in the management of irrigation would include transfer responsibility for operation & maintenance and also collection of water charges to the Water Users' Association in their respective jurisdiction with effect from 2008-09. One time functional grant @Rs.1200/- per hectare to be shared by the Centre, State and Farmers in the ratio of 45:45:10 respectively is being paid to outlet level Water Users Associations' as incentive, the interest from which is to be used for maintenance. Apart from this, an amount of Rs. 3.00 lakh (60% - Central: 40% -State) is being provided to each WUA as one time infrastructure Grant, Overall 16 States viz. Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Karnataka, Kerala, Madhya

Pradesh, Maharashtra, Nagaland, Odisha, Rajasthan, Sikkim, Tamil Nadu and Uttar Pradesh have either enacted exclusive legislation or amended their Irrigation Acts for involvement of farmers in irrigation management. Other States are also taking steps in this direction. So far 84,779 Water Users' Associations have been formed in various States covering an area of 17.84 million hectare under various commands of irrigation projects.

Under the restructured "Command Area Development & Water Management" Programme, more emphasis is being given to participatory approach. Under this Programme, payment of Central Assistance to State is linked with the formation of WUAs. During the year it is expected that more than 1000 WUAs will be formed in New Projects.

#### 4.1.3 Prioritization of projects

The ongoing CADWM programme has now been restructures and 99 prioritized projects have been approved for completion during 2016-17 to December, 2019.

In respect of other projects, a scheme is under formulation to cover other ongoing and new projects under CAD. The Scheme will target following activities:-

- CADWM works in 185 projects targeting 55 lakh hectare CCA, including 30% coverage by Micro irrigation and balance by OFD works
- Correction of System Deficiency in Canal Network (including Main Canal) of the included projects
- Re-use of Industrial/ Municipal waste

water in the irrigation command for included projects through establishment of infrastructure for additional treatment (if any) and conveyance of water {on experimental basis, restricted to 5% of the total projects}

- Strengthening of PIM aiming for development of capacities of WUAs for Operation and Maintenance of Irrigation System
- Strengthening/extension of 14 existing WALMIs, and creation of 7 new WALMIs for greater penetration of water education and for strengthening of PIM.

## 4.1.4 Central Assistance released under PMSKY-HKKP (CADWM)

Table-4.2 : Physical and financial achievement of the PMKSY (HKKP) during XI & XII Plan					
Plan	Physical (in Million hectare)		Financia Assistar (Rs in cr	•	
	Target	Actual	Target	Actual	
XI Plan	1.32	1.686	1833	1680.12	
XII Plan					
(up to 2015-16)	7.6	1.419*	15000	1887.87	
(from 2016- 17 onwards) (till date)	7.2	0.225*	14525	853.95	
*The achievem	ısed;				

Since the inception of the programme in 1974-75, 219 projects have been completed benefiting a Cultural Command Area (CCA) of about 15 Mha for which CA of about Rs. 5028 crore have been given (up to March 2012). During XII Plan period, a CCA of 7.6 Mha has been targeted with CA amount of Rs 15,000 crore which was subsequently revised to 3.6 Mha during midterm appraisal. From 2015-16, the programme become HKKP component of

PMKSY with a target of 1.5 Mha. Subsequently, from 2016-17 onwards, the role of programme has been restricted to 99 prioritised AIBP projects. The physical and financial achievement of the project during XI and XII Plan period are summarised in table no. 4.2.

Statewise gist of Central Assistance released during 2015-16 and 2016-17 for CAD works is given in the **Annexure-IV.** 

#### 4.2 Surface Minor Irrigation

Central Loan Assistance under AIBP was introduced in 1996 to provide financial assistance to the states to expedite completion of surface water Major and Medium irrigation Projects. Since 1999-2000, scope of AIBP has been extended to include Surface Minor Irrigation (SMI) Schemes in Special Category States of North Eastern Region and other hilly states namely Himachal Pradesh, J&K, Uttarakhand and Koraput, Bolandgir and Kalahandi (KBK) districts of Odisha. Since April, 2005 this assistance was provided in the form of grant and further extended to include SMI schemes serving DPAP/Tribal area in Nonspecial Category States also.

During XII Plan, SMI schemes benefitting DDP, Flood Prone Area and Left Wing Extremists affected area were included for central assistance under AIBP. About 5651 SMI schemes from 16 States have been included During XII Plan. An irrigation potential of 11.56 lakh ha is targeted to be created through these schemes. So far 6.95 lakh ha irrigation potential has reported to be created and about 3270 schemes have been reported to be completed.

After the introduction of PMKSY in 2015-16,

	Table- 4.3 : Details of SMI schemes during XII Plan							
Sl No	States	No of schemes	Estimated Cost	Targeted Potential	Cumulative Potential Achieved till 03/2017	No of Schemes completed		
1	Arunachal Pradesh	315	230.723	0.192	0.164	185		
2	Assam	987	4899.969	3.869	1.593	491		
3	Bihar	176	351.620	0.645	0.533	117		
4	Chhatisgarh	232	1164.610	0.892	0.419	122		
5	Himachal Pradesh	230	252.170	0.297	0.213	216		
6	Jammu & Kashmir	420	1342.431	1.335	0.649	123		
7	Jharkhand	361	421.116	0.517	0.409	267		
8	Madhya Pradesh	343	2201.491	1.411	0.525	275		
9	Maharashtra	46	1519.195	0.507	0.067	3		
10	Manipur	267	325.241	0.244	0.223	165		
11	Meghalaya	241	543.794	0.352	0.125	115		
12	Mizoram	14	13.708	0.006	0.000	-		
13	Nagaland	434	312.848	0.209	0.204	418		
14	Sikkim	381	115.021	0.124	0.081	225		
15	Tripura	21	47.323	0.039	0.000	0		
16	Uttarakhand	1183	1138.211	0.921	0.732	548		
	TOTAL	5651	14879.471	1.558	5.936	3270		

SMI schemes are part of Har Khet Ko Pani (HKKP) of PMKSY. Under PMKSY (HKKP), a target of creation of irrigation potential of 2.0 lakh has been envisaged through SMI schemes between 2015-16 and 2019-20.

#### 4.2.1 Funding Pattern

Table-4.4				
SMI Schemes	Central:State			
Special Category States (North Eastern states, Hilly states i.e. Himachal Pradesh, Jammu & Kashmir & Uttarakhand)	90:10			
All Non Special Category States, Schemes benefitting tribal areas, drought prone areas, desert prone areas and Left Wing Extremists Affected area	60:40			

#### 4.2.2 Irrigation Potential Creation

In 2015-16, central assistance of Rs. 601.93 crore was released and irrigation potential of 1.05 lakh ha has been reported to be created. In 2016-17, central assistance of Rs. 148 crore has been released. State-wise details of the ongoing SMI schemes are given in **Annexure-V.** 

#### 4.2.3 Plan for 2017-18

During 2017-18, a potential of 0.4 lakh ha is targeted to be created through SMI schemes.

#### 4.3 RRR of water bodies scheme

The scheme of RRR of water bodies has multiple objectives such as reclamation of the

lost irrigation potential, improvement of catchment area of the tanks, increase in storage capacity of water bodies and development of tourism and cultural activities. Therefore, it was visualized that this programme will go in a long way in enhancing water availability in different parts of the country.

During the X Plan, the Pilot Scheme namely "Repair, Renovation and Restoration (RRR) of Water Bodies directly linked to agriculture was launched in January 2005. Under this scheme works in 1085 water bodies were completed and an irrigation potential of 0.78 lakh ha was restored.

Based on success of the pilot scheme, two schemes of RRR, one with domestic support & other with external assistance were launched. Under the scheme of external assistance, 8747 water bodies were proposed for restoration in the states of Andhra Pradesh including Telengana (3000), Karnataka (1224), Orissa (900) and Tamil Nadu (5763). About 8054 water bodies have been reported to be revived under the scheme of external support. Under the scheme of domestic support, a total of 3341 water bodies were taken up for restoration in 12 states out of which 2198 water bodies have been completed till date and an irrigation potential of 1.093 lakh ha has been reported to be restored. A total central grant amounting to Rs. 917.259 crore had been released to the states for completion of works on these water bodies.

The scheme for Repair, Renovation & Restoration of Water Bodies was continued in XII Plan also. In XII Plan, 1345 water bodies

have been included under this scheme and an irrigation potential of 1.0187 lakh ha is planned to be revived through the revival of these water bodies. So far, central assistance of Rs. 264.67 crore has been released in this scheme. After the launch of PMKSY, the scheme has become part of HKKP component of PMKSY.

#### 4.3.1 Funding Pattern

Table-4.5					
Category	Central:State				
For North-Eastern and Hilly States	90:10				
For area under Drought Prone Area Programme (DPAP), DDP area, KBK, Tribal and Naxal affected areas	60:40				
For General Category State	25:75				

Funding pattern for providing Central Assistance under RRR scheme is as follows: During 2015-16, Rs. 161 crore has been released and a potential of 0.25 lakh ha has been reported to be revived till date. The statewise details of the scheme are given in table no. 4.6.

#### 4.3.2 Irrigation Potential Creation

During 2015-16, Rs. 161 crore has been released and a potential of 0.25 lakh ha has been reported to be revived till date. The Statewise details of the scheme in XII Plan are in **Annexure-V.** 

#### 4.3.3 Plan for 2017-18

During 2017-18, a potential of 0.3 lakh ha is targeted to be created through RRR of water bodies schemes.

Table- 4.6 : Details of XII Plan RRR of water bodies scheme						
State	No of WBs included	Estimated Cost	Targeted Potential	Targeted Storage revival	Cumulative release till 03/2017	No of completed WBs upto 03/2017
Madhya Pradesh	125	183.2421	0.333045	438.347	37.7	82
Manipur	4	65.442	0.0119657	6.281	10.37	
Meghalaya	9	11.432	0.01096	0.4654	2.52	
Odisha	760	361.52	0.4611	49.3	107.646	370
Rajasthan	32	89.688	0.0758323	10.454	35.925	5
Tamilnadu	154	78.1097	0.0245867	3.8503	9.2235	
Telengana	182	125.454	0.0622	24.399	44.876	
Uttar Pradesh	74	83.4069	0.03447	42.236	16.4087	
Uttarakhand	5	12.49	0.0045	2.274	0	
GRAND TOTAL	1345	1010.8	1.0187	577.61	264.6692	464

#### PMKSY (Per Drop More Crop)

5.0 This component is being implemented by Dept. of Agriculture, Cooperation & Farmers Welfare and mainly focuses on water use efficiency at farm level through precision/Micro Irrigation. The main objectives of Per Drop More Crop (Micro Irrigation) are:

- Increase area under micro irrigation technologies to enhance water use efficiency
- Increase productivity of crops and income of farmers through precision water management.
- Promote micro irrigation technologies in water intensive/consuming crops like sugarcane, banana, cotton etc and give adequate focus to extend coverage of field crops under micro irrigation technologies.
- Make potential use of micro irrigation systems for promoting fertigation.
- Promote micro irrigation technologies in water scarce, water stressed and critical ground water blocks/districts
- Establish convergence and synergy with activities of on-going programmes and schemes, particularly with created water source for its potential use, integration of solar energy for pressurized irrigation etc.
- Promote, develop and disseminate micro irrigation technology for agriculture and horticulture development with modern scientific knowledge.

Besides promoting precision irrigation and

better on-farm water management practices to optimise the use of available water resources, this component also supports gap filling interventions like micro level water storage or water conservation/management activities as Other Intervention, to complement and supplement the works under taken through various national/state level programmes for drought proofing. Central Ground Water Board (CGWB) has identified 1071 blocks/ talukas under over exploited category which need special attention for water conservation and ground water recharge. It has also been observed that 219 districts in the country have been frequently affected by drought in the recent past. These areas are witnessing regular agrarian crisis and the farmers are in the state of distressed condition, requiring special attention and support for a durable & sustainable solution.

These areas require special treatment to improve the condition of underground water, to improve soil moisture regime and to create micro water storages for protective irrigation during longer dry spells. States have been advised to use the resources of Other Intervention for gap filling measures to strengthen drought proofing and water conservation measures in these critical areas. Activities like Water storage/ harvesting structures, Secondary Storage Structure, Ground water development and recharge, Renovation of existing water bodies, water conveyance and water lifting devices etc. are supported under the component. Apart from above, extension activities particularly for

crop alignment, awareness campaign and capacity building etc are also supported under the component.

The action plan for PDMC is drawn from the DIPs. States have been empowered to prioritise the area of operation and taking up location specific interventions under the programme. State Level Sanctioning Committee (SLSC) chaired by Chief Secretary of the states approves the annual action plan of the state based on allocated resources. Thrust is given for cluster based development.

#### 5.1 Achievements

Table-5.1 : The State wise progress						
S.No.	States	2015-16	2016-17			
1	Andhra Pradesh	94104	141098			
2	Bihar	5155	2629			
3	Chattisgarh	8056	16923			
4	Goa	92	12			
5	Gujarat	142681	165948			
6	Haryana	3117	1222			
7	Himachal Pradesh	3306	696			
8	Jharkhand	4528	5810			
9	Karnataka	64220	139406			
10	Kerala	561	309			
11	Madhya Pradesh	75224	48610			
12	Maharashtra	35242	106172			
13	Mizoram	398	0			
14	Odisha	2907	4611			
15	Punjab	1799	1540			
16	Rajasthan	56346	47852			
17	Sikkim	773	0			
18	Tamil Nadu	32288	44778			
19	Telangana	39864	61980			
20	Uttar Pradesh	1598	21241			
21	Uttrakhand	721	1966			
	GRAND TOTAL	572980	812913			





An amount of Rs. 1556.73 crore and Rs. 1991.17 crore have been released as Central Share to states during 2015-16 and 2016-17 respectively for implementation of PDMC component (both Micro Irrigation and Other Intervention).

During 2015-16, 5.72 lakh ha have been covered under Micro Irrigation against the target of 5 lakh ha and during 2016-17, 8.13 lakh ha have been reported so far against the target of 8 lakh ha. The State wise progress is given **(Table 5.1).** 

#### 5.2 Other Interventions



Under Other Interventions it is reported that

48636 nos. of different Water Harvesting Structures with irrigation potential (life saving irrigation) of about 98190 hectare of have been created. The state wise details are given at **Annexure-VI**.

#### 5.3 Preparation of DIPs

All efforts have been made to comprehensive District Irrigation Plans. To this effect 8 training on 'Preparation of DIPs' for All India Services officers in different Premier Institutes of the country with total 201 participants from various states. Common template was developed in consultation with all premier institutes and organizations on water management to facilitate states to prepare the DIPs. Besides, specific training programmes for state level officers were also arranged for preparation of DIPs. So far, district irrigation plans (DIP) for 664 districts have been prepared which covers almost all the agricultural dominated districts of the country. DIPs of 9 districts of Arunachal Pradesh and 2 of Union Territories are yet to be prepared. These states and UTs are being pursued to finalise the DIPs at the earliest.

#### 5.4 Monitoring Mechanism

For effective monitoring of the programme, a dedicated web portal with MIS has been developed and regular update of achievement is being made on this at District level. An Android based Bhuvan integration app for geotagging of interventions has been developed in collaboration with NRSC, Hyderabad. Besides this, regular monitoring is done through Video-conferences, desk reviews, field visits etc.

#### 5.5 Impact of Micro Irrigation

An impact evaluation study for Micro Irrigation was carried out in the year 2014 and major findings of the study are:

- i. The irrigated area has increased after adoption of MI system from the same source. It is observed that with adoption of MI system the increase in irrigation coverage from same source of water is 8.41%. In Maharashtra the average increase was observed to be of 22.28%.
- ii. Farmers of all the states have shown an increase in area under horticulture crops after the adoption of the system. The cropped area after implementation of NMMI has shown an increase due to possibility of irrigation facility in degraded/marginal and undulated land.
- iii. Micro irrigation helped in reduction in irrigation cost by 20%-50% with average of 32.3%. Average electricity consumption has been reduced by about 31% after using the micro irrigation system.
- iv. Saving of fertilizers with averages reduction of about 28% in total fertilizer consumption in the surveyed states. Fertilizer saving vary from 7%-42%.
- v. Micro irrigation has generated benefits to the farmers in terms of enhancement of the productivity. The average productivity of fruits and vegetables has increased about 42.3% and 52.8%, respectively.
- vi. The overall benefits accrued from the micro irrigation system are reflected in the income enhancement of the farmers.

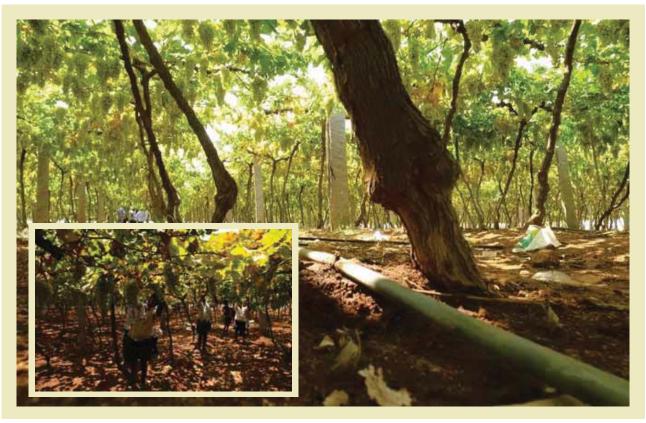
All the surveyed states reported increase in farmer's income in the range of 20% to 68% with an average increase of 48.5%.

Beneficiaries of all the states under study vii. have shown decrease in utilization of the labor in pre-harvest practices that is labor saving on irrigation, weeding, fertilization and other operations. It shows that the use of human labor after the use of micro irrigation has decreased significantly and ranges between 7.41 to 18.75 percent. But in post-harvest operations, right from harvesting to handling and disposal of the produce, there is an increase in labor utilization and it ranges between 21.19 to 50.23 percent due to the increase in the production which requires more of the labor for harvesting, assembling and grading, handling, transportation and disposal of the produce.

#### 5.6 Action Plan for 2017-18

During the year 2017-18, Rs. 3400.00 Crore (BE) has been allocated. Creation of 1 lakh ha potential as lifesaving irrigation has been targeted through Other Interventions. 12 lakh ha has been targeted to be covered under Micro Irrigation during 2017-18 which is about 50% more than that of last year.

With a view to provide impetus to micro irrigation in the country, the Union Finance Minister, in his Budget Speech 2017-18 has announced creation of a dedicated Micro Irrigation Fund to be instituted with NABARD with an initial corpus of Rs.5000 crore for encouraging public and private investments in modern irrigation methods such as sprinkler and drip irrigation as also water use enhancing practices to realize the objective of 'Per Drop More Crop'.



#### **Watershed Development**

#### 6.0 Programme Overview

Integrated Watershed Management Programme (IWMP) was launched in 2009-10 after integrating and consolidating the then existing programmes namely Drought Prone Area Programme (DPAP), Desert Development Programme (DDP) and Integrated Wasteland Development Programme (IWDP). IWMP has been amalgamated as the Watershed Development Component of the Pradhan Mantri Krishi Sinchayee Yojana (WDC-PMKSY) from 2015-16 [other components of PMKSY are (1) "Har Khet to Paani" and (2) AIBP – implemented by MoWR, RD & GR and (3) "More Crop Per Drop – implemented by DAC &FW].

The objectives of IWMP are harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and ground water; prevention of soil run-off; rain water harvesting and recharging of ground water table; increasing the productivity of crops; introduction of multi-cropping and diverse agro-based activities; promoting sustainable livelihoods and increasing the household incomes; etc. The major activities undertaken under IWMP/WDC-PMKSY inter alia include soil and moisture conservation works, rain water harvesting, nursery raising, afforestation, horticulture, pasture development, livelihood activities for the asset-less persons and production system & micro enterprises for small and marginal farmers.

PMKSY is to be implemented through the District Irrigation Plan (DIP) and State Irrigation Plan (SIP). The DPRs of the projects

being implemented under the Watershed Development Component shall become a part of the DIP.

#### 6.1 Main features of WDC-PMKSY

- i. Programme is being implemented in 28 states excluding Goa.
- ii. Projects are taken up in a cluster of micro-watersheds having a total area of about 5000 ha in rainfed/degraded areas having no assured irrigation. Area of a micro-watershed is about 500 ha.
- iii. Projects are implemented over three phase namely Preparatory, Work and Consolidation phase.
- iv. Cost norm is Rs. 15000/- per ha for hilly & difficult area, uptoRs. 15000/- per ha for IWMP projects in the IAP districts and Rs. 12000/- per ha for other areas.
- v. Funding pattern is 60:40 between Centre and the States for all the States (except North-Eastern States and J&K, H.P & Uttarakhand) wherein the funding pattern is 90:10.
- vi. Programme is implemented through dedicated institutions at the level of States (State Level Nodal Agencies-SLNA), District (Watershed Cell cum Data Centre-WCDC), Project (Project Implementing Agencies-PIA) and Panchayat (Watershed Committees-WC).
- vii. Budget is prescribed for various components Admin 10%, M&E 2%, EPA-4%, Institution and capacity building-5%, DPR-1%, Watershed works

-56%, Livelihood activities-9%, Production systems and microenterprises-10% and Consolidation phase-3%.

viii. Livelihood activities are implemented through SHGs and/or their federation. Financial support to enterprising individuals can also be considered subject to a maximum of 10% of the funds under the livelihood component.

released during 2015-16 and 2016-17.

An amount of R. 2,150.47 crore budget (BE) has been provided for the Watershed Development Component of PMKSY including Neeranchal Project (Rs. 105 crore) during 2017-18.

#### **6.2.2 Physical Progress**

At present, no further sanction of watershed

#### Key achievements under IWMP

- 8,214 projects to cover an area of 39.068 million ha have been sanctioned till March, 2015 at a total cost of Rs 50739.58 crore.
- As of 31.03.2017, an amount of Rs. 13991.76 crore as Central share has been provided to the States.
- Out of sanctioned 8214 projects, 568 projects (6.92%) are in the post work Consolidation Phase, 5003 (60.90%) are in the Works Phase, and 2643 (32.18%) projects are in the Preparatory Phase.
- Third party M&E agencies [M/s Mukesh & Associates, Salem for West and NE regions and M/s Vimarsh Development Solutions, Gurgaon for North region] have been engaged at the DoLR as well as in the States for concurrent monitoring of the programme.

- DoLR is implementing a web based planning, Monitoring & Evaluation system called Srishti and a mobile App called Drishti. About 5.62 lakh photographs from the field have been uploaded using the mobile app.
- PFMS has been implemented for carrying out financial transactions at all levels under WDC-PMKSY. Transactions to the value of Rs 1440.68 Cr have been done on the PFMS system in 2016-17 as on 07.04.2017
- A web based DPR preparation tool has been developed with an objective to improve and standardize the quality of DPRs.
- A convergence matrix to find synergies with other programmes of the Govt is being finalised in consultation with other Ministries and States.

#### **6.2 Progress of Implementation**

#### 6.2.1 Financial progress

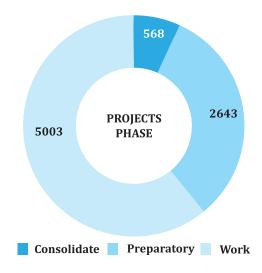
Against the total cost of Rs. 50,739.58 crore for all the 8,214 sanctioned projects, an amount of Rs.11032.21 crore as Central share has been released (since 2009-10, upto 31.03.2015) under WDC - PMKSY. During 2015-16, it became part of PMKSY and Central share of Rs. 1487.83 crore and Rs. 1471.72 crore has been

projects is undertaken; priority is being given to qualitative and time-bound completion of the ongoing sanctioned projects.

Out of sanctioned 8,214 projects, 568 projects (6.91%) are in the Consolidation Phase, 5,003 (60.91%) are in the Work Phase, and 2,643 (32.18%) projects are in the Preparatory Phase.

WDC-PMKSY aims to create protective

irrigation in about 11.5 lakh hectares during 2015-20. During 2015-16 and 2016-17, irrigation coverage of 1.27 lakh hectare and 1.65 lakh hectare respectively, is envisaged. The physical progress made under the programme during last year and the current year is as follows:



The State-wise details of physical progress made under the programme during last year and the current year are given in Annexure-VII. During 2017-18, a target for irrigation coverage of 1.73 lakh ha has been fixed by the department.

Financial Year				
2015-16 2016-17*		Total		
1,05,237	1,29,921	2,35,158		
2,46,805	2,62,259	5,09,064		
5,07,949	4,13,994	9,21,943		
	2015-16 1,05,237 2,46,805 5,07,949	2015-16 2016-17*  1,05,237 1,29,921  2,46,805 2,62,259		



Construction of Checkwall & Checkdam in IWMP-2009-10 Project, Thungathurthy, Nalgonda District, Telanagana





Continuous Contour Trench (CCT) and Deep CCT [IWMP-3 (2010-11), Latitude and longitude - 25.114869 & 74.06376, Gram panchayat - Akhodiya khed Block - Rajsamand, District : Rajsamand, Rajasthan]





Pineapple plantation [Dhalai IWMP-II/B-II, Location: Jarulcherra IWMP, District : Dhalai, GPS Coordinates:  $24^003'\,26''$  N,  $91^051'34''$ E]

#### **6.3 Convergence**

To optimize the resources action has been initiated for signing an MoU with the three

Departments in Ministry of Agriculture & Farmers Welfare, namely (i) Department of Agriculture, Cooperation and Farmers Welfare, (ii) Department of Animal Husbandry, Dairying and Fisheries and (iii) Department of Agricultural Research and Education. Action has also been taken to undertake Natural Resources Management activities by utilizing the labour component of MGNREGS and to undertake some of the Entry Point Activities in convergence with Swachh Bharat Mission (Gramin).

Sr. No.	State/Project Name	Potential Target for AIBP	Potential Created under AIBP upto 3/2014
	ANDHRA PRADESH		
1	Cheyyeru(Annamaya)	9.11	9.11
2	Somasila	38.48	39.77
3	Madduvalasa	10.00	10.00
4	Maddigedda	1.42	1.42
5	Vamsdhara St-II Ph I	17.10	24.49
6	Veligallu	9.71	9.71
7	Swarnamukhi	4.66	3.65
	Sub Total	90.47	98.15
	ASSAM		
8	Pahumara	11.76	10.55
9	Hawaipur lift	3.89	3.89
10	Rupahi Lift	2.77	2.77
11	Boradikarai	7.41	7.20
12	Intg. Irr. Scheme in Kallong Basin	8.65	4.42
13	Kallonga @	2.69	0.00
14	Mod. of Jamuna Irr.	13.76	12.70
	Sub Total	50.91	41.52
	BIHAR		
15	Upper Kiul	11.68	10.68
16	Orni Reservoir	9.56	9.46
17	Bilasi Reservoir	4.00	4.00
18	Sone Modernisation	314.58	290.58
19	Restoration of Kosi Barrage and its appurtenants for sustaining created irrigation Potential	0.00	0.00
	Sub Total	339.82	314.72
	CHHATISGARH		
20	Hasdeo Bango	86.50	86.50
21	Shivnath Diversion	5.24	5.24
22	Jonk Diversion	9.57	7.87
23	Kosarteda	11.12	11.12
24	Mahanadi Res. Pr.	13.88	13.76
25	Barnai	1.51	1.51
26	Minimata (Hasdeo Bango Ph. IV)	38.40	38.40
	Sub Total	166.22	164.40

Sr. No.	State/Project Name	Potential Target for AIBP	Potential Created under AIBP upto 3/2014
	GOA		
27	Salauli	9.30	9.30
	Sub Total	9.30	9.30
	GUJARAT		
28	Jhuj	2.91	2.91
29	Sipu	1.02	1.02
30	Mukteshwar	5.07	5.07
31	Harnav - II	0.00	0.00
32	Umaria	0.16	0.16
33	Damanganga	6.69	6.69
34	Karjan	5.99	5.99
35	Sukhi	3.49	3.49
36	Deo	0.10	0.10
37	Watrak	3.71	3.71
38	Aji-IV	3.75	3.75
39	Ozat-II	1.80	3.34
40	Brahmini-II	2.06	2.06
41	Bhadar-II	1.50	6.00
	Sub Total	38.24	44.28
	HARYANA		
42	Gurgaon Canal		0.00
43	WRCP	131.97	115.22
	Sub Total	131.97	115.22
	HIMACHAL PRADESH		
44	Changer Lift Irr. Project	3.04	3.04
	Sub Total	3.04	3.04
	JAMMU & KASHMIR		
45	Marwal Lift*	11.39	0.00
46	Lethpora Lift*	2.66	2.66
47	Koil Lift*	2.15	0.00
48	Mod. of Kathua Canal	3.21	3.21
49	Igophey Irr. Pr.	3.47	3.47
50	Rafiabad High Lift Irr.	2.93	2.93
51	Mod. of Zaingir Canal	2.14	2.14
52	Mod. Of Martand Canal	1.79	1.79
53	Mod. Of Mav Khul	2.55	2.55
54	Mod. of Babul Canal	0.69	0.29
	Sub Total	32.97	19.03

Sr. No.	State/Project Name	Potential Target for AIBP	Potential Created under AIBP upto 3/2014
	JHARKHAND		
55	Latratu	6.10	6.10
56	Kansjore	6.26	6.26
57	Tapkara Reservoir	1.82	1.52
	Sub Total	14.18	13.88
	KARNATAKA		
58	Hirehalla	8.33	4.18
59	Ghataprabha St.III	148.80	111.57
60	Gandori Nala	8.09	7.94
61	Maskinallah	3.00	3.50
62	Votehole	0.00	0.00
	Sub Total	168.23	127.20
	KERALA		
63	Kallada	9.28	9.28
	Sub Total	9.28	9.28
	MADHYA PRADESH		
64	Bansagar Unit-I	0.00	0.00
65	Upper Wainganga	28.26	28.26
	Rajghat Dam	0.00	0.00
66	Sindh Phase I	10.58	5.21
67	Urmil RBC	2.12	2.12
68	Banjar	1.10	1.10
	Sub Total	42.05	36.69
	MAHARASHTRA		
69	Surya	2.97	2.97
70	Bhima	58.76	58.76
71	Upper Tapi	1.40	1.40
72	Upper Wardha	37.26	34.52
73	Wan	15.28	14.92
74	Jayakwadi Stage-II	7.27	7.27
75	Vishnupuri	2.64	2.64
76	Bahula	4.30	1.67
77	Krishna	19.59	19.59
78	Kukadi	53.14	51.79
79	Hetwane	6.17	1.82
80	Chaskaman	26.19	26.19
81	Wan - II	5.08	0.35

Sr. No.	State/Project Name	Potential Target for AIBP	Potential Created under AIBP upto 3/2014
82	Pothra Nalla	5.16	5.16
83	Utawali	5.07	5.07
84	Purna	7.51	7.51
85	Nandur Madhmeshwar	24.62	24.62
86	Kar	3.24	1.68
87	Lal Nalla	3.84	3.42
88	Arunavati	0.77	0.77
89	Tajnapur LIS	3.62	4.47
90	Khadakwasla	0.62	0.62
91	Kadvi	0.37	0.37
92	Kasarsai	3.04	3.04
93	Jawalgaon	1.81	1.81
94	Kumbhi	5.43	3.60
95	Kasari	1.24	1.24
96	Patgoan	1.99	1.99
97	Madan Tank	3.28	1.20
98	Shivna Takli	6.39	6.39
99	Amravati	2.61	2.00
100	Chandarbhaga	1.92	1.92
101	Sapan	4.43	2.78
102	Pentakli	3.22	2.10
103	Prakasha Barrage	10.31	10.31
104	Sulwade Barrage	8.58	8.58
105	Sarangkheda	11.52	11.52
	Sub Total	360.61	336.04
	ORISSA		
106	Upper Kolab(KBK)	21.40	21.40
107	Titlagarh St-II(KBK)	2.20	2.70
108	Potteru(KBK)	7.28	7.28
109	Naraj Barrage	0.00	0.00
110	Improvement to Sason Canal System	16.28	16.28
111	Salandi Left Main Canal-Ambahata	3.65	3.65
112	Improvement to Salki Irrigation	20.14	20.14
	Sub Total	70.95	71.45
	PUNJAB		
113	Ranjit Sagar Dam	0.00	0.00
114	Remodelling of UBDC	118.00	118.00
115	Irr. to H.P. below Talwara (Shahnehar Irr. Project)	0.00	0.00
	Sub Total	118.00	118.00

Sr. No.	State/Project Name	Potential Target for AIBP	Potential Created under AIBP upto 3/2014
	RAJASTHAN		
116	Jaisamand (Modernisation)	2.40	2.40
117	Chhapi	6.99	6.56
118	Panchana	6.11	6.11
119	Bisalpur	1.80	1.80
120	Gambhiri (Modernisation)	0.93	0.93
121	Chauli	8.96	8.96
122	Mahi Bajaj Sagar	18.41	18.41
	Sub Total	45.59	45.15
	TAMILNADU		
123	WRCP	0.00	0.00
	Sub Total	0.00	0.00
	TELANGANA		
124	Sriramsagar St.I	137.04	137.04
125	Priyadarshini Jurala	40.16	40.16
126	Nagarjunsagar	27.94	27.94
127	Gundalavagu	1.05	1.05
128	Alisagar LIS	21.77	21.77
129	Guthpa LIS	15.70	15.70
	Sub Total	243.66	243.66
	UTTAR PRADESH		
130	Upper Ganga including Madhya Ganga Canal	54.18	52.38
131	Sarda Sahayak	388.46	366.68
132	Providing Kharif Channel in H.K. Doab	11.04	11.04
133	Rajghat Dam	0.00	0.00
134	Gunta Nala Dam	3.88	3.88
135	Gyanpur Pump Canal	1.50	1.50
136	Eastern Ganga Canal	72.29	69.13
137	Rajghat Canal	43.35	41.01
138	Mod. Agra Canal	35.00	37.80
139	Jarauli Pump Canal	39.75	17.63
	Sub Total	649.45	601.03
	UTTRAKHAND		
140	Tehri	270.00	0.00
	Sub Total	270.00	0.00
	WEST BENGAL		
141	Kangsabati	82.06	17.80
142	Mod. Barrage and Irrigation System of DVC	8.00	8.00
143	Hanumata	1.25	1.19
	Sub Total	91.31	26.99

	Details of 99 Priority projects						
Sl. No.	Project Name	Balance cost* (Rs. In crore) as on 01.04.16	Project Completion Target (Month/Year)	Targeted Irrigation Potential (Th. Ha.)			
	Andhra Pradesh						
1	Gundlakamma	87.5	2017	32.4			
2	Tadipudi LIS	91.22	2017	83.61			
3	Thotapally	152.47	2017	48.56			
4	Tarakaram Teerta sagaram	285.69	2017	10			
5	Musurumilli	33.86	2017	9.16			
6	Pushkara LIS	84.79	2017	71.18			
7	Yerracalva	27.54	2017	6.96			
8	Maddigedda (Completed)	1.96	2017	1.42			
	Assam						
9	Dhansiri	152.09	Mar-17	86.37			
10	Champamati	122.61	Mar-17	25			
11	Borolia	72.64	Dec.,2019	13.56			
	Bihar						
12	Durgawati	46.76	2018	23.59			
13	Punpun	269.32	2018	13.68			
	Chhattisgarh						
14	Maniyari Tank	96.04	Mar-19	14.52			
15	Kelo	187.49	2018	22.81			
16	Kharung	241.08	Mar-19	10.3			
	Goa						
17	Tillari	8.69	2018	14.52			
	Gujarat	I	I				
18	Sardar Sarovar	1385.11	2018	1792			
	Jammu & Kashmir	I	I				
19	Tral Lift	70.81	Mar-17	6			
20	Prakachik Khows Canal	18.1	Mar-17	2.26			
21	Restoration & Mod. of Main Ravi Canal	27.16	Mar-17	50.75			
22	Rajpora Lift	0.91	2018	2.43			
	Jharkhand	Г					
23	Subernarekha Multipurpose	2478.74	Mar-19	236.85			
	Karnataka		T				
24	Upper Tunga Irrigation Project	539.64	Mar-17	80.49			
25	Sri Rameswar Irrigation	86.54	Mar-17	13.80			

Sl. No.	Project Name	Balance cost* (Rs. In crore) as on 01.04.16	Project Completion Target (Month/Year)	Targeted Irrigation Potential (Th. Ha.)
26	Karanja	64.51	2018	29.23
27	Bhima LIS	173.12	2018	24.29
28	NLBC System Project (New)	1350.84	2018	105
	Kerala			
29	Karapuzha	55.96	2018	7.36
30	Muvattupuzha	12.56	2018	30.72
	Madhya Pradesh			
31	Sindh Project Phase II	331.12	Mar-17	162.1
32	Indira Sagar Project Canal Phase - I & II (km. 0 to km. 142)	91.53	Mar-17	62.2
	Indira Sagar Project Canal Phase - III (km. 143 to km. 206)	306.49	Mar-17	20.7
	Omkareshwar Project Canal Phase-IV (OSP lift)	367.41	Mar-17	54.63
	Bargi Diversion Project Phase - I (km. 16 to km 63)	31.94	Mar-17	21.19
33	Mahi Project	360.87	2017	33.75
34	Barriyarpur LBC	271.3	2017	43.85
35	Bansagar Unit 2	2247.23	2017	154.54
36	Mahan Project	122.82	2017	19.74
37	Pench Project	1500.34	2017	28.27
38	Sagad Project	142.64	2017	17.06
39	Singhpur Project	111.18	2017	10.2
40	Sanjay sagar (Bah) Project	178.6	2017	17.81
41	Mahuar Project	70.93	2017	13.78
42	Indira Sagar Project Canal Phase - IV (km. 206 to km. 243)	362.77	2017	19.6
	Indira Sagar Project Canal Phase - V (Khargone Lift )	286.44	2017	33.14
	Omkareshwar Project Canal Phase-II (RBC km. 9.70 to km 65.50)	126.86	2017	19.58
43	Omkareshwar Project Canal Phase-III (RBC km. 65.50 to km 142)	68.25	2017	48.59
	Bargi Diversion Project Phase - II (km. 63 to km 104)	36.06	2017	31.9
44	Bargi Diversion Project Phase - III (km. 104 to km 154)	1060.17	2018	26
	Bargi Diversion Project Phase - IV (km. 154 to km 197)	429.77	2018	34

Sl. No.	Project Name	Balance cost* (Rs. In crore) as on 01.04.16	Project Completion Target (Month/Year)	Targeted Irrigation Potential (Th. Ha.)
	Maharashtra			
45	Waghur	494.06	Mar-17	38.57
46	Bawanthadi (IS)	130.71	Mar-17	27.71
47	Lower Dudhna	521.92	Mar-17	44.48
48	Tillari	311.46	Mar-17	6.57
49	Lower Wardha	590.84	Mar-17	63.33
50	Lower Panzara	131.6	Mar-17	6.79
51	Nandur Madhmeshwar Ph-II	360.43	Mar-17	20.5
52	Gosikhurd (NP)	5606.88	Dec.,2019	250.8
53	Upper Pen Ganga	743.89	Dec.,2019	44.47
54	Bembla	1656.23	Dec.,2019	52.54
55	Tarali	366.34	Dec.,2019	14.28
56	Dhom Balaakwadi	348.35	Dec.,2019	18.1
57	Arjuna	277.37	Dec.,2019	5.7
58	Upper Kundalika	106.02	2018	2.8
59	Aruna	209.19	Dec.,2019	9.03
60	Krishna Koyana Lift	1643.89	Dec.,2019	104.17
61	Gadnadi	267.39	Dec.,2019	3.47
62	Dongargaon	2.59	2018	2.77
63	Sangola Branch Canal	642.63	Dec.,2019	11.29
64	Khadakpurna	269.08	Dec.,2019	23.86
65	Warna	831.33	Dec.,2019	54.75
66	Morna (Gureghar)	109.09	Dec.,2019	3.08
67	Lower Pedhi	544.51	Dec.,2019	17.02
68	Wang project	100.4	Dec.,2019	7.07
69	Naradave (Mahammadwadi)	85.92	Mar-19	12.28
70	Kudali	251.44	Mar-19	5.33
	Manipur			
71	Thoubal	332.55	Mar-17	29.45
72	Dolaithabi Barrage	153.05	Mar-17	7.54
	Odisha	1		I
73	Lower Indra(KBK)	0.84	Mar-17	35.87
74	Upper Indravati(KBK)	47.06	2017	85.95
75	Rukura-Tribal	133.57	2017	7.65
76	Subernarekha	1121.88	Mar-19	119.26
77	Anandpur Barr. PhI / Integrated Anandpur Barr.	1197.04	Mar-19	8.88

Sl. No.	Project Name	Balance cost* (Rs. In crore) as on 01.04.16	Project Completion Target (Month/Year)	Targeted Irrigation Potential (Th. Ha.)
78	RET irrigation	206.56	2018	8.5
79	Kanupur	611.87	2018	47.74
80	Telengiri	133.77	2018	13.83
	Punjab			
81	Kandi Canal Extension (Ph.II)	176.27	Mar-17	23.33
82	Rehabilitation of Ist Patiala Feeder and Kotla Branch Project	57.06	Mar-17	68.62
	Rajasthan			
83	Narmada Canal	356.15	Mar-17	245.88
84	Mod. of Gang Canal	41.8	2018	69.69
	Telangana			
85	J. Chokha Rao LIS	2193.91	Mar-17	249
86	SriKomaram Bheem project	115.78	2017	9.92
87	Gollavagu Project	24.2	2017	3.85
88	Rallivagu project	14.08	2017	2.43
89	Mathadivagu Project	10.83	2017	3.44
90	Peddavagu @ Neelwai project	28.7	2017	6.07
91	Palemvagu project	3.99	2017	4.1
92	Peddavagu @ Jagannathpur	146.47	2017	6.07
93	SRSP St.II	418.13	2017	178.07
94	Rajiv Bheema L.I. Scheme	287.97	2017	82.15
95	Indiramma Flood Flow Canal	2081.67	Mar-19	40
	Uttar Pradesh			
96	Bansagar Canal	197.9	2017	150.13
97	Arjun sahayak	730.42	2018	44.38
98	Madhya Ganga canal PH-II	1607.47	Dec.,2019	146.53
99	Saryu Nahar(NP)	2781.42	Dec.,2019	1312

 $<sup>\</sup>ensuremath{^*}$  The information is as intimated by States.

	Priority projects likely to be completed by June, 2017						
Sl. No.	Project Name	Targeted Irrigation Potential (Th. Ha.)	Project Completion Target (Month/Year)	CAD Completion Target			
	Andhra Pradesh						
1	Maddigedda	1.42	Completed	Completed			
	Chhattisgarh						
2	Maniyari Tank	14.52	Jun-17	Jun-18			
3	Kharung	10.3	Mar-17	Jul-18			
	Karnataka						
4	Sri Rameswar Irrigation	13.8	Jun-17	Jun-18			
	Madhya Pradesh						
5	Sindh Project Phase II	162.1	Jun-17	Jun-18			
6	Singhpur Project	10.2	Jun-17	Jun-18			
7	Mahuar Project	13.78	Mar-17	Jun-18			
8	Indira Sagar Project Canal Phase - V (Khargone Lift )	33.14	Jun-17				
	Maharashtra						
9	Bawanthadi (IS)	27.71	Jun-17	Jun-18			
10	Lower Panzara	6.79	Mar-17	Jun-18			
11	Nandur Madhmeshwar Ph-II	20.5	Jun-17	Jun-17			
12	Dongargaon	2.77	Jun-17	Jun-17			
	Odisha						
13	Upper Indravati(KBK)	85.95	Completed	Completed			
14	Rukura-Tribal	7.65	Jun-17	Jun-17			
	Punjab						
15	Kandi Canal Extension (Ph.II)	23.33	Jun-17	Not reqd as water made available upto 2.5 ha through underground pipelines			
16	Rehabilitation of Ist Patiala Feeder and Kotla Branch Project	68.62	Jun-17	Already completed			
	Telangana						
17	Gollavagu Project	3.85	Jun-17	Jun-18			
18	Rallivagu project	2.43	Jun-17	Jun-18			
19	Mathadivagu Project	3.44	Jun-17	Jun-18			
20	Peddavagu @ Neelwai project	6.07	Jun-17	Jun-18			
21	Palemvagu project	4.1	Jun-17	Jun-18			
	TOTAL	522.47					

	CA under released CADWM				
Sl.No.	State	CA under released CADWM (Rs. in crore)			
		2015-16	2016-17		
1	Arunachal Pradesh	8.31			
2	Assam	24.32			
3	Bihar	7.75	12.6433		
4	Gujarat	354.72	681.644		
5	Haryana	34.7			
6	Himachal Pradesh	1.67			
7	Jammu & Kashmir	27.53			
8	Karnataka	9.09	31.4262		
9	Kerala	1.44			
10	Madhya Pradesh	99.15	77.794		
11	Maharashtra	4.78	15.174		
12	Manipur	18.62			
13	Odisha	34.92	35.273		
14	Punjab	155.92			
15	Rajasthan	102.88			
16	Tamil Nadu	29.27			
17	Uttar Pradesh	34.33			
18	West Bengal	7.55			
	TOTAL	956.95	853.95		

#### Annexure-V

	State wise details of SMI schemes in XII Plan								
						Amount	is in crore a	nd potential in	lakh ha.
SI. No.	State	No of schemes	Estimated Cost	Targeted Potential	Cumulative CA released till 03/2016	Cumulative Potential Achieved till 03/2016	No of Schemes completed	CA Release in 2015-16	CA Released during 2016- 17
1	Arunachal Pradesh	315	230.72	0.19	166.61	0.16	185	37.22	20.52
2	Assam	987	4899.97	3.87	1877.95	1.59	491	139.41	87.736
3	Bihar	176	351.62	0.65	115.29	0.53	117	6.36	0.00
4	Chhatisgarh	232	1164.61	0.89	343.36	0.44	122	32.77	0.00
5	Himachal Pradesh	230	252.17	0.30	160.43	0.21		0.00	1.125
6	J&K	420	1342.43	1.34	358.91	1.66	123	84.03	0.00
7	Jharkhand	361	421.12	0.52	311.13	0.41	267		0.00
8	Madhya Pradesh	343	2201.49	1.41	1251.93	0.52	275	0.00	0.00
9	Maharashtra	46	1519.19	0.51	500.91	0.05	3	0.00	0.00
10	Manipur	267	325.24	0.24	193.39	0.22	165	40.00	20.00
11	Meghalaya	241	543.79	0.35	252.48	0.12	115	72.99	0.00
12	Mizoram	14	13.71	0.01	1.98	0.00		1.98	0.00
13	Nagaland	434	312.85	0.21	244.57	0.20	418	61.45	18.50
14	Sikkim	381	115.02	0.12	56.63	0.08	225	4.34	0.00
15	Tripura	21	47.32	0.04	17.75	0.00		0.00	0.00
16	Uttarakhand	1183	1138.21	0.91	806.58	0.73	548	121.37	0.00
	TOTAL	5651	14879.47	11.55	6659.91	6.95	3270	601.93	148.00

Other interventions under Per Crop More Drop							
			2015-16		2016-17		
Sl. No.	Name of the state	DIP prepared	No. of WHS	Protective Irrig (ha)	No. of WHS	Protective Irrig (ha)	
1	Andhra Pradesh	13	1310	2300	7339	13958	
2	Arunachal Pradesh	9	0	0	0	0	
3	Assam	27	0	0	0	0	
4	Bihar	38	0	0	0	0	
5	Chhattisgarh	27	4	46	778	1349	
6	Goa	2	0	0	0	0	
7	Gujarat	33	350	401	346	1438	
8	Haryana	21	0	0	179	2228	
9	НР	12	126	220	0	0	
10	J&K	22	0	0	0	0	
11	Jharkhand	24	373	321	0	0	
12	Karnataka	30	2053	2693	4195	14406	
13	Kerala	14	546	621	0	0	
14	Madhya Pradesh	51	412	1138	0	0	
15	Maharashtra	34	0	0	312	3477	
16	Manipur	9	0	0	0	0	
17	Meghalaya	11	0	0	0	0	
18	Mizoram	8	0	0	381	753	
19	Nagaland	11	0	0	1001	668	
20	Odisha	30	473	1077	1092	2317	
21	Punjab	22	0	0	0	0	
22	Rajasthan	33	4673	7653	0	0	
23	Sikkim	4	0	0	0	0	
24	Tamil Nadu	31	3272	1970	10962	20321	
25	Telangana	30	4371	9269	2093	1356	
26	Tripura	8	0	0	0	0	
27	Uttar Pradesh	75	0	0	222	8081	
28	Uttarakhand	13	787	123	986	0	
29	West Bengal	19	0	0	0	0	
30	Others	3	0	0	0	0	
	TOTAL	664	18750	27835	29886	70355	

State-wise details of Physical progress made under the programme during past two years and the current year								
Sl. No.	State	Structure	Water Harvesting Additional area Structures (WHS) brought under created/rejuvenated irrigation		Farmers benefited			
		FINANCIAL YEAR						
		2015-16	2016-17*	2015-16	2016-17*	2015-16	2016-17 *	
1	Andhra Pradesh	33270	69976	51581.00	76864.00	0923.00	73711.00	
2	Bihar	836	1403	3406.00	11260.00	13029.00	19926.00	
3	Chhattisgarh	1680	633	4074.68	870.00	8728.00	266.00	
4	Gujarat	676	3237	76.00	6347.00	1232.00	8347.00	
5	Haryana	1208	155	27971.00	1575.00	22070.00	835.00	
6	Himachal Pradesh	1293	813	2741.08	1042.00	14052.00	5852.00	
7	Jammu & Kashmir	222	775	25.00	7925.00	3823.00	47351.00	
8	Jharkhand	1568	787	1099.00	708.00	21980.00	5509.00	
9	Karnataka	8118	3764	14805.00	10079.00	1668.00	14082.00	
10	Kerala	2605	1611	6897.70	1932.00	20710.00	11925.00	
11	Madhya Pradesh	5604	4697	20315.00	26907.00	1255.00	28434.00	
12	Maharashtra	3650	826	28816.00	7175.00	27685.00	6805.00	
13	Odisha	3832	6885	3863.00	9227.00	12800.00	21845.00	
14	Punjab	27	37	3817.00	2030.00	190.00	155.00	
15	Rajasthan	8498	17726	5717.00	17291.00	21429.00	43217.00	
16	Tamil Nadu	2519	8039	5034.74	15502.00	13678.00	33928.00	
17	Telangana	4435	0	9269.00	0.00	747.00	0.00	
18	Uttar Pradesh	1994	3293	3734.00	12842.00	7469.00	23533.00	
19	Uttarakhand	11430	375	1351.00	76.00	2929.00	1777.00	
20	West Bengal	3784	2121	1137.00	1457.00	2244.00	2892.00	
	North Eastern States							
21	Arunachal Pradesh	104	42	68.00	54.00	3070.00	985.00	
22	Assam	2769	780	20568.19	35084.00	108534.00	18850.00	
23	Manipur	2023	357	251.00	202.00	83212.00	4695.00	
24	Meghalaya	419	128	1508.00	29.90	2779.00	1563.00	
25	Mizoram	2031	838	27922.89	14127.00	6693.00	33581.00	
26	Nagaland	22	358	7.00	948.00	18.00	2528.00	
27	Sikkim	0	93	0.00	630.00	0.00	685.00	
28	Tripura	620	172	750.00	75.00	1002.00	717.00	
	Total	105237	129921	246805.28	262258.90	507949.00	413994.00	
* As per information received from States (as on 30.11.2016); provisional and subject to change								

#### PRESS CLIPS

# पोलावरम समेत विभिन्न सिंचाई परियोजनाएं 2019 तक होंगी पूरी : उमा भारती

विशेष प्रतिनिधि र्स् दिली। बोहोन गरी उस

word it any wat for shears वर्षन इच्छारों कृषि विचाई पेजा और लॉरन विचाई साथ कार्यक्रम को अंतर्गत सभी शिवाई वरियोजनाओं को 2019 तक पूरा sur frese server ; push fres it an लाख रंफोपर अस्तियन भूम को मिचाई की जा सकेती।

उमा ने कहा, "सरकार ने इस परियोजना को राष्ट्रीय परियोजना का दर्ज दिया है और इस पर आने बाल सारा खर्च और सरकार पहन कांगी (

उन्होंने कहा कि पोताबाव वर्षत प्रधानवनी ऋषि विश्वाई भीजव और लारित विचार्त साथ कार्यक्रम को अंतर्गत सभी सिंपार्ट परियोजसभी को 2019 तक पूरा कर तिक जरूरा। इस परियोजनाओं के पूरे होने पर देश में 80 लाख भी जा सबंदी।

साकारी विक्रांत के अनुसर वसा भारती ने सांध वर्षण क्षे मुख्यानी एत चंडकान् नायह् को चलावरम सिमाई परिचोजना के तिए गयाई की तरफ ये जारी 1981 करोड़ रुपये की विलीय महायत बा येक प्रदार किया।

वं रिन्ट् 3274 कारोड़ रूपये के ग्रेक करी किए

सागा पोताबात प्रीचीवना के राम से भी जाना जाता है। यह 2 था



प्रधानमंत्री कृति विधाई चीजन के सहर आपेट्र आंध्र प्रदेश, मुजात, महागड़ की विशीष घटट में मंत्रीय टस्तानेजी को प्रदान करने के मीके पर आपोतिन समागेद को मंत्रीयित करती हुई लेगीय जब संसाधन चीते मुनी उमा भारती। साथ में हैं केटीय तिल चंडी अन्नत केटली, शहरी विधास वंती एवं नेकीया नावडू, आंध्र प्रदेश के युव्यवेती एन चन्द्र कानू नावडू, जल संसाधन राज्यवंती हा. संजीव कुमार बालियान व विज्ञान और तकरीकी राज्यवंती वाई एवं चौचती।

विराह्मकालम्ब राहर वृत्त अन्य केले इस परियोजना को ल्यारित के लिए समाई में 2001 54 करोड़ में पीने के पाने को आपूर्ति के रूप निवार्ड लाभ कार्यक्रम (आईबीफी रुपये की व्यवस्था की गई है। इस ्र नपर्य को विश्लीय सहात्रका वे कृत 23 44 की करोड़ घर कीर क्ष प्रदान किया। टीएमधी तथा विशास्त्रकारणस्थ इसोने आंध्र प्रदेश की स्मात मनव के तिह औद्योगिक पंताबरम् समेत गुजात और याने को अनूनि का भी प्राथमा है। महाराष्ट्र की सिमाई परिभोजनाओं इस परिपोजना ने सूच्या नदी बेसिन

ापण करवाम अवस्था कर पूर्व के पूर्व के स्थान के प्रति के स्थान के प्रति के सार के प्रति के सार के प्रति के सार के प्रति के सार की प्रति है। इस परियोजना में 31 2981.94 करीड़ नगरे में में, राज्य पार्च 2014. तथा मूल 5155.82 सारकार हारा किए गूल वर्ष के लिए सारोड़ करने, वर्ष में किए के पार्च के हैं। 1981.54 करीड़ ग्रेज करा जारी किया है। 1981.54 करीड़ ग्रंज जार संस्थार मंद्री मार्थ 3014. लक्ष कुल 5135.87 करोड़ रुप्ये अर्थ किले जा मुक्ते हैं जिसमें से एआईबीची को नहल ाकर् वेशिय इंगालान को भी चीच्याच्या वहाना प्रश्न को केली व भागी ने आत साराप्त के सिया इंगालान को भी चीच्याच्या वहाना प्रश्न को गाउँ है अर्थ भागी ने आत साराप्त के सिया इंगालान को चीच्याच्या वहाना प्रश्न को गाउँ है अर्थ भागी ने आत साराप्त के सिया इंगालान को प्रश्निक के प्रश्न के स्वर् क्ष देश्येचा के प्रियार केवा क्षेत्र किया को चीवन आचेन द्वारा परिचेतन प्रतिकाल को जारी भई पटेस की 463 करोड़ वर्ग की अध्यक्षण में एक परिचेत का गठर से प्रकार है।

ात्रमध्य शहू प्रकार को विजानों स्वृती दो गांचे की शिवल वर्ष 2010- किये जा पूर्व है। राज्य धारका इसा किसीय व्यवस्था कर पेक जारी जगायद कामा वाली एक 11 के काम म. एम परियोजना की यो वर्ष मूचन के अन्यास पर खातु जिसा। जमां भागते ने काम विकास के बहुददेशनीय परियोजना है। इस परियोजना को सहस कमा है। 24 परिमोजकाओं को वर्ष 2018 तक पूरा कर लेगी। इनमें से अधिकांश परियोजनाई राज्य के सूखा प्रधारत जिलों से हैं। जलेक्स्टोन हैं कि प्रधारमंत्री कृषि য়িখাই মাজত और লাগৈ যিখাই তথ্য আইমস আ তত্ত বিভিন্ন परियोजनाओं के कार्यानवन से वर्षात पूरे तथ परियोजनाओं की प्राथिकता पर विकास विवास के तित् सलीमगढ् के जल सम्बद्धन गंत्री वृजनोहर अस्रवाल की

समिति को संबंधित राज्ये हारा हपराब्ध बाराई सई जानकारी बे अपुषार ५० परियोजनओं की 2019-20 तक पूरा करने के लिए क्षमान को गई है। 23 परियोजनाओ ज्ञान्त्रीयसनाः। यो 2016-17 तसः और 31 परियोजनाओं पूरा तीने की संधावना है। शंच 45 परियोजनाओं आयोगकता-3: के दिसाबर 2019 तक पूरा होने का अस्तरात है हुए परियोजनाओं पर 77,565 करोड़ रूपये खर्च होने का अनुमान है जिसमें 48546 करोड़ रूपये परियोजना कार्य पर खर्च होने इसमें से 31,342 करोड़ अपने की अनुवारित केडीय महाचना होगी। वर्ष 2016 के टीरान अपने

war uren it with few soft it इन परियोजनाओं को पूरा करने के निया पावार्ड को साथ लोबी अवस्थि की विश्वाद क्योष राजरीआईएक के विश्वाद की धोषणा की भी जब उसके तिर 20,000 करोड़ रुप्ते भी आवरित किए। 12,517 करोड़ with all refer of 2016-17 M उधारी को क्या में प्रदान की गई।

इस बारे में बजर की कमी के महेनजर वर्षवार आवायकताओं की भ्यात में रखते हुए शबाई से कंजीब सहायता से उधार तीरे का निर्णय तिया गया विस्तवा भूगतान १५ सात की अवस्थि में 5 सात की एक रिचायती अवस्थि समेत किया जाना हैं। इसके अलावा, राज्य साकारे, यदि आवश्यक्ष हो हो धन गवार्ड से राज्य को विस्तेरात्री के लिए उध्य

Indian Hortzon Seesing April 8, 2017 City



The Union Minister for Water Resources, River Development and Ganga Rejuvenation, Sushri Uma Bharti launching the MIS for online monitoring of AIBP projects, at a function, in New Delhi

#### PRESS CLIPS

# NBCC inks MoU for Rs 1058 cr Maha irrigation project

▲ Team MP | 1 16 March 2017 10:42 PM | New Delhi



State-owned construction firm NBCC (India) Ltd today signed an agreement with the Vidarbha Irrigation Development Corporation (VIDC) for a Rs 1,058-crore irrigation project in

"NBCC has been allotted construction of irrigation scheme works in Maharashtra under Gosikhurd National Project, valuing approx Rs 6,000 crore," the company said in a statement.

The memorandum of understanding (MoU) for the first phase of work valued at about Rs 1,058 crore was signed today in Mumbai. The first phase is part of the total work of Rs 6,000 crore to be implemented by the company.

The scope of work under Gosikhurd National Project in Maharashtra includes upgradation of civic amenities of rehabilitation villages, right bank canal, canal and distribution system of Nerla and Mokhabardi LIS etc," the statement said.

The first phase of project is likely to be completed in about 18 months.

NBCC MD Anoop Kurnar Mittal said that the company is eyeing overseas markets for expansion. He said the company has bagged Rs 250 crore project from Mauritius last week and is expecting to secure more projects in Mauritius and other such neighbouring

#### केन बेतवा की अंतिम अङ्चन दुर

विका न्व भूते

नो जिल्लो। केदिय जह संस्थापन नदे विकास और नेपा संख्या मोजनाय की मंत्री मुख्या ज्ञार पास्त्री ने घोषणा को है कि केन वेत्राज्ञ नदी जोड़ी परियोजना की जीतन अहुत्वा खब्द हो गई है। आज गई किली में एक समारत को संबोधित काले हुए इजोरे कहा कि परियोजन को गण जीव बोह को मेंज़ी मिल गई है और इसके वाह का मनुगा मान का है कर इसक हिताबि प्रवेषन को अंतिम पर पर दे के बाद इसका अभ्यातिक निर्वाण कार पुरू होया। दो महोराम ने अंध्र प्रदेश के मुख्याती के एन चंद्रवाण नागड़ को मोनास्मा दिखाँ मोनांत्रन के लिए च्यापी की तरफ में करते। १७६३ करोड़ स्था के मिनाय मानार का निर्वाण प्रदेश हैं करोड़ माना मानार का निर्वाण प्रदास आमार मानार का निर्वाण प्रदास आमार पर उन्होंने कहा कि सरफार ने इस परिवेचना को राष्ट्रीय परिवेचना पर दर्जा दिया है और इस पर अने बाला खाद खादी केंद्र सरकार पहल करेगी। मुखी पारणी ने कहा कि पोलाक्त मनेत प्रधानमंत्री भूगि सन्दा कि पोलाक्त मनेत प्रधानमंत्री भूगि सिन्धा बोजना और लागित सिन्धा लाग बार्यक्रम के अंतर्गत सभी विभाग परिवोत्तनओं को 2010 तक पूरा कर लिया लागा। उपनी देता में 80 लाख हे बेटेका

अतिरिक्त चूनि को सियाई की जा सकती। केंद्रित जल गोवागत मंत्री ने हम अवका पर महत्याष्ट्र के लियाई मंत्री वी गिरोस दलातेन महाजन को नावाई की तरफ से जारी 850 करोड़ रफने और गुजात के उप बुख्कांडी और सिकार मंत्री को निर्देश कर पटना को 463 चराइ स्तर्भ को जिलाव सामता का केक ज्या किया। इस अकार पर सुवी चरतों ने कहा कि केंद्र सरका नर्मन सिनाई लाक कार्यक्रम के अंतर्गन महस्त्र भी 26 परियोजनाओं को पर्न 2018 तक पूरा कर लेगी। इनमें में अधिपादन परियोजनार राजा के मुख्या प्रशासित जिल्हों में हैं। इस अध्यसर पर केंद्रीय विकास मेंडी औ अरूप जेरली, केटीप गारी विकास मंत्री वी एम विकेषा कपड़, आंध्र प्रदेश के मुख्यमंत्री की एम नंद्रकानू कपड़ और मेटीय जन संस्थान नदी विकास और वेश संदर्भ राम नंत्री भी जिला नेवल ने भी अपने विकार रावे। प्रतास्थाती कृषि जिलाई वीजना और व्यक्ति सिंचाई लाभ कार्यक्रम के तहल परियोजनाओं के क्यान्यतन में क पान परवानगान क कार्यानगर से संबंधित मुद्दे तथा परियोजनाओं के सार्वभावत पर विचार विभाग के विचार प्रतीमगढ़ के जल संबध्य मंत्री श्री पुतर्नोरंग अक्रकत को अञ्चलता ने एक



निर्मात का नहन किया रख वा कार्यानी को सर्वापन सन्तो इत त्यलका कराई गई जानकार्य के अनुसार 99 परिवोजनाओं की 2019-20 तथा पूर्व करने के लिए परन्तक को गई है। 23 परियोजनाओं (प्राथमिकता-क) के 2016-17 तक और 31 परियोजनाओं (प्राथमिकता नाम) कि

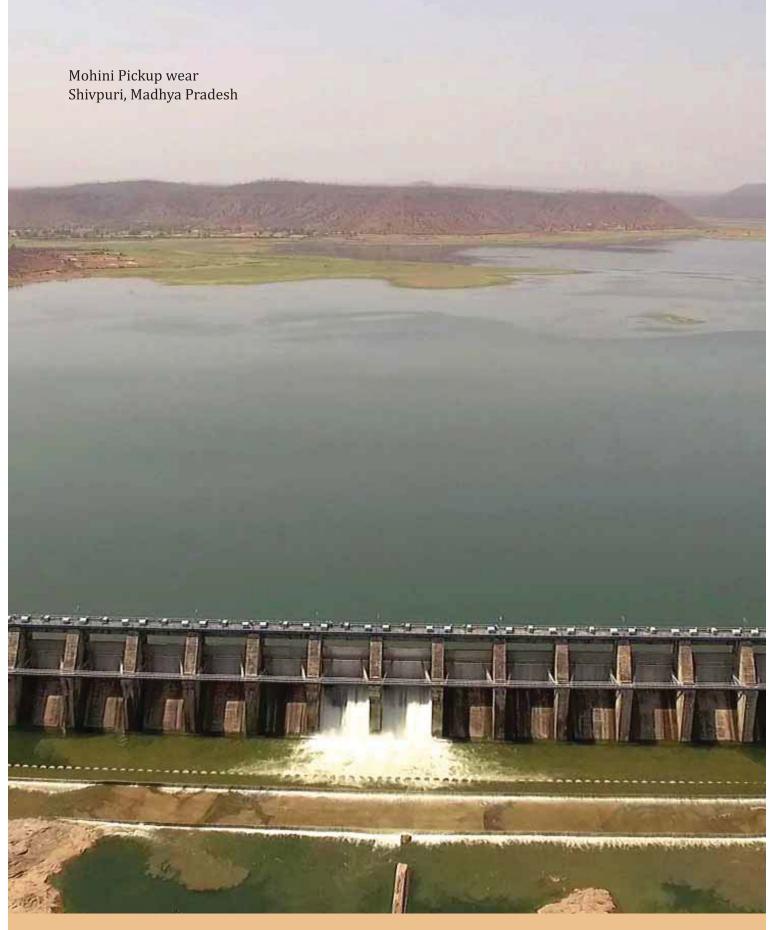
अनुवान है। इन परिवासनाओं पर 77595 करोड़ रुपए (48546 करोड़ रुपये परिवासना कार्य तथा 29049 करोड़ रुपए CAD) कर्म होने का अनुवान है जिसमें में 31342 करोड़ करा। की अनुवानिक केंद्रीय सारायता होती। वर्म 2016 के दौरान अपने करार भावता में, वाद्रीय दिशा गरी है 2017-18 तम् होने को संसारत हैक. इन परियोजनों के पूरा करने के लिए पार्थ 45 परियोजनाने (प्राथमिकता-18) नायाई के साथ लेवी आर्थय के सियाई के दिसाबा, 2019 तक पूरा होने का करेत (LTIF) के निर्माण को योगा को यो

अवर्थित किया 15517 करोड़ क्या को गी। वर्ष 2016-17 के टैटन फटिय संशादनी और बाजर उठावें के रूप में प्रदान की नी। बाजर की कोने के महोता करिया आकरवानाओं की करने में राहरे एए तवाड़ में केन्द्रीय मतानता जाम लेने का निर्मा किया में ना प्रदान 15 मान की अर्थित में 3 मान की एक रिवारण की करीय में 3 मान की एक रिवारण करीय में में मान की एक हराइन अंधार माना हत्या तरा है। इस अस्ताह हा कि स्वाह स्थान हा नाम हराई और अवस्थान की ती अस नामा है गोल शेल है कि हा हा है जो की स्थान की ती अस नामा है गोल शेल ही हैं जो की की है कि साम में में असी जाती हैं जो हि जो ही है जो ही है जो उदा प्रदेश ने पा है जा भी ने नाम उपहरंड बंधारा वार्ती एक बहु दोरांचेंग पितांजा है। इस परियोजन के हता, विकारशायना जहार एसं अंतर के हैं कि पाने परे आर्थि के स्पर्न में जुला 23.44 सी करीड़ एस परिट (टीएममी) के विकारशायनाना इसमा सर्वाय के लिया शीवोजिक पाने की अर्थार्थ का पर प्रकार की इस परियोजन के स्थार में प्रवेशन की इस परियोजन के स्थार में प्रवेशन की इस परियोजन में कृष्ण नहीं पेतिन से 80 टीएसमी पानी पालाब, जीवर पेपिन हरतांतरण की पी

प्रीपक्षणन को नई है। इस मार्ग्यक्रमा का 2009 में 10.451.04 करोड़ कराने (2005-06 के मुक्त स्मार पर) के जिस्सा को बोजना करोना हुए जेजूनी दो नहें और किंत को 2010-11 के तक मा, इस प्रीप्ताक्षण को अधिक पराध्य 16002.45 करिए राष्ट्र है। इस परियोक्त की न्वीत विचार लाथ कार्यक्रम (ए.वर्डाबीचे) के तान केंद्रिय सरायता प्रदान की ना तरी हैं। इस परियोजन में दिशक 31,03,2014 तम कुल 5115.87 करोड़ रुपये किये जा पुके हैं जिसमें से एअपीयीपी से सात 562.469 करोड़ रुपये को केजीप साराया प्रथम को गार्च टेंक वर्ष 2014 में पीजायस को राष्ट्रीय परियोजन चीत्रत किए असे के बाद, 950 करोड़ रुपये पीलावरस परियोजन जीवकरण को जारी किये ज पुके हैं। राज्य सरकार द्वारा दें गई क्तन के अध्यार पर चानू वर्ष के द्वीपाय के पानासकर दुरा मान की अध्यायकता को पूर्व करने के लिए, 2981.54 करीड़ स्पर्ध को जबारों ने जबस्ता की गाँ है। इस को को कुल के द्वीर सहारश के दक्षित 2981.54 करोड़ स्पर्ध में में, राज्य सरका द्वारा किए गर्ने जान के लिए 1981.54 करोड़ आज जारी किने गर्

# उमा भारती ने सिंचाई परियोजनाओं के लिए 3274 करोड़ रुपए के चेक जारी किए

NOTES:	



Ministry of Water Resources, River Development and Ganga Rejuvenation

Government of India