

Chapter I: Programme Overview and Audit Approach

1.1 Introduction

Irrigation is a State subject and the role of the Government of India (GoI) in this sector primarily focuses on overall planning, policy formulation, co-ordination and guidance. The irrigation requirements of the country are met through various modes of irrigation including Major¹, Medium² Irrigation (MMI) projects and Minor Irrigation (MI) schemes³. The Accelerated Irrigation Benefits Programme (AIBP) was launched during 1996-97 as a Central Assistance programme for accelerating the implementation of large projects which were beyond the resource capability of the States and completion of other irrigation projects which were at an advanced stage but were delayed due to resource constraints faced by State Governments. However, the scope of the programme was thereafter, expanded from time to time to cover MI schemes in Special Category States⁴ (SCS) and in specified areas of other States.

1.2 Programme evolution and design

As stated above, the primary goal of AIBP launched in 1996-97 was to speed up completion of MMI projects which were at advanced stages of construction. The coverage under AIBP was gradually expanded over the years to include drought prone area of KBK⁵ districts of Odisha and MI schemes of Special Category States (SCS); Extension, Renovation, Modernization (ERM) projects and MI schemes of Special Areas⁶ (SA) of non-SCS.

From October 2013 onwards, additional emphasis was placed on *pari-passu* implementation of Command Area Development (CAD) works for increasing utilization of Irrigation Potential (IP). During 2015-16, AIBP was made one of the four components of *Pradhan Mantri Krishi Sinchayee Yojana* (PMKSY) with focus on faster completion of on-going MMI projects including National Projects. MI schemes were made a part of the separate component of PMKSY-*Har Khet ko Pani*. Under PMKSY, 99⁷ incomplete MMI projects were identified (July 2016) for completion in a mission mode and referred as Priority projects. All Priority projects were segregated into Priority-I (23), Priority-II (31) and Priority-III projects (45) having schedule of completion by March 2017, March 2018 and December 2019 respectively.

¹ Projects with Irrigation Potential (IP) greater than 10,000 ha of Culturable Command Area (CCA).

² Projects with IP of 2,000 ha to 10,000 ha of CCA.

³ Projects with IP less than 2,000 ha of CCA.

⁴ North Eastern States and Hilly States (Himachal Pradesh, Sikkim, Jammu & Kashmir and Uttarakhand)

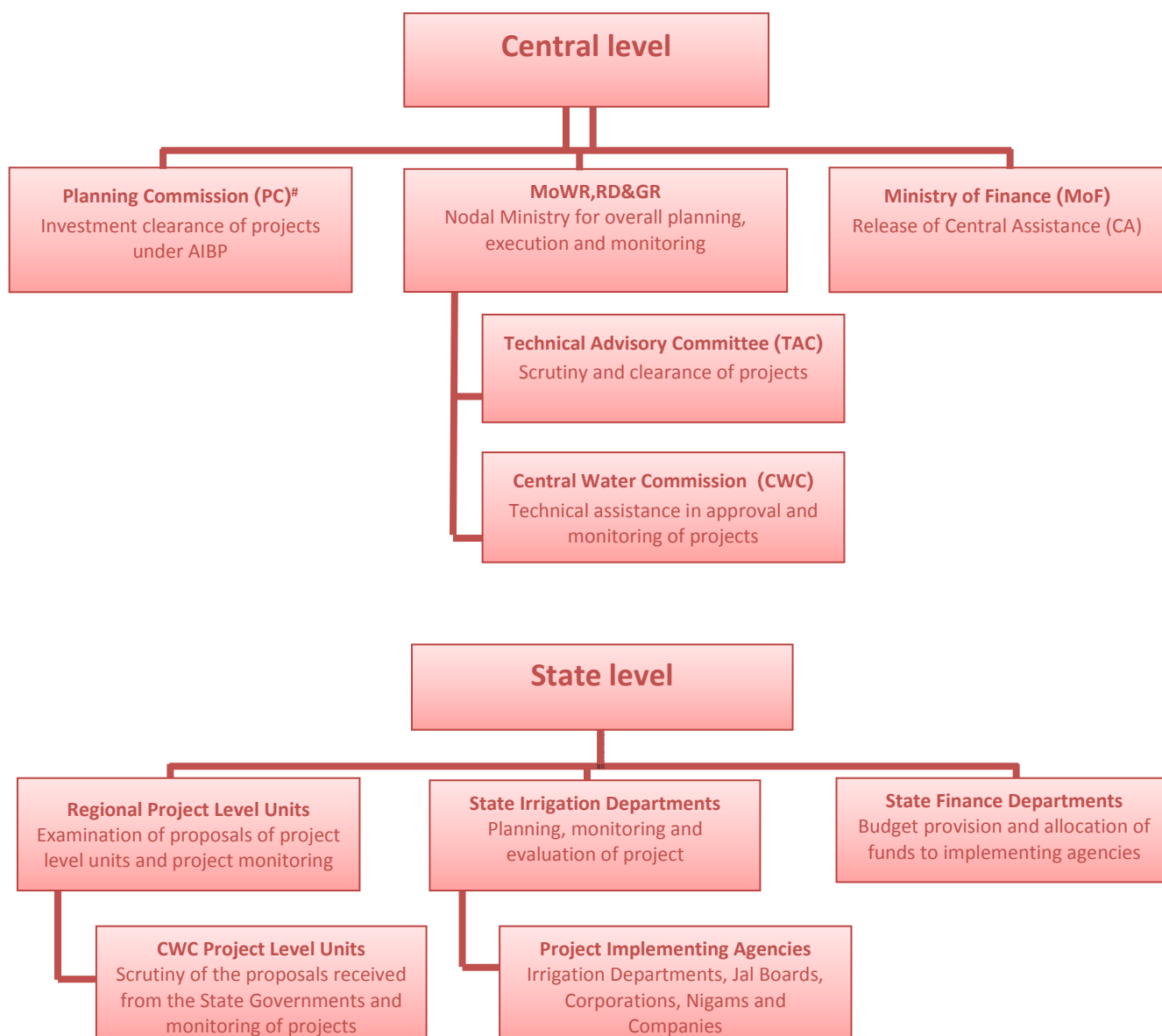
⁵ Koraput, Bolangir and Kalahandi.

⁶ The Special Areas denote Drought Prone Areas, Tribal Areas, Desert Areas, Flood Prone Areas.

⁷ At the time of introduction of PMKSY, 149 projects, including five National Projects, were ongoing. The 99 priority projects include two National Projects (Saryu Nahar Pariyojana in Uttar Pradesh and Gosikhurd Project in Maharashtra).

1.3 Organizational Structure

Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR,RD&GR/Ministry) is responsible for framing policy guidelines for implementation while State Governments are primarily associated with planning and implementation of irrigation projects and schemes. A chart depicting the role of various agencies in implementation of AIBP is given below:



Since constitution of NITI Aayog (January 2015), investment clearance for projects is being given by the Ministry.

Under PMKSY, a three-tier implementation structure as detailed below, has been created (September 2016) at Central level for implementing the programme.

- A **PMKSY Mission** with Additional Secretary/Special Secretary of MoWR,RD&GR as Mission Director, with responsibility inter-alia, for completing the 99 identified MMI projects including their CAD works in a Mission mode.
- A **Council** headed by CEO NITI Aayog and Secretaries of MoWR,RD&GR and Ministry of Agriculture, Cooperation and Farmer’s Welfare (AC&FW) as members, for overall implementation of works, coordination, policy matters and monitoring of the Mission. Chief Secretaries of States with large number of projects were appointed as members along with one Chief Secretary from other States in rotation. The Mission Director is Member Secretary of the Council.
- A **High Level Empowered Committee (HLEC)** with the Finance Minister, Minister of WR,RD&GR, Minister of AC&FW, Minister of Rural Development and Vice Chairman (NITI Aayog) as Members was constituted for reviewing the progress of the projects and other components of the PMKSY.

1.4 Projects approved under AIBP

There were 201 MMI projects under AIBP during 2008-17 (period of Audit coverage) which included 47 MMI projects that were brought under AIBP during the audit period. Similarly, there were 2,808 MI ongoing schemes as on 31st March 2008 and 8,483 schemes were taken up under AIBP during 2008-17. State wise number of MMI projects and MI schemes is given in **Annexure 1.1**. Summary of MMI projects and MI schemes covered during the period under AIBP is given in Table 1.1 below:

Table 1.1: Number of AIBP projects/schemes

Period	MMI and ERM projects	MI schemes
Ongoing projects/schemes as on 2008-09	154	2,808
Added during 2008-09 to 2016-17	47	8,483
Completed during 2008-09 to 2016-17	62	8,014
Ongoing AIBP projects/schemes as on 31.03.2017	139*	3,277

*includes four deferred projects

1.5 Central Assistance under AIBP

A key objective of AIBP was to provide Central Assistance (CA) to States implementing MMI projects and MI schemes to meet their resource gap so as to ensure accelerated completion of irrigation schemes and projects. The funding arrangements under AIBP has also evolved since the inception (October 1996) of the programme and is summarized in Table 1.2.

Table 1.2: Changes in funding pattern

Month/Year	Criteria for funding
October 1996	Funding of MMI projects in the form of Central Loan Assistance (CLA) on 1:1 basis between Centre and the States.
April 1997	Funding for MMI projects for SCS on 2:1 basis between Centre and the States.
April 1999	Funding basis for both MMI projects and MI schemes for SCS on 3:1 between Centre and the States.
February 2002	<ul style="list-style-type: none"> ▪ Concept of Reforming States⁸ introduced with funding on 4:1 basis. ▪ Provision of 100 per cent CLA for SCS, including KBK districts of Odisha.
April 2004	CLA to be converted on project completion to 30 per cent grant/70 per cent loan for General States and 90 per cent grant/10 per cent loan for SCS.
April 2005	The loan component to be raised by the States and grant component to be released by the Centre.
December 2006	In addition to SCS, grant (CA) of 90 per cent also made applicable to SA viz. Tribal Areas, Drought Prone Areas Programme (DPAP), Flood-Prone Areas and KBK districts whereas for projects of all other areas the grant would be 25 per cent.
October 2013	CA as grant reduced to 75 per cent of project cost in SA viz.; DPAP areas, Desert Development Programme (DDP) Area, Tribal Areas, Flood-Prone Areas in non-SCS. Arrangement for all other areas remained unchanged.
October 2015	Provision for 60 per cent CA of project cost in SA i.e. Drought prone/Desert prone/Tribal and Flood prone area in non-SCS and 25 per cent for other areas. Arrangement for all other areas remained unchanged.
July 2016	Provision for funding of 99 Priority projects through NABARD by creation of Long Term Irrigation Fund with an initial corpus of about ₹ 20,000 crore.

(Source: Ministry)

CA for projects under AIBP is provided to States in the form of grants based on AIBP guidelines⁹. During 2008-17, GoI released ₹ 41,143 crore¹⁰ as CA for the programme, which included ₹ 28,334 crore for 197 MMI projects and ₹ 12,809 crore for 11,291 MI schemes. Under PMKSY, the total CA requirement for completion of Priority projects had been estimated at ₹ 31,342 crore.

State-wise details of releases of CA and State share and reported expenditure during 2008-17 in respect of 20¹¹ States are given in **Annexure 1.2**. The details of CA released for MMI projects and MI schemes are given in **Annexure 1.3**. The summary position of funds released for MMI projects and MI schemes under AIBP and expenditure reported with respect to the 20 States for which complete information was made available is given in Table 1.3.

⁸ Based on year-wise Operation and Maintenance (O&M) cost per ha and net revenue collection, increase in water rates at the rate of ₹ 225 per ha for MI schemes and ₹ 450 per ha for MMI projects at interval of three years and increase in water rates to meet full O&M costs for all categories of projects at the end of five years.

⁹ Central Loan Assistance (CLA) was released before November 2006. From December 2006 onwards, CA released in the form of grants only.

¹⁰ Including ₹ 2,421 crore as loan from NABARD during 2016-17.

¹¹ Details on release of States' share in respect of five States viz. Arunachal Pradesh, Goa, Odisha, Rajasthan and West Bengal were not made available by the States/Ministry. Details of States' share and expenditure in respect of Manipur and Punjab is also not available as these were not selected for Audit.

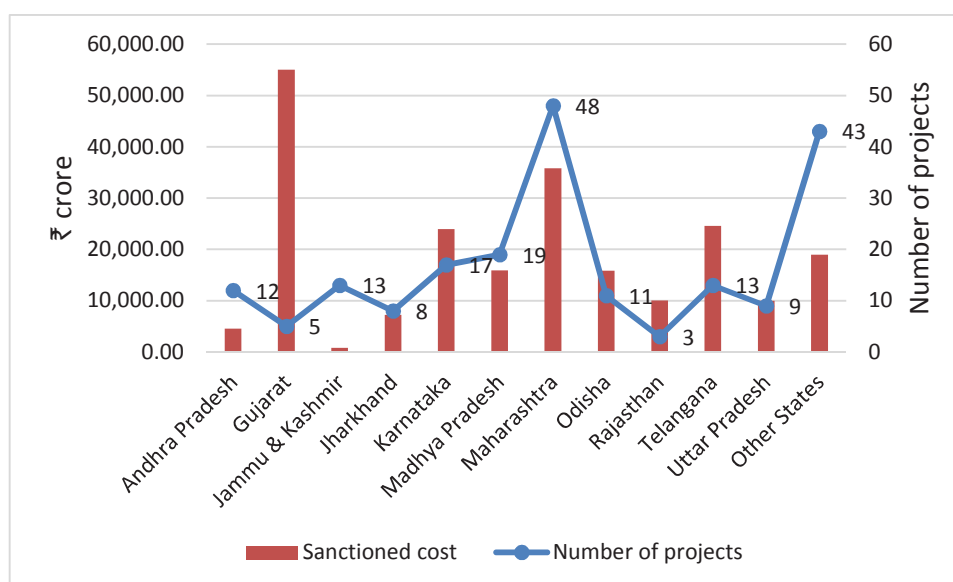
Table 1.3: Financial outlay and Expenditure on AIBP**(Amount in ₹ crore)**

Period	Central share released	State share released	Total Releases	Reported Expenditure
2008-09 to 2016-17	41,143	56,805.84	97,985.32	92,522.39

Source: Central releases are based on the records of the Ministry, while figures of States share and reported expenditure have been compiled from information provided by the State Governments for 20 States only.

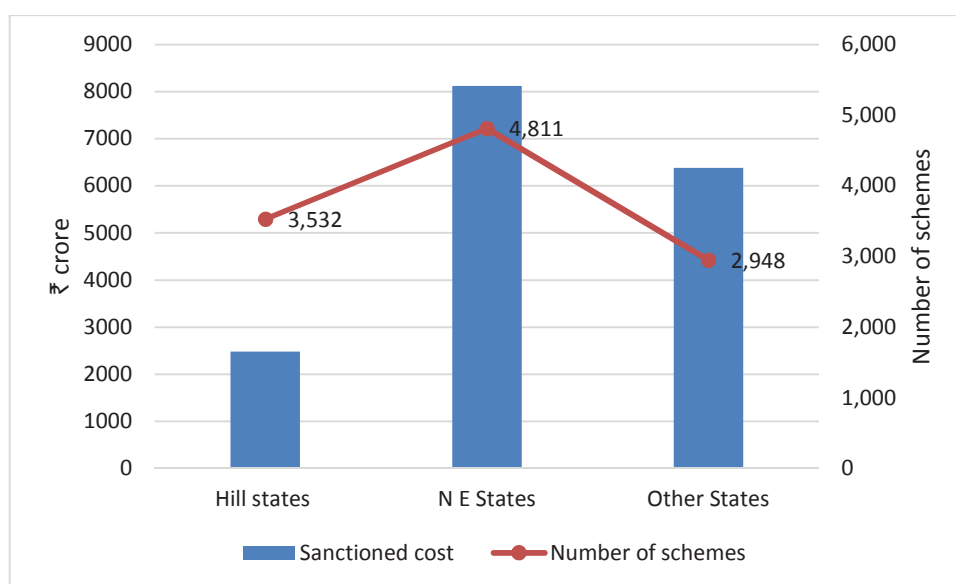
1.6 State-wise distribution of projects/schemes and their sanctioned costs

The total sanctioned cost of the 201 MMI projects which were part of AIBP during 2008-17, was ₹ 2,22,799.98 crore. An analysis of State wise distribution of the MMI projects shows that nine States viz. Maharashtra (48); Madhya Pradesh (19); Karnataka (17); Telangana (13); Jammu and Kashmir (13); Andhra Pradesh (12); Odisha (11); Uttar Pradesh (nine) and Jharkhand (eight) accounted for about 75 per cent of projects covered under AIBP. In terms of sanctioned cost, the States of Gujarat (24.71 per cent), Maharashtra (16.07 per cent), Telangana (11.05 per cent), Karnataka (10.76 per cent), Madhya Pradesh (7.14 per cent), Odisha (7.11 per cent), Rajasthan (4.50 per cent), Uttar Pradesh (4.49 per cent) and Jharkhand (3.26 per cent) accounted for the major share of projects in financial terms. The distribution of projects and sanctioned cost among these States and the remaining States is shown in Chart 1.

Chart 1: MMI projects under AIBP during 2008-17

The total sanctioned cost of 11,291 MI schemes was ₹ 16,800.78 crore. Of this, major portion was allocated for the North East States (47.82 per cent) followed by the Hill States (14.60 per cent), and Other States (37.58 per cent). The distribution of MI schemes and sanctioned cost to these States is shown in Chart 2.

Chart 2: MI schemes under AIBP during 2008-17



1.7 Audit Objectives

We undertook a performance audit of AIBP to examine and assess:

- If planning of the programme was adequate for achieving targeted IP creation and its utilization;
- Whether funds were adequate, available timely and utilized properly;
- Whether the projects were executed in an economic, efficient and effective manner by ensuring availability and sustainable management of water;
- Whether the mechanisms for monitoring and evaluation of projects were adequate and effective; and
- Whether the assurance given by the Ministry in reference to previous recommendations of the PAC have been complied with and implemented.

1.8 Audit Criteria

The main sources of audit criteria for the performance audit were as follows:

- AIBP guidelines;
- Guidelines issued by Central Water Commission (CWC) for preparation of Detailed Project Reports (DPRs);
- Project-wise Memorandum of Understanding (MoU) between the State and Central government;
- State PWD Manual/State Procurement Manuals;

- General Financial Rules;
- Other related circulars/instructions issued by MoWR, RD&GR and CWC; and
- PMKSY Guidelines

1.9 Audit scope and sampling

In this Performance Audit, we covered the MMI projects and MI schemes pertaining to the period 2008-09 to 2016-17 from 25¹² States. A sample of 118 MMI projects from the universe of 201 projects was selected on random basis subject to the condition that 50 *per cent* projects in each State subject to a minimum of one and all Priority I projects were selected under the two groups i.e. Sample A and Sample B. Sample A consists of 30 MMI projects (six Priority I, six Priority II, nine Priority III and nine other projects) drawn from the 47 projects added during 2008-17, whereas Sample B includes 88 MMI projects (15 Priority I, nine Priority II, 18 Priority III and 46 other projects) drawn from rest of the 154 projects. The selected 118 MMI projects constitute 58 *per cent* of total MMI projects.

From the universe of 11,291 ongoing and completed MI schemes pertaining to the period 2008-17, a Sample C of 335 schemes which constitutes three *per cent* of the total number of schemes, was drawn on random basis subject to the condition that five *per cent* of completed and ongoing schemes in each State subject to a maximum of 15 ongoing and completed schemes were selected. State wise numbers and sample of projects/schemes under three samples are given in **Annexure 1.4**.

The 118 MMI projects selected have a total sanctioned cost of ₹ 1,80,145.79 crore and includes 64 priority (21 Priority I, 15 Priority II and 28 Priority III) projects under PMKSY. Further, out of sampled 118 MMI projects, 25 MMI projects pertain to SCS and KBK areas of Odisha and 40 projects pertain to SAs in non-SCS & Agrarian Distress Areas covered under Prime Minister's Package. Of these 118 MMI projects, 30 projects were completed, three were deferred and 85 were ongoing as on 31st March 2017. GoI released ₹ 19,184 crore for 115 sampled MMI projects¹³ as CA and expenditure incurred on these projects was ₹ 62,801 crore during 2008-17.

The total sanctioned cost of 335 selected MI schemes was ₹ 1,680.55 crore, of which 213 were completed and 122 were ongoing as on 31st March 2017. Expenditure to the tune of ₹ 1,591.71 crore was incurred against 335 MI schemes during 2008-17¹⁴.

State-wise distribution of release and expenditure for sampled MMI projects and MI schemes is given in **Annexure 1.5**. It is pertinent to mention that in case of MI schemes, CA is released for cluster of schemes and not for individual schemes.

¹² We covered MMI projects and MI schemes in 21 States each. The total number of States covered for both MMI projects and MI schemes was 25.

¹³ Three deferred projects prior to 2008.

¹⁴ The Scheme wise release of CA was not furnished by the authorities.

1.10 Audit Methodology

The Performance Audit commenced with an Entry meeting with the Ministry on 12 April 2017 in which the audit objectives, scope and methodology were explained. Field audit was conducted from April to September 2017. At the Central level records pertaining to the Ministry and CWC were examined for evaluating the performance of agencies involved in approval/clearance, funding, monitoring and evaluation of projects. State Audit Offices in 25 States examined records relating to planning, financial management, execution, monitoring and evaluation of the selected projects pertaining to the concerned States.

Draft of the Audit Report was issued to the Ministry on 30 November 2017 and their comments received on 09 February 2018. An Exit conference was held with officials of the Ministry on 15 February 2018. The report was revised based on the discussions held in the exit meeting and issued (July 2018) to the Ministry for their further comments. The comments of the Ministry on the revised report are awaited.

1.11 Previous Audit Findings and Public Accounts Committee Recommendations

AIBP was previously examined in audit on two occasions. Audit findings arising out of the first audit were reported in the CAG's Report No. 15 of 2004 (Union Government-Performance Appraisal). The findings of the second audit undertaken of AIBP was reported in the CAG's Report No.4 of 2010-11 (Performance Audit). The findings contained in CAG's Report No.4 of 2010-11 (Performance Audit) were taken up for detailed examination by the Public Accounts Committee (PAC) and its recommendations on the subject were made in its 68th Report (15thLok Sabha). Action Taken Report submitted by the Ministry with respect to the PAC recommendations and related audit findings in the present report are given in **Annexure 1.6.**

1.12 Acknowledgement

We acknowledge the cooperation extended by MoWR,RD&GR, CWC and State Government Departments at each stage of the Performance Audit.