Chapter - V

5. Performance Audit on PSUs (other than Power Sector)

5.1. Performance Audit on 'Benefits derived by the State Government under Accelerated Irrigation Benefit Programme'

Executive Summary

Introduction

A large number of Major and Medium Irrigation projects were languishing due to various reasons, the most important being the inadequate provision of funds by the State Governments due to limited resources at their disposal. Keeping this in view, the Government of India launched (1996-97) the Accelerated Irrigation Benefits Programme (AIBP). The Scheme provided Central Loan Assistance (CLA) to expedite the implementation of the ongoing Major/Medium projects and ensure simultaneous implementation of Field Irrigation Channels (FICs) for utilisation of the created Irrigation Potential, so that end users (farmers) are provided with water. The Scheme was implemented in Karnataka by two Companies (implementing agencies) *viz*. Krishna Bhagya Jala Nigam Limited (KBJNL) and Karnataka Neeravari Nigam Limited (KNNL).

Audit Objective

The Audit objective was to assess whether the State Government and the implementing agencies (KNNL/KBJNL) were able to leverage the benefits of the AIBP Scheme to expedite the completion of the projects (including FICs), and realise the ultimate Irrigation Potential so as to cater to the water needs of the farmers in the State including the drought prone areas.

Audit Findings

Audit observed that the State Government/implementing agencies was not able to leverage the entire benefits of the scheme in terms of either the funding or in creating Irrigation Potential by expediting the completion of projects. The summary of the findings is given below.

- ➤ Of the total of 79,838 ha. due for creation of Irrigation Potential (dry) as per the committed timeframe, the companies could create only 55,516 ha. during the last five years (2013-18) and the Irrigation Potential pending creation as at end of March 2018 was 24,322 ha. (Paragraphs 5.1.9.1, 5.1.9.2 and 5.1.18)
- The envisaged Field Irrigation Channels (FICs) were also not fully completed in any of the six test-checked projects even after a lapse of two to eighteen years, after their original scheduled dates of

completion as there were lapses in planning and execution of the works in synchronisation with the Irrigation Potential already created. Out of the total 1,71,166 ha of FICs due for creation, a total of 1,18,412 ha. of FICs were created during 2013-18. The balance FICs pending creation was 52,754 ha. which included 28,432 ha. for which Irrigation Potential had already been created. As a result, while some parts of the drought prone districts of central and north Karnataka have been provided with irrigation facilities, other parts are yet to receive water. (*Paragraphs 5.1.15 and 5 1.18*)

- Due to non-adherence to prescribed guidelines of AIBP with respect to furnishing Annual Audited Certificates and achieving committed physical targets, the State was deprived of Central Assistance of ₹821.86 crore. The State Govnerment had to bear this deficit by raising funds from external sources. (*Paragraphs*5.1.16.1 and 5.1.16.2)
- ➤ The State Government/ implementing agencies were also not able to fast-track the completion of the projects and realise the Irrigation Potential. This was due to lack of preparedness by the implementing agencies as they did not include the works in their Annual Works Programme in line with the commitments made to the Central Government. There were delays in tendering and award of work, and absence of an efficient works management system to ensure that decisions on scope and design change were handled in an efficient manner by the implementing agencies. These led to delays in completion of work. (Paragraphs 5.1.11 to 5.1.14)
- ➤ In the absence of formation of the State Level Monitoring Committee, no concurrent evaluation of the Projects was done. While there was monitoring by the Central Water Commission, the mechanism of providing compliance to their observations was not optimal. (*Paragraph 5.1.17*)

Introduction

5.1.1. A large number of Major¹⁰¹ and Medium¹⁰² Irrigation projects were languishing due to various reasons, the most important of them being the inadequate provision of funds by the State Governments due to limited resources at their disposal. The Government of Karnataka participated in a Scheme launched by the Government of India in 1996-97 *viz.* the Accelerated Irrigation Benefits Programme (AIBP) Scheme. The Scheme provided Central Loan Assistance (CLA) to expedite the implementation of the ongoing Major/Medium projects and ensure simultaneous implementation of Field Irrigation Channels (FICs) for utilisation of the created Irrigation Potential, so that end users (farmers) are provided with water.

The ratio of funding in the nature of Central Assistance (in the form of grant by Government of India) to the State Contribution during the period 2006-07 to 2012-13was 90:10 for drought-prone areas and 25:75 for non-drought prone areas. This was revised to 75:25 for drought-prone area and 25:75 for the non-drought areas from 2013-14 to 2014-15.

5.1.1.1. In 2016, the Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR), Government of India (GoI) introduced a scheme called Pradhan Mantri Krishi Sinchayee Yojana (PMKSY). PMKSY aimed to enhance the physical access of water on-farm and expand the cultivable area under assured irrigation, improve on-farm water use efficiency, introduce sustainable water conservation practices, *etc.* AIBP was included as part of PMKSY and it focussed on faster completion of ongoing Major and Medium projects. The funding ratio between Government of India and Government of Karnataka was 60:40 from 2015-16 to 2018-19.

Government of Karnataka implemented 12 projects under the AIBP Scheme, which included ¹⁰³ five projects under PMKSY for completion in a time-bound manner.

Organisational Setup

5.1.2. The MoWR, GoI was responsible for policy, guidelines, and programmes for the development and regulation of the country's water resources. The State Governments were primarily responsible with project planning and implementation of the projects.

The agencies, which were involved in the approval and implementation of the projects under AIBP were the Technical Advisory Committee of the MoWR GoI, which was responsible for examination of project proposals and the CWC Project level units, which scrutinised the proposals received from the State Government. The Water Resources Department of the State Government was

¹⁰¹ Projects with Irrigation Potential greater than 10,000 ha. of Culturable Command Area (CCA).

Projects with Irrigation Potential greater than 2,000 ha. and less than 10,000 ha. of CCA.
 Priority-1 projects (two in Karnataka) were to be completed by March 2017, Priority-2 projects (no projects in Karnataka) were to be completed by March 2018 and Priority-3 projects (three projects in Karnataka) were to be completed by December 2019.

responsible for Planning, monitoring and evaluation of projects and the implementing agencies in the State executed the Projects.

5.1.2.1. In Karnataka, the projects under AIBP are implemented by two implementing agencies/Companies *viz.*, Krishna Bhagya Jala Nigam Limited (KBJNL) and Karnataka Neeravari Nigam Limited (KNNL), which were formed during 1994-95 and 1998-99 respectively under the Companies Act, 1956. The objective of creation of these two companies were to overcome constraints in funding by enabling them to raise funds from external sources (*eg.*by floating irrigation bonds, avail loans from financial institutions, *etc.*) and execute the projects undertaken by the Company including AIBP projects. KBJNL and KNNL are administratively controlled by the Water Resources Department, GoK, headed by the Principal Secretary.

Each Company is headed by the Managing Director, who monitors the day-to-day activities. The projects/works taken up are monitored at the field level by the Chief Engineers at Zonal Offices, Superintending Engineers at Circle Offices and Executive Engineers at Divisions.

KNNL and KBJNL created both the dry Irrigation Potential (by construction of canals and distributaries) and also the wet Irrigation Potential (by construction of Field Irrigation Channels-FICs) during the review period 2013-14 to 2017-18. From 2015-16 onwards, the work of construction of FICs of the projects is also undertaken by Command Area Development Authority (CADA), which functioned under the control of the Water Resources Department.

Audit Objective

5.1.3. The audit objective was to assess whether the State Government and the implementing agencies (KNNL/KBJNL) were able to leverage the benefits of the AIBP Scheme to expedite completion of the projects (including FICs), and realise the ultimate Irrigation Potential so as to cater to the water needs of the farmers in the State including the drought prone areas.

Scope of Audit

5.1.4. Twelve Major/Medium irrigation projects were executed under AIBP during 2013-18. Audit selected seven ¹⁰⁴ of the 12 ¹⁰⁵ projects(58 *per cent*) implemented giving due importance to project expenditure and Irrigation Potential. Of the Irrigation Potential of 3,13,810 ha. in these seven test checked projects, 1,28,972 ha. was created before 2012-13 (Table No.5.1.2). The creation of balance Irrigation Potential of 1,84,838 ha. and the pending FICs during the period 2013-18 was assessed in audit.

Further, out of the seven projects, six projects (Malaprabha, Hipparagi, Varahi, Upper Tunga, Bhima Lift Irrigation Scheme, and Karanja) were executed by KNNL and one project (Narayanapura Left Bank Canal - NLBC)

¹⁰⁴ A brief of the Projects and the districts covered by the projects are given in **Appendix-8**.

¹⁰⁵ Status of the twelve projects are given in **Appendix-9**.

was executed by KBJNL. These projects were executed across 30 Divisions of these Companies, out of which Audit selected 17 Divisions. Audit examined records at the Division, Circle and Zonal Offices of these Companies, and also examined the records of the Water Resources Department and Offices of Command Area Development Authority (CADA).

Audit test-checked the works executed during 2013-14 to 2017-18 in each of these seven test-checked projects and the details of the audit coverage are given below:

Number of Value of test-Category Total Value No. number (₹ in test-checked checked works of crore) works (₹ in crore) works Irrigation Potential 4,293.87 1,212.05 1,516 203 2 196.10 Field Irrigation 399 76 48.50 Channels-FIC Total 1.915 4,489,97 279 1,260.55

Table No.5.1.1: Details of sampling

The coverage represented 14.57per cent of the total number of works and 28.07per cent in terms of expenditure.

Audit Methodology

5.1.5. The methodology adopted for achieving the Audit Objectives involved explaining the audit objectives, criteria and scope of audit to the Government and Management during an Entry Conference, which was held on 12 March 2018.

During the course of the audit, audit observations were issued to the Managements seeking their views. The Performance Audit Report was issued to the Government and the Managements, and the Exit Conference was held on 29 October 2018 with the Government. The Government endorsed (October 2018) the replies furnished by the Managements. The views of the Government/Managements have been suitably incorporated in the Report.

Audit Criteria

- **5.1.6.** The Audit Criteria considered for assessing the achievement of the Audit Objectives were derived from the following sources:
 - AIBP Guidelines, Memorandum of Understandings (MoU) between GoI and GoK, Budget documents;
 - Orders/instructions issued by the MoWR, GoI, Central Water Commission and Government of Karnataka;
 - Land Acquisition Acts (1894 and 2013); Karnataka Transparency in Public Procurement (KTPP) Act, 1999; Karnataka Public Works Department Code (1965 and 2014);
 - Detailed Project Reports, Estimates and Contract Documents of the projects/works.

Acknowledgement

5.1.7. We acknowledge the cooperation extended by the Water Resources Department of the GoK, the Managements of the Companies, Offices of the Special Land Acquisition Officers and the Command Area Development Authority in facilitating the conduct of the Performance Audit.

Audit Findings

5.1.8. The projects included under AIBP were to be completed within the time-frame committed in the Memorandum of Understanding (MoU) between the State and Centre.

In order to assess whether the State Government was able to leverage the benefits of the participation in the AIBP Scheme, audit analysed

- (a) Achievement of project deliverables; and
- (b) Factors affecting the project implementation.

Achievement of Project deliverables

Status of the Projects

5.1.9. The status of the seven selected projects executed under AIBP during 2013-14 to 2017-18 by Krishna Bhagya Jala Nigam Limited (KBJNL) and Karnataka Neeravari Nigam Limited (KNNL) is given in the following table:

Table No.5.1.2: Status of selected projects

(Amount: ₹ in crore)

Sl. No.	Project under AIBP	Original/ Revised date of completion	Latest expenditure (March2018)	Targeted Irrigation Potential (IP) under AIBP (ha.)	IP achieved under AIBP (ha.):		
					As of March 2013	As of March 2018 (per cent of achievement to total IP)	Status (March 2018)
Name	of Projects unde	er KNNL					
1	Malaprabha	<u>Dec.2000/</u> Mar . 2013	1,173.38	44,214	44,214	44,214 (100.00)	Creation of Irrigation Potential completed in 2013. However, FIC and Re-modelling works are under progress
2	Karanja	Mar. 2000 Dec.2019	309.80	24,553	18,119	19,554 (79.64)	Ongoing
3	Varahi	Mar. 2011/ Mar. 2015	569.53	15,560	1,328	5,091 (32.72)	Ongoing
4	Hipparagi	<u>Mar. 2011</u> Mar. 2014	1,499.67	74,742	59,307	74,742 (100.00)	Creation of Irrigation Potential completed. However, FIC works are under progress
5	Bhima LIS	Mar. 2012 Dec. 2019	487.20	24,292	6,004	23,633 (97.29)	Ongoing

Sl. No.	Project under AIBP	Original/ Revised date of completion	Latest expenditure (March2018)	Targeted Irrigation Potential (IP) under AIBP (ha.)	IP achieved under AIBP (ha.):		
					As of March 2013	As of March 2018 (per cent of achievement to total IP)	Status (March 2018)
Name of Projects under KNNL							
6	Upper Tunga	Mar. 2016/ Mar. 2017	829.35	25,449106	Nil	17,254 (67.79)	Ongoing
	Total			2,08,810	1,28,972	1,84,488	
Name of Projects under KBJNL							
7	Narayana- pura Left Bank Canal	Dec. 2016 Dec. 2019	1,826.56	1,05,000	Nil	1,01,343 (96.52)	Ongoing
	Total		6,695.49	3,13,810	1,28,972	2,85,831	

^{*} The figures indicated are Irrigation Potential upto distributary/lateral level (Dry potential). Details of the extent of the creation of Field Irrigation Channels (Wet potential) have been dealt with separately in Paragraph 5.1.15 *infra* of this Report.

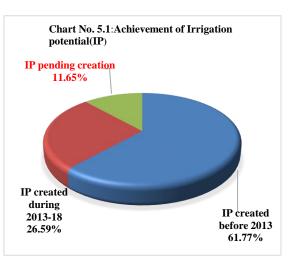
It can be seen from the table above that as at the end of March 2018, only two projects were considered to be physically completed (dry irrigation potential), while five projects were ongoing and Irrigation Potential was yet to be created.

Further, though the two test-checked projects were stated to be physically completed, none of the seven test-checked projects had been completed in the true sense of the word as of March 2018 *i.e.* creation of dry Irrigation Potential as well as creation of wet Irrigation Potential with the creation of Field Irrigation Channels so as to provide water to the fields for utilisation of created Irrigation Potential.

Creation and Utilisation of Irrigation Potential

5.1.9.1. The total Irrigation Potential to be created under the seven test-checked projects was 3,13,810 ha. This included creation of 2,08,810 ha. of fresh Irrigation Potential (new canal network) in six projects and to provide water to 1,05,000 ha of *suffering achkat*¹⁰⁷ by undertaking modernisation work (Extension, Renovation and Modernisation-ERM) of existing canal network of one project *viz.*, Narayanapura Left Bank Canal.

Out of a total of 2,08,810 ha. of Irrigation Potential to be created, 1,28,972 ha. had been created prior to 2013. Of the remaining Irrigation Potential of 79,838 ha., to be created (during 2013-18), the companies could create only 55,516 ha. (70 per cent) during 2013-18. As at end of March 2018, balance Irrigation Potential of 24,322 ha., was pending creation, even after lapse of two to eighteen years from their



¹⁰⁶ In addition, 15,613 ha. of pending FIC of earlier portion of the project was also covered under AIRP

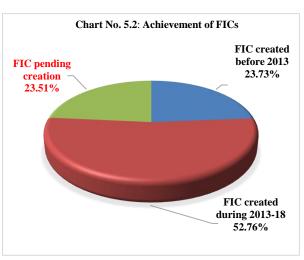
¹⁰⁷ Suffering achkat is area for which adequate quantity of water is not being received.

original scheduled dates of completion

Further, in respect of the ERM-Narayanapura Left Bank Canal Project, canal network for providing water to 3,657 ha. (3 *per cent*) of *suffering achkat* had not been created (March 2018), even though its original scheduled date of completion (December 2016) was over.

5.1.9.2. One of the objectives of the Scheme is to ensure simultaneous implementation of Field Irrigation Channels (FICs) for utilisation of the created Irrigation Potential (dry), so that water was provided for irrigation.

Out of a total of 2,24,423 ha of FICs to be created under six¹⁰⁸ of the seven test checked projects, FICs of 53,257 ha had been created before 2012-13. Out of the total 1,71,166 ha of FICs balance to be created during 2013-18, 1,18,412 ha. of FICs (70 per cent) were created during 2013-18. Audit observed that 52,754 ha. of FIC is pending creation (March 2018) in six projects (all by KNNL) over periods ranging



from 2 to 18 years beyond the original due dates of completion committed in MoU/Form-C.

More importantly, FIC was not created for irrigating 28,432 ha. ¹⁰⁹ of area in these projects even though Irrigation Potential had already been created ¹¹⁰. The reasons for shortfall in creation of FICs are brought out in Paragraph 5.1.15 *infra*.

Audit analysed the factors which affected the Project implementation. The findings are given below.

Factors affecting the Project implementation

5.1.10. The State Government and implementing agencies (KNNL/KBJNL-companies) had made commitments to complete the projects within the time-frame in the Memorandum of Understanding and the Form-C *i.e.* a report containing the programme and progress of works, submitted every year to the Central Water Commission.

Audit analysed the preparedness of the companies in terms of including the works in the Annual Works Programme (AWP) in line with the commitments

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¹⁰⁸ Excluding Narayanapura Left Bank Canal Project, an ERM work envisaged to provide water to *suffering achkat*, for which FICs were not envisaged.

¹⁰⁹ Malaprabha (2,810 ha.), Karanja (1,983 ha.), Varahi (2,019 ha.), Hipparagi (5,348 ha.), Bhima LIS (3,469 ha.) and Upper Tunga (12,803 ha.).

¹¹⁰ 23,968 ha of Irrigation Potential network created prior to 2016-17 and 4,464 ha. Irrigation Potential created during 2017-18.

made to Central Water Commission and whether action was taken to prepare the estimates and award the tenders in a timely manner, after their inclusion in the Annual Works Programme. Further, audit analysed whether the companies had factored the inherent risks such as time taken for acquisition of land, obtaining forest clearance etc. for implementation of projects. Audit also analysed the works management system to ensure that decisions on scope and design changes encountered during implementation were handled timely and efficiently. Audit further analysed whether the works of Field Irrigation Channels were taken up simultaneously along with creation of Irrigation Potential.

The audit findings are given in the following paragraphs:

Preparedness of the companies to accomplish the commitment

5.1.11. As per AIBP Guidelines of 2006, the implementing agencies submit to the State Government every year, a Form-C containing the progress of work for the previous year and programme for the ensuing year, for onward transmission/approval of the CWC with a request to release the Central Assistance. The companies also prepare the Annual Works Programme (AWP)¹¹¹ for the works of the projects proposed to be implemented in the ensuing year.

Audit, however observed that the implementing agencies failed to include the works in the AWP in line with the commitments made for completion of the Project. This was noticed in Varahi Project. The details are given below:

5.1.11.1 The Varahi Project undertaken by KNNL was included under AIBP in 2007-08 with targeted Irrigation Potential of 15,560 ha.to be completed by March 2011, which was subsequently revised to March 2015. The GoI had already released almost its entire share of 25 *per cent* (₹ 99.63 crore) by 2013-14 as per the estimated cost (₹ 405.29 crore).

Despite availability of central assistance, the Company failed to include the works of construction of Varahi Right Bank Canal (VRBC-km.18.725 to km.42.73 km.) and Varahi Lift Irrigation Canal (VLIC-for 26.215 kms) in the Annual Works Programmes before March 2015.

Even as at March 2018, the works in VRBC and VLIC were not included in the Annual Works Programme.

In respect of another branch canal of the Project *viz.*, VLBC (km.39 to km.43.69)¹¹², though the works were included prior to March 2015, the estimates were submitted only in February 2018 and are yet to be approved.

As a result of the above, the Irrigation Potential to the extent of 10,469 ha. is yet to be created.

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¹¹¹ This varied from targets given in the Monthly Monitoring Reports.

¹¹² Works under this stretch were included in the AWP of 2013-14.

Audit analysis revealed that the delay in Irrigation Potential creation was mainly because KNNL failed to initiate the process of land acquisition required for these works (refer to Paragraph 5.1.13.2).

The Government informed (October 2018) that works of VLBC would be tendered shortly and were likely to be completed by 2019-20 and the works of the entire Varahi Project were likely to be completed by 2020-21.

The reply does not address the reasons for non-inclusion of the works of VRBC and VLIC in the Annual Works Programme till date (March 2018) when the completion date committed had been over long back (March 2015). Further, even as on date (March 2018), 10,469 ha. of the targetted Irrigation Potential of 15,560 ha., (representing 67 *per cent*), is pending completion, for which land acquisition proposals are yet to be sent, and hence, completion of the project by 2020-21 is highly doubtful.

Non-timely action to award the tenders

5.1.12. After inclusion of works in the AWP, it was important that the implementing agencies prepare the estimates, obtain technical approval for the work from the Technical Sub-committee (TSC) of the company, prepare Draft Tender Proposals and invite the tenders in a reasonable time so that the works are taken up for execution as planned.

Audit observed that even the works, which were included in the Annual Works Programme, were awarded in the succeeding years (up to two years), though there were no related land acquisition problems for these works. The delays were mainly due to delays in preparation and approval of estimates as there were no timelines fixed for different processes of approval and awarding the works. The audit findings in respect of the test-checked works/projects are given below.

Upper Tunga Project

5.1.12.1. The Upper Tunga Project (UTP), consists of km.0 to km.258 of the main canal and its distributaries. The Project was taken up under AIBP in 2014-15 with a project cost of ₹ 770.16 crore to create Irrigation Potential of 25,449 ha. and was to be completed by March 2016. It was, however, extended to March 2017 after the GoI had categorized (March 2016) the Project as 'Priority Project-1' under PMKSY and was to be completed by March 2017.

Though the works from km.231 to km.258 of the Project were included in the Annual Works Programme of 2014-15, the work of preparing the estimates and tendering for works from km.242 to km.258 was initiated only in 2017-18 for which no reasons were recorded. The works in the entire stretch (km.231 to km.258) are yet to be completed (March 2018). Delays in completion of the work resulted in non-creation of Irrigation Potential of 8,195 ha. Further, as at the end of March 2018, FIC works are pending completion for 20,998 ha.

The Government replied (October 2018) that works in all stretches were now awarded but was silent about the reasons for the delay and about taking corrective measures to avoid administrative delays.

The fact remained that the Company had tendered the works over many years even after including the work in the AWP of 2014-15 despite the fact that land was available.

Varahi Project

5.1.12.2. The work of construction of Varahi Left Bank Canal (earthwork excavation and Cement Concrete Lining) including structures from km.38 to km.43.69 was included in the Annual Works Programme of Varahi Project Division for the year 2013-14. However, no action was taken till September 2016 for this. In September 2016, the execution of the above works was shifted from Varahi Project Division-1 to Varahi Project Division-2.

Audit observed that the approval process for the cut-off statement and estimates was mired for almost a year in seeking and submitting clarifications between the Executive Engineer, Superintending Engineer, and the Chief Engineer and is yet to be approved (September 2018). The process of approval of the cut-off statement (which is a prelude to the preparation of estimate), which was initiated in July 2017 was finally approved in February 2018. The Executive Engineer thereafter prepared (February 2018) the estimates. But the estimates are yet to be approved (March 2018) as the CE informed (March 2018) that command area maps and additional information were not furnished, thereby delaying the technical sanction of the estimates. The CE asked (June 2018) M/s. Secon Private Limited, the agency, which performed the survey of the Varahi Project, for clarification for the difference between the originally contemplated potential (2,642 ha.) and the potential indicated in the estimates (900 ha.). The agency is yet to reply (June 2018).

Thus, tenders in respect of the works, which were included in the AWP of 2013-14 are yet to be finalised (June 2018) due to non-approval of estimates.

The Government replied (October 2018) that Varahi Project was planned to be executed in stages. The alignment from km.38 to km.43.69 was approved in 2003-04, but since then there were developments including need for additional structures. This resulted in change in extent of Irrigation Potential. The Government informed that the work would be taken up during 2018-19.

The fact remains that the Company's plan to tackle the project in stages was not in line with that of scheduled completion as per AIBP and this fact was not included in the Form-C. Further, the Company had ample time between the date of approval of alignment in 2003-04, inclusion of work in AWP in 2013-14 and preparation of cut-off statements in 2017, and during this entire period, the company had failed to reconcile the differences in *achkat* and consider the demand for additional structures. Failure to do so resulted in the delay in sanction of the estimate and consequent delay in creating Irrigation Potential of 2,642 ha. even as at end of September 2018.

Bhima LIS Project

5.1.12.3. The Bhima LIS Project, taken up in 2009-10, envisaged the creation of Irrigation Potential of 24,292 ha. under AIBP with an estimated cost of ₹ 379.70 crore. The Project, which was scheduled to be completed by March 2012, has been extended now to December 2019 after its inclusion under PMKSY. The Project involved the construction of a barrage with two lifts, *viz*. Balundagi and Allagi, with its canals.

On a test-check of 16 out of 61 works executed during 2013-18, it was noticed that in 11 works¹¹³, the time taken from the tender notification to date of issue of Work Order ranged from seven to 33 months as against about five months' time¹¹⁴ ideally. This delayed various works and affected providing irrigation facilities to 8,269.18 ha.

A case of deficiency in inviting tenders resulting in delay in creation of irrigation facility for 2,802 ha. (of the 8,269.18 ha.) in the project is given below:

The tender in respect of the work of the Distributary-15 of Balundagi Canal under Bhima LIS was invited (May 2011) before the estimate was prepared and Draft Tender Proposal (DTP) approved. The approval for the estimate of the work was given in August 2011 and for the Draft Tender Proposal in July 2012. In the meantime, extensions were given for the tender by issuing 14 corrigenda, the last one being issued in June 2012.

The tender was opened in August 2012. The Technical Sub-committee (TSC) approved the award of work in February 2013 with the condition to update the cost of the work. The cost was updated (April 2013) and thereafter submitted to the Board of Directors (BoD) who approved the award of work in August 2013. Finally, the Work Order was issued in February 2014, *i.e.* 18 months after the tenders were opened (August 2012). As per the Work Order, the work was to be completed by February 2015, but the same was completed in March 2016.

As a result of these delays, the works of FICs could not be taken up and completed. As at end of March 2018, the FIC works were under progress.

The Government while confirming (October 2018) the facts replied that corrigenda were necessitated as there were delays in submission of estimate by the consultants and calculation of kilometre rates for the distributary.

The fact was that the due process of tendering was not followed as the tenders was invited (May 2011) even before the estimate was finalised (July 2012), and thereafter there were delays in issue of work order after tenders were issued, all resulting in delay in completion of work and non-creation of irrigation facilities for 2,802 ha. as at end of March 2018.

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¹¹³ Construction of distributaries in Balundagi, Allagi and Ghattarga Branch canals.

¹¹⁴ Two months for opening of tenders after invitation of tender as per KTPP Act, and three months for evaluation, discussion and approval by Technical Sub-committee/ Board of Directors.

Narayanapura Left Bank Canal (NLBC) Project

5.1.12.4. NLBC, an Extension Renovation and Modernisation Project was included (2014-15) under AIBP to provide water to suffering achkat of 1,05,000 ha of land in drought prone districts in Northern Karnataka. The project was to be completed by December 2016. The Project was included under Priority Projects under PMKSY with revised date of completion as December 2019.

Audit test-checked eight works (out of total 16 works) of distributaries (including branch distributaries and laterals) in Jewargi Branch Canal and Mudbal Branch Canal of NLBC. It was observed that in respect of three of the eight works, even though short-term tenders were called (February 2015) citing urgency, it took 16 months to finalize the tenders for the work of distributaries for which reasons were not on record.

As a result, restoration of irrigation facilities in the *suffering achkat* of 8,239 ha. was delayed. Further, out of three works, two works were completed with a delay of 11 and 14 months and one work was under progress with a delay of 16 months even as late as March 2018.

The Government's reply (October 2018) confirmed the factual position that the tenders were invited in February 2015 and approved by BoD in May 2016, without providing any details for the delay.

Thus, the Companies did not gear up to complete the projects within the committed dates. As a result, these projects, which should have been completed within two to seven years, as per the deadlines committed under the Scheme, are still pending completion (March 2018).

Recommendation 1: Projects with specific commitments need to be given preference in the Annual Works Programme.

Recommendation 2: The Companies need to eliminate Technical / Administrative delays in finalising tenders so as to award the works included in the AWP in time.

Land Acquisition

5.1.13. The implementing agencies had to factor the inherent risks while executing the projects. The inherent risks such as delay in acquisition of land, forest clearance, farmers protest, *etc.* need to be factored in for deciding the completion schedule. Land acquisition is a time-consuming process. It is, therefore, imperative that the Companies, executing the work, submits the requirement of land well in time so as to ensure timely possession of land for execution of the projects. With effect from January 2014, land acquisition is governed by the Right to Fair Compensation & Transparency in Land Acquisition, Rehabilitation & Resettlement Act, 2013. It usually takes a minimum of three years to complete the land acquisition process.

5.1.13.1. The State Government/Implementing agencies committed to the scheduled completion date falling within three to five years ¹¹⁵ in the Memorandum of Understanding/Form-C.

Audit observed that in respect of four¹¹⁶ of the seven test-checked projects, the original dates of completion of the projects ranged from March 2000 to March 2016. However, even as at end of March 2018, land acquisition was pending in Karanja (75 hectares), Varahi¹¹⁷ (543 hectares), Bhima LIS (258 hectares) and Upper Tunga (218 hectares). Thus, the requisite land had not been acquired even after two to eighteen years after the scheduled completion dates of the project.

Illustrative cases where there were failures on the part of implementing agencies to submit proposals for land acquisition, failures to pay compensation and award of work before acquisition of land in violation of Extant Orders are given below.

Failure to submit proposals for land acquisition

5.1.13.2. In respect of one test-checked Project *viz*. Varahi, it was observed that the Project, committed to be completed by March 2011, was extended up to March 2015. However, even as at end of September2018, the Company (KNNL) had not taken action to submit proposals for land acquisition in respect of forest land (119 ha.), private land (174 ha.) and Government land (125 ha.) totaling 418 ha. for construction of canals¹¹⁸.

The Government replied (October 2018) that proposals for release of forest land and private land (*Khata* land) were being prepared. The reply confirms the fact that the Company failed to factor the inherent risks of land acquisition even though it was known that the minimum time taken for land acquisition would be three years, and did not take timely action to acquire the land.

Non-payment of compensation

5.1.13.3. Audit observed non-payment of compensation for land acquisition in Malaprabha Project and non-payment of compensation for loss of trees and revenue loss in Varahi, which affected the progress of the works. The details are given below.

• Malaprabha: The work of construction of lateral of 13-R Subdistributary of 57th Block under Malaprabha Right Bank Canal of the Project, was awarded in July 2007 at a cost of ₹ 0.97 crore, to be completed by September 2007.

108 Varahi Right Bank Canal (km.18.419 to km.42.73), Varahi Left Bank Canal (km.30 to

km.43.694) and Varahi Lift Irrigation Canal (km.0 to km.26.215).

¹¹⁵ Malaprabha (five years), Karanja (two years), Varahi (four years), Hipparagi (three years), Bhima LIS (three years), Upper Tunga Project (two years) Narayanapura Left Bank Canal (three years).

¹¹⁶ Irrigation potential in respect of two projects (Malaprabha and Hipparagi) were completed while land acquisition was not envisaged in Narayanapura Left Bank Canal, an ERM project.

¹¹⁷ Position as at October 2018, based on information furnished by the Government.

The contractor did not take up the work as the farmers objected on account of non-receipt of compensation. The land compensation Award was issued in March 2010. The contractor stated (December 2014) that the farmers were not allowing him to execute the work as they had not yet received the compensation. The work was pending (March 2018). This resulted in not providing water to 1,177.36 ha. for more than 10 years.

The Government replied (October 2018) that work was delayed due to agitation by farmers and non-payment of land compensation. The reply does not specify the reasons for non-payment of compensation even after the compensation Award was issued.

• Varahi: The work of km.11 to km.12 of Distributory-16 of Varahi Left Bank Canal was awarded (October 2016) with scheduled date of completion as September 2017.

The Karnataka Cashew Development Corporation (KCDC) claimed (April 2016) amount of ₹ 3 lakh as compensation for loss of trees and revenue loss in the work at km.11 to km.12. Though the Company acquired the land and paid compensation of ₹ 1.65 crore for land acquisition to Karnataka Cashew Development Corporation (KCDC), it had not paid compensation of ₹ 3 lakh for loss of trees and revenue loss claimed (April 2016) by KCDC. As a result, the trees could not be cut and the work was pending completion till date (June 2018) and the contractor had requested for extension of time up to May 2019.

Hence, failure on the part of the Company in making payment towards compensation for loss of revenue to KCDC resulted in delay in completion of the work beyond 12 months (September 2017 to September 2018).

The Government confirmed (October 2018) that the Chief Engineer had recommended (November 2017) for paying the compensation. The fact, however, remained that payment had not been made till date (March 2018).

Recommendation 3: The Company needs to take timely requisite action for land acquisition.

Works Management

5.1.14. The implementing agencies need to have an efficient works management system so that decisions on scope and design changes are handled timely and efficiently. Any delay would result in time overruns as well as cost overruns and more importantly, it would impact the realisation of the objectives for which the projects are included under AIBP. The deficiencies noticed in works management are given below.

Varahi

5.1.14.1. The work of creation of canal from km.29.901 to km.33 of Varahi Left Bank Canal was awarded (October 2016) to a contractor for ₹ 8.20 crore. The work was to be completed by October 2017.

A proposal for Extra Financial Implication (EFI) was submitted (October 2017) to TSC for additional quantities of Soft Rock and excavation in all kinds of soil. TSC remarked (November 2017) that directions had been issued in the past (in October 2006) to provide berm of three-metre width. Even though the estimates for the work were sanctioned in 2015-16, the width of the berm provided in the estimate was only one-metre. The TSC noted that bulk of the extra cost (excavation in soft rock/all kinds of soil due to this change in berm width) was due to the additional excavation, which would have been part of the estimate and not come as extra cost had the directions issued in October 2006 been considered while preparing the estimate.

The EE furnished (December 2017) compliance stating that due to oversight, a berm of one-metre width was provided in the estimate. The EFI for ₹ 3 crore was approved in March 2018.

Thus, preparation of incorrect estimates resulted in delay of five months for approval.

The Government replied (October 2018) that change in the berm width was not the reason for delay as this work was completed by the contractor. The reasons for delays were disputes regarding ownership of land for payment of compensation, deemed forest land and scarcity of sand for execution of the works.

The contention of the Government is not acceptable, as the contractor had attributed the EFI as a cause for the slow progress of work. The work, which was to be completed by October 2017, was not completed till June 2018 even after giving extension till May 2018.

Upper Tunga Project

5.1.14.2. The work of excavation and lining of main canal of the Upper Tunga Project from km.212 to km.217 was awarded (February 2013) to Amruta Constructions Private Limited for ₹ 14.63 crore with a stipulation to complete the work in 11 months (January 2014). The contractor executed work to an extent of ₹ 8.46 crore in all the reaches except km.212 to km.213.220.

The work from km.212 to km.213.220 was not tackled as the farmers demanded change in alignment in this reach and were requested to carry out the canal work as per the alignment originally surveyed. The alignment originally surveyed had been modified and approved at the time of sanction of the estimate to avoid the alignment running in deep cut areas and in the village limits of Somanakatte-Basavankatte.

In a meeting held in November 2015 with the landowners coming under both the old and new alignments, the landowners of the old alignment agreed to part with their lands. As this required fresh land acquisition, the contract was rescinded. The revised tender notification was issued (February 2017) for the balance work. The work was awarded in August 2017 to MVR Constructions for ₹ 10.23 crore. The work was completed in March 2018 creating an Irrigation Potential of 236 ha.

Thus, a work, which was to be completed by January 2014 was delayed for almost four years (2014 to 2018) due to a change in alignment from one that was surveyed initially.

The Government replied (October 2018) that the original approved alignment was modified at the time of estimate to avoid alignment running in deep cut village limits. The alignment could have proved expensive, and the safety of people and property was under threat. As the land owners of the revised alignment did not agree to part with their lands, the work was carried out as per the original alignment.

The fact remains that the Company took four years to decide about the change of alignment. The work was finally executed through the original alignment where farmers were willing to part with their land.

Bhima LIS

5.1.14.3. The work of construction of Allagi 'B' Main Canal from km.20 to km.35.70 with an Irrigation Potential of 1,973.31 ha. was awarded (April 2008) to a contractor for ₹ 8.09 crore to be completed by April 2009. The work was carried out between April 2009 and December 2013 in intermittent stretches due to objections from farmers who were insisting on construction of additional structures, such as cart-track crossing, cross-drainages, superpassages, *etc.* The total expenditure incurred (upto December 2013) on the work was ₹ 6.91 crore, and the balance work to be done was for ₹ 1.18 crore. The contractor expressed his helplessness in completion of the work due to financial burden and obstruction from farmers.

KNNL terminated (June 2017) the contract and invited fresh tenders for the balance work of ₹ 1.18 crore and awarded (August 2017) the same for ₹ 1.52 crore to another contractor. KNNL also invited (June 2017) fresh tenders for the work of additional structures and awarded (September 2017) at a cost of ₹ 2.95 crore to a third contractor. The works were completed in June 2018.

Thus, a work, which should have been completed by April 2009 was completed only in June 2018, as KNNL did not resolve the farmers' objections by providing additional structures. This resulted in Irrigation Potential not being available for an area of 1,973.31 ha¹¹⁹ for eight years.

¹¹⁹ As intermittent stretches were completed, the balance Irrigation Potential for the Project as a whole was stated as 659 ha.

The Government replied (October 2018) that the contractor was executing the work at old rates, and had the contractor been changed, the financial burden would have increased.

The fact remains that the contractor had been changed and the financial burden had also increased as the Company had delayed taking action to resolve the farmers demand by four years (2013 to 2017) resulting in consequential delay in creation of irrigation potential of 1,973.31 ha.

Malaprabha

5.1.14.4. The existing lining¹²⁰ between km.31 and km.32 of Malaprabha Left Bank Canal (MLBC) collapsed due to internal seepage of water. The Chief Engineer approved the estimate for the work of remodelling the same in March 2011 with M-20 grade concrete though the existing lining of the canal and bed was of M-15 grade. The tenders for the works were invited in January 2012.

After Technical and Financial evaluation (March 2012) by the Chief Engineer, it was put up to the Technical Sub-committee (TSC) for approval. The TSC, while evaluating (July 2012) the offers observed that the grade of concrete to be adopted for paver lining was M-15, whereas M-20 had been adopted in the work. The TSC, therefore, directed that the lining should be modified to M-15 grade for execution instead of M-20 grade. The cost of the lining (M-20) at ₹ 3.58 crore was the major portion of the component in the overall cost of work of ₹ 4.18 crore. Adopting M-15 grade of concrete instead of M-20 grade would result in reduction in cost.

The contractor did not agree (November 2012) to the modification and hence the tender was cancelled in January 2013. The works were re-tendered in January 2014 and awarded (May 2014) to a new contractor for ₹ 3.42 crore. The works were completed in June 2015.

Thus, wrong adoption of the grade of cement concrete while estimating the work resulted in cancellation of the tender and delay in award of work by almost two years (July 2012 to May 2014).

The Government replied (October 2018) that as the reaches were in deep-cut, it was not possible to use mechanical pavers. Hence, manual lining was adopted and revised estimate prepared by revising the grade of cement from M-20 to M-15.

The reply is silent on the failure to prepare the estimates considering the ground realities in the first place. The fact also remained that as the work was to be executed in an existing canal, which had been lined earlier with M-15 grade, M-15 grade had to be used and the reply of the Government that estimate was revised from M-20 to M-15 only confirms that the estimates were not prepared correctly in the initial stage by the Company.

¹²⁰ Canal lining is the process of reducing seepage loss of water by adding an impermeable layer, usually of cement.

Incidentally, it was noticed that the same mistake had happened in the preparation of estimates in two other packages covering the stretches km.22 to km.28.

5.1.14.5. The work of strengthening and improvement of Hunsikatti Aqueduct ¹²¹ at km.31.30 of Malaprabha Right Bank Canal (MRBC) was awarded (February 2011) to a contractor at ₹ 5.23 crore. The work was to be completed by May 2012. The work was to be done by dismantling the top slab by a conventional method using pneumatic breaker/jackhammers.

However, during execution, the consultant for the project opined (March 2012) that to avoid/minimise vibrations to the structure, it would be better to go in for a sophisticated technique using a diamond saw for removing the top slab 'part by part' by providing appropriate supports.

However, during a site visit in April 2013, the MD opined that cutting and removing the deck slab by sophisticated technique may involve risks and hence advised to dismantle the entire trough and submit a modified proposal. Under these circumstances, the contract was closed (October 2014) after incurring an expenditure of ₹ 2.72 crore, mainly for the work of construction of the causeway.

A proposal for construction of a new aqueduct running parallel to the existing one was prepared and submitted (November 2015) to the Chief Engineer.

Audit observed that no action was taken either on the proposal to construct a new aqueduct or modify the existing one based on the MD's direction for 15 months *i.e.* up to February 2017. It was only in February 2017, that the work of preparing the revised estimates (removing top slab of existing aqueduct) was awarded to an agency (EI Technologies Pvt. Ltd.) with a time limit of completion in four months. Though a follow-up letter was issued to the agency in October 2017 to submit the estimates at the earliest, the estimates are yet to be submitted (March 2018).

Thus, failure to finalise the method of strengthening of the aqueduct has delayed its completion. The completion of the aqueduct was important as 71,155 ha. of the land of the Project situated downstream of the aqueduct was not getting the adequate quantum of water for over six years (May 2012 to June 2018). The consequent effect of these failures was that as against the required discharge of 1,416 cusecs (capacity of the aqueduct to carry water), the water flowing in the aqueduct was about 700 cusecs.

The Government replied (October 2018) that financial provision for the work was made in the budget of 2016-17. The revised estimate was submitted in July 2018 and approval was expected shortly.

The reply is, however, silent as to why the work, which was closed in October 2014, is yet to be taken up even after a lapse of four years (October 2018),

¹²¹ A bridge like structure to convey water across gaps such as valleys.

particularly where financial provision of the work had already been made in the budget of 2016-17.

Thus, poor works management system to handle the scope and design changes in a timely and efficient manner led to delay in completion of works.

Non-synchronisation of works of Field Irrigation Channels

5.1.15. The Field Irrigation Channels (FICs) provide the final link to supply water to the agriculture fields through canals and distributaries. Unless the FICs are completed, the ultimate Irrigation Potential cannot be utilised.

Simultaneous implementation of works of Field Irrigation Channels is essential for the utilization of Irrigation Potential. As per the MoU signed between the State and the Central Government, the works for creation of FIC should have been taken up simultaneously and completed in the year after the completion of the Irrigation Potential. The creation of FICs was the responsibility of the implementing agencies upto 2014-15. However, this was transferred/jointly done with the Command Area Development Authority (CADA)¹²² from 2015-16 onwards.

Audit observed that KNNL had not planned for the creation of FICs to the full extent of Irrigation Potential that had been created up to the end of the preceding year (refer Column 6, 8 of **Appendix-11**). As a result, as at end of March 2018, FICs of 28,432 ha. had not been created for which dry Irrigation Potential had already been created. This included 23,968 ha. of FICs for the Irrigation Potential created prior to 2016-17 and 4,464 ha. created during 2017-18.

On further scrutiny to analyse the reasons for the non-achievement of FICs, Audit observed that there were deficiencies in the planning and execution of the works of creation of FICs in six test checked projects implemented by KNNL. Results of test-checked works revealed that there were failures by the Company to furnish estimates to CADA in Varahi Project, failure to invite tenders for FIC work in spite of completion of work of creation of Irrigation Potential and failure to study ground realities as farmers had already laid pipelines in lieu of FICs in Hipparagi Project, failure to identify land for FICs in Bhima LIS Project, failure to re-tender the works and handover the documents to newly formed divisions for taking up works in Malaprabha Project, failure to take action to expedite creation of FICs and address farmers concerns in Upper Tunga Project. These are detailed in **Appendix-12**.

Thus, due to non-synchronisation of creation of FICs with the work of creation of Irrigation Potential, the State lost out on the benefits of providing water to drought prone districts as the investments made on creation of dry irrigation potential could not be reaped pending completion of FICs.

As a result, as at end of March 2018, FICs of 28,432 ha. had not been created for which dry Irrigation Potential had already been created. This included

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¹²² CADA is an agency of the Government created to undertake works of development in the Command Area of the project including creation of FICs, reclamation, *etc*.

23,968 ha. of FICs for the Irrigation Potential created prior to 2016-17 and 4,464 ha. created during 2017-18.

The Government replied (October 2018) that in respect of Bhima Project, the works were delayed due to land compensation of distributary works, but the works have now been completed after convincing the farmers. In respect of the other Projects, the Government, without citing any specific reasons for the delay, replied (October 2018) that the works will be completed by March 2019.

Recommendation 4: The Companies/CADA need to include the full extent of dry Irrigation Potential already created in the previous year, while planning for creation of FICs and also take action to expedite their creation, so that FICs are created *pari passu* with the Irrigation Potential already created, and water can be supplied to the end users (farmers).

Central Funding

5.1.16. The percentage of Funding in the form of Central Assistance under AIBP ranged from 25-75 *per cent* of the works component of the project during the review period (2013-18) (Refer paragraph 5.1.1). As this quantum of Central Assistance, was in the form of grant (non-repayable) and formed a substantial component, it was imperative that the projects were completed as per MoU with GoI for availing maximum benefits under the scheme.

5.1.16.1. The implementing agencies were eligible for Central Assistance of ₹ 3,523.35 crore. However, Central Assistance of only ₹ 2,701.49 crore¹²³ was received (as of March 2018). This short receipt of ₹ 821.86 crore¹²⁴was due to failure of the implementing agencies to achieve the annual targeted Irrigation Potential, adhere to the projected expenditure, furnish Annual Audited Certificates to the CWC /MoWR *etc*. Besides, this also includes ₹ 493.69 crore, which was not released by Central Government for which no reasons were cited. The short receipt represented 23.33 *per cent* of the eligible assistance as illustrated in the graph below.

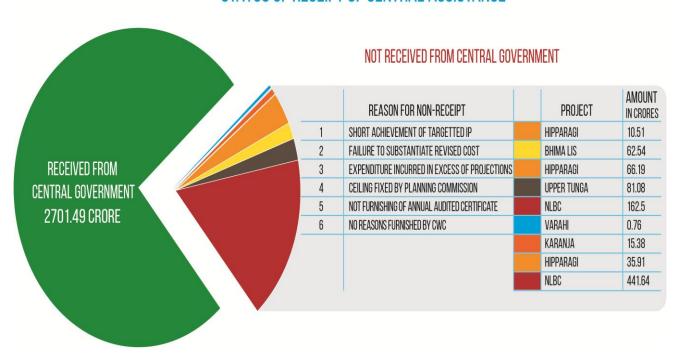
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¹²³ The project-wise details are given in **Appendix-10**.

¹²⁴ Net of ₹ 876.51 crore short received in six projects and ₹ 54.65 crore excess received in one project.

Chart No. 5.3: Status of receipt of Central Assistance

STATUS OF RECEIPT OF CENTRAL ASSISTANCE



5.1.16.2 The project-wise reasons for the short receipt of Central Assistance are given below.

Table No.5.1.3: Status of receipt of Central Assistance

Project/Audit observation(s)	Reply of the Government and remarks
Narayanapura Left Bank Canal (KBJNL)	
KBJNL received ₹ 70 crore as against the eligible amount of ₹ 232.50 crore resulting in non-receipt of ₹ 162.50 crore due to non-submission of Annual Audit Certificate for the expenditure incurred for the period August 2014 to March 2015. The project was again included in 2015-16 under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) and was eligible for CA at 60 <i>per cent</i> of the works' component of the project cost. During the period 2015-16 to 2017-18, KBJNL incurred an expenditure of ₹ 1,516.56 crore. The CWC did not release any CA during 2015-16 and 2016-17, but released ₹ 368.86 crore during 2017-18 against ₹ 810.50 crore resulting in short receipt of CA of ₹ 441.64 crore. CWC/MoWR had not cited any reasons for not releasing the CA totaling ₹ 604.14 crore ¹²⁵ .	The Government replied (October 2018) that after induction of the project under PMKSY Scheme, the CA admissible was revised. It was stated that so far, the State had received ₹ 438.86 crore (₹ 70 crore plus ₹ 368.86 crore) and a proposal was submitted for release of balance admissible CA of ₹ 571.66 crore, which was awaited. The reply is not acceptable as the Company had not furnished Annual Audited Certificate, as required under the guidelines. Moreover, as against the total eligible assistance of ₹ 604.14 crore receivable (after adjusting ₹ 438.86 crore), the Company had sought for release of only ₹ 571.66 crore, for which also there is no commitment from the Central Government.
Hipparagi (KNNL)	
During 2012-13, as against the projected expenditure of ₹ 123 crore the actual expenditure was ₹ 200.46 crore while the	The Government replied (October 2018) that shortfall of the previous year, spent in the next year, was not eligible for Central

¹²⁵ Refer to **Appendix-10** for details.

Project/Audit observation(s)

actual Irrigation Potential created was only 6,904 ha. as against the targeted Irrigation Potential of 12,000 ha. As reimbursement of CA under AIBP was based on projected expenditure and achievement of Irrigation Potential, the CA totaling ₹ 76.70 crore was not released.

Upper Tunga (UTP), Bhima LIS, and Karanja (KNNL)

In respect of these projects, the CA actually received was ₹ 939.27 crore against eligible CA of ₹ 1,098.27 crore, resulting in short receipt of ₹ 159 crore.

CWC/MoWR had not stated any reason for the short release of CA, except in respect of Bhima LIS Project where it was stated that the implementing agencies failed to substantiate the revised cost. The implementing agencies had not taken up the matter with MoWR for the release of CA for the projects.

Reply of the Government and remarks

Assistance. Only the expenditure incurred over and above the previous year's shortfall was eligible for receiving this CA in the next year.

The reply is only a factual statement without justifying the reasons for short achievement of targeted Irrigation potential and projecting incorrect expenditure, as a result of which the State lost the Central Assistance.

In respect of UTP, the Government replied that the CA was not received due to the ceiling fixed by the Planning Commission.

In respect of Bhima LIS project, the reply is silent on the reasons why the Company failed to substantiate the revised cost of the Project to the CWC and claim the Central Assistance.

Thus, the State Government, not only lost out on the funds in the nature of grants, but also took the burden of funding such expenditure, as the projects were executed either by way of grant from the State Government or by raising funds from external sources, which had an additional financial implication of ₹ 52.19 crore per year¹²⁶.

Recommendation 5: The Company/GoK should follow up for release of Central Assistance where they have adhered to the guidelines.

Monitoring

5.1.17. In the process of implementing the Projects, it is important to monitor and control the progress of project activities based on the objectives for which the project was established. AIBP guidelines provide a detailed framework for monitoring and evaluation of projects and schemes.

Audit scrutiny of the mechanism of monitoring of the scheme by the Top Management at various levels *i.e.*, by the Central Government, Company and State Government, revealed the following:

Central level: The Central Water Commission (CWC), which was to visit
the projects and submit Status Reports (once a year) made a total of 45
observations, during such visits in the selected seven projects. The
implementing Agencies could comply with only 21 observations (as per
independent audit verification) and the balance were not complied with.
The CWC had, through their Monitoring Reports, pointed out the

¹²⁶ Considering the average rate of interest on Government borrowing for the years 2013-14 to 2017-18 at 6.35per cent.

important reasons affecting the completion of the projects *viz*. non-synchronisation of FIC works with main works (Malaprabha, Karanja, Varahi, UTP Projects), lack of coordination between KNNL and CADA (Karanja Project), non-acquisition of land (Varahi Project), poor achievement of the target (Varahi and Hipparagi Projects). In spite of these, the implementing agencies failed to take corrective action. KNNL did not furnish any compliance to the observations of CWC to Audit.

- Company level: Monitoring of works was done by the Chief Engineer (jurisdictional) concerned at the Zonal Level. The Management also submitted to the Government the Monthly Monitoring Reports containing the physical and financial achievements against the target set for the year, for various projects. The Management also submits Form-C containing the programme of works planned for the year and achieved for the previous year to the Government/CWC. Audit observed that there were variations in the targets of Irrigation Potential planned to be created during the year, among these reports (Form-C, Annual Works Programme and Monthly Monitoring Reports). This variation is indicated in Appendix-13. The top management, however, did not analyse them and give suitable directions for course correction.
- State level: A State Level Monitoring Committee was required to be formed for the concurrent evaluation of the project. However, the same has not been formed in Karnataka. The Government assured (October 2018) in the Exit Conference that it would form the State Level Monitoring Committee.

In the absence of formation of State Level Monitoring Committee, the inputs of the Committee on the concurrent evaluation of the Projects were absent. While there was monitoring at the Central level, the mechanism of providing compliance to their observations was not optimal.

Output and outcome of the AIBP

5.1.18. The outcome under the AIBP during the last five years (2013-18) was assessed during audit. During the period, the implementing agencies had to create fresh Irrigation Potential in six projects totalling to 79,838 ha. and FICs of 1,71,166 ha., and take up Extension, Renovation and Modernisation (ERM) work in one project to provide water to *suffering achkat* of 1,05,000 ha. An amount of ₹ 4,489.97 crore was spent on these seven test-checked projects during the five-year period (2013-18).

The implementing agencies (KNNL/KBJNL) created canals and distributaries capable of providing irrigation to 55,516 ha (70 per cent)., provided FICs for 1,18,412 ha. (70 per cent) and also completed ERM work to provide water to 1,01,343 ha (97 per cent) during the last five years ¹²⁷. These provided irrigation facilities in central and north Karnataka including parts of drought prone districts of Haveri, Davanagere, Gadag, Bidar, Belagavi, Bagalkot and Kalaburagi.

¹²⁷ Refer Table 5.1.2, **Appendices-9** and **11** for project wise/ year-wise details.

While the above facts were appreciable, it is equally important to mention that the State Government and the implementing agencies were not able to fully leverage the benefits of AIBP in terms of funding and were unable to fast-track the completion of the projects and realise the ultimate Irrigation Potential.

As at March 2018, 24,322 ha. of Irrigation Potential by construction of canal and distributaries, 52,754 ha. of FICs are pending creation. More importantly, FICs were not created for 28,432 ha. (52,754 ha. *minus* 24,322 ha.) even though the infrastructure of canal network had already been created in the earlier years. As a result of all these, parts of the drought-prone districts are yet to receive the irrigation facilities.

We conclude that the reasons for not fully leveraging the benefits in terms of funding were the failure by the implementing agencies to achieve the annual targeted Irrigation Potential, adhere to the projected expenditure and also furnish Annual Audited Certificates. As a result, the State Government, not only lost out on the central funds in the nature of grants, but also had to bear such deficit in funding by raising funds from external sources, for which the additional financial implication due to interest worked out to ₹ 52.19 crore per year.

We also conclude that the projects could not be fast-tracked owing to lack of preparedness by the implementing agencies to complete the works within the dates of completion committed to the Central Government. Primarily, the implementing agencies did not include the works in their Annual Works Programme in line with the commitments made to the Central Government. Thereafter at every stage there were omissions *viz*. delay in award of work, not having an efficient works management system for handling decisions on scope and design changes. The envisaged Field Irrigation Channels were not fully completed in any of the six test-checked projects even after a lapse of two to eighteen years, after their original scheduled dates of completion as there were lapses in planning and execution of the works in synchronisation with the Irrigation Potential already created.

There are 23 audit observations in this Performance Audit Report based on the test-checked projects/works, but similar errors/omissions may also exist in other projects/works being implemented by the Companies, but not covered in this audit. The implmenting agencies may, therefore, like to internally examine all such other projects/ works being executed by them with a view to ensuring that they are being carried out as per requirements and procedures.