Project Completion

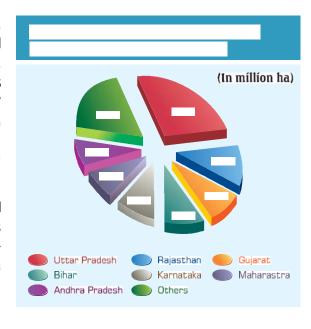
4.1 Share of AIBP in Irrigation Potential

Out of the Ultimate Irrigation Potential (UIP) of the country of 139.9 million ha, AIBP projects (excluding non-AIBP components of such projects) accounted for 10.49 million ha (8 per cent).

Analysis of UIP and IP creation for major, medium and ERM projects revealed the following:

- Out of total UIP of 58.47 million ha, targeted potential under AIBP was 9.65 million ha (17 per cent), against which 4.90 million ha of Irrigation Potential (IP) was reportedly created upto 2007-08.
- Out of the 4.90 million ha of IP reportedly created under AIBP. 2.16 million ha (44 per cent) was created during 1996-97 to 2002-03, while 2.74 million ha (56 per cent) was created during 2003-04 to 2007-08.

A state-wise profile of reported creation of IP under AIBP projects is given in Chart 6; details of state-wise reported creation are given in Annexure – IV.



4

Chapter - 4

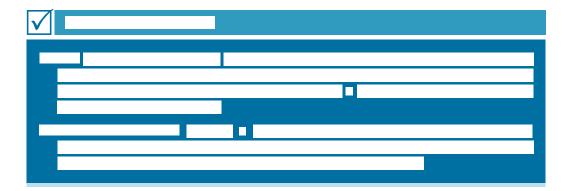
Project Completion Clearly, AIBP was a significant factor in the reported creation of Irrigation Potential in the major, medium and ERM sector, especially since 2003-04. However, project-wise data regarding actual utilisation of IP reportedly created was not furnished by either CWC or MoWR, and was evidently not maintained. In the absence of such data, the contribution of AIBP to irrigation potential which was actually utilised could not be ascertained in audit.

In the Action Taken Report of 2008-09 on the previous audit report, the MoWR had stated that monitoring of utilization of IP was not covered in the programme, as the utilization did not start immediately in many projects, and usually took two to three years, due to various reasons. The current audit confirmed the continued lack of monitoring of utilization of IP by the MoWR/CWC. It would, thus, appear that MoWR merely intended AIBP to fund large-scale construction of works and structures without ensuring the benefit of irrigation water to the farmers.

The role of AIBP in the Minor Irrigation (MI) sector is relatively small. Analysis of UIP and IP creation for MI projects revealed that:

- Out of the total UIP of the country of the MI sector of 81.43 million ha, 17.38 million ha pertains to the surface water component, where AIBP is applicable. Of this UIP of 17.38 million ha, the UIP of AIBP MI schemes was only 0.84 million ha (5 per cent).
- Against the UIP of AIBP MI schemes of 8.36 lakh ha, 2.67 lakh ha of IP was reportedly created from 1999-2000 to 2007-08.
- Of the above, 1.99 lakh ha of IP was reportedly created during 2003-08, and 1.23 lakh ha (62 per cent of IP created) reportedly utilized.

Audit scrutiny revealed that the Ministry did not maintain project-wise details of IP created and utilised under AIBP MI projects; it could only furnish total IP created and utilised on a year-wise and State-wise basis. In the absence of detailed data, the authenticity of creation/ utilisation of IP under individual AIBP MI projects could not be verified. This compounds the minuscule contribution of MI projects under AIBP to even the surface water component of the entire MI sector in the country.



4.2 Completion of Major, Medium and ERM Projects under AIBP

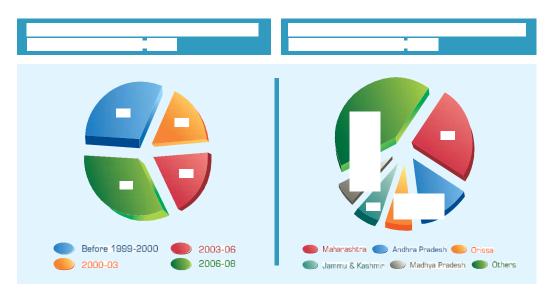
Chapter - 4

Project Completion

4.2.1 Overall Profile of Reported Completion of AIBP Major, Medium and ERM Projects

The earlier audit report (No. 15 of 2004) had highlighted the poor progress in completion of major, medium and ERM AIBP projects. Only 23 out of 172 projects approved since 1996-97 had been completed; even out of these 23 projects, completion certificates were yet to be issued for 10 projects. Further, the concept of 'Fast Track Projects" introduced within AIBP in February 2002 turned out to be a futile effort, as none of the 29 "Fast Track Projects" had been completed.

Notwithstanding the numerous changes in scope, coverage, and terms of assistance under AIBP, the current audit revealed that the status of completion of projects taken up under AIBP continued to be poor. Of the 253 major, medium and ERM projects sanctioned under AIBP between October 1996 and March 2008, only 100 projects were reported as completed¹¹. An age-wise profile of the 153 projects reported as ongoing, based on the year of inclusion under AIBP, is given below:



It may be noted that these five states, which had the maximum number of ongoing AIBP projects, also received, along with Karnataka (except J&K), the vast majority of AIBP grants during the period 2005-06 to 2007-08 as detailed in paragraph 7.1.

¹¹ This should be read in the context of the audit findings that 12 out of 21 test-checked projects reported as complete, were, in reality, either not completed or not commissioned.

4.2.2 Status of Completion of Test-Checked Projects

Audit scrutiny of 41 Major and 29 Medium Irrigation Projects in 26 States revealed that 21 projects (12 Major and 9 Medium projects), representing 30 per cent of the total test-checked projects were reported as completed either by the State Govt. or MoWR. However, field audit revealed that 12 projects out of these reportedly complete projects were actually incomplete/non-commissioned as detailed below:

 Table 7 - Profile of Completed Projects in Audit Sample

Category Total number of test-checked projects		Projects reported as completed	Projects actually found incomplete/non-commissioned
Major	41	12	7
Medium	29	9	5
Total	70	21	12

Details of projects falling within the audit sample, which were found incomplete or non-commissioned, are given below:

Table 8 - Details of Major/Medium Projects found incomplete/non-commissioned

Project, Kadapa acquisition, rehabilitation and resettement works were pending even after the scheduled period of completion was over. Haryana 2. Balance Work of Water Resources Consolidation Project (WRCP) Out of the total 104 works to be executed, only 73 works (70 per cent) were actual executed. Shortfall in achievement of various components viz., earthworks, lining and ceme concrete ranged between 31 and 70 per cent. Jharkhand 3. Tapkara Reservoir The targeted CCA was not achieved due to non restoration/renovation work in the macanal to check heavy leakage of water, non-construction of aquaduct, branch canal and earth to the concrete ranged between 21 and 50 per cent. Kerala 4. Kallada Though works of main canal and branch canals were completed, completion of wor relating to 6 Minor Distributaries ranged between 21 per cent and 60 per cent.		*	•
Veligallu Reservoir Project, Kadapa Due to delay in official correspondence and fulfillment of legal procedures related to las acquisition, rehabilitation and resettlement works were pending even after the scheduled period of completion was over. Haryana 2. Balance Work of Water Resources Consolidation Project (WRCP) Out of the total 104 works to be executed, only 73 works (70 per cent) were actual executed. Shortall in achievement of various components viz., earthworks, lining and ceme concrete ranged between 31 and 70 per cent. Jharkhand 3. Tapkara Reservoir The targeted CCA was not achieved due to non restoration/renovation work in the macanat to check heavy leakage of water, non-construction of aquaduct, branch canal and distributaries, and non-repair of cross drainage structure and gate outlet. Kerala 4. Kallada Though works of main canal and branch canals were completed, completion of wor relating to 6 Minor Distributaries ranged between 21 per cent and 60 per cent.	S.No.		Project Status
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Balance Work of Water Resources Consolidation Project (WRCP) Dut of the total 104 works to be executed, only 73 works (70 per cent) were actual executed. Shortfall in achievement of various components viz., earthworks, lining and ceme concrete ranged between 31 and 70 per cent. Tapkarra Reservoir The targeted CCA was not achieved due to non restoration/renovation work in the macanal to check heavy leakage of water, non-construction of aquabuct, branch canal and detributaries, and non-repair of cross drainage structure and gate outlet. Kerala Kallada Though works of main canal and branch canals were completed, completion of worlding to 6 Minor Distributaries ranged between 21 per cent and 60 per cent.	1.		Due to delay in official correspondence and fullfilment of legal procedures related to land acquisition, rehabilitation and resettlement works were pending even after the scheduled period of completion was over.
Resources Consolidation Recorded Recor	Haryan	a	
Tapkara Reservoir The targeted CCA was not achieved due to non restoration/renovation work in the macanal to check heavy leakage of water, non-construction of aquaduct, branch canal as distributaries, and non-repair of cross drainage structure and gate outlet. Kerala Kallada Though works of main canal and branch canals were completed, completion of wor relating to 6 Minor Distributaries ranged between 21 per cent and 60 per cent.	2.	Resources Consolidation	Shortfall in achievement of various components viz., earthworks, lining and cement
canal to check heavy leakage of water, non-construction of aquaduct, branch canal at distributaries, and non-repair of cross drainage structure and gate outlet. Kerala 4. Kallada Though works of main canal and branch canals were completed, completion of wor relating to 6 Minor Distributaries ranged between 21 per cent and 60 per cent.	Jharkha	ind	
Kallada Though works of main canal and branch canals were completed, completion of wor relating to 6 Minor Distributaries ranged between 21 percent and 60 per cent.	3.	Tapkara Reservoir	The targeted CCA was not achieved due to non restoration/renovation work in the main canal to check heavy leakage of water, non-construction of aquaduct, branch canal and distributaries, and non-repair of cross drainage structure and gate outlet.
relating to 6 Minor Distributaries ranged between 21 per cent and 60 per cent.	Kerala		
	4.	Kallada	Though works of main canal and branch canals were completed, completion of works relating to 6 Minor Distributaries ranged between 21 per cent and 60 per cent.
Maharashtra	Mahara	shtra	
	5.	Vishnupuri	The project (AIBP component) was declared completed (March 2006) with creation of 2636 ha of irrigation potential. However, as the Part-I works of the command area were not completed, the utilization of created irrigation potential could not be done.
	6.	Patgoan	The works were declared as completed (March 2007). Irrigation potential of 1992 ha said to have been created under AIBP could not be utilized as out of 17 ${\rm K.T}^{\rm o}$. Weirs, four K.T. Weirs had collapsed and four K.T. Weirs required major repairs.

¹² K.T. Weirs: Kolhapur Type Weirs

Project Completion

S.No.	State and Names of the Projects	Project Status
Punjab		
7.	Remodeling of Upper Bari Doab Canal (UBDC)	The State Government declared the project as completed and furnished a completion certificate in September 2006. Audit cardinly, however, revealed that conver works like providing gates and gearing system on various carel distributance! water regulators cross regulations were still incomplete as on August 2008. A perised of the photographs printed in the Menitoring Report of Neverther 2006 revealed that works like construction of Cross Regulator cum foot bridge with fail at RD 12750, od structure obstructing the flow of vater at RD 195000 of Kasur Branch Lovert (KBL), and construction of KBL 184000000000000000000000000000000000000
Rajasth	an	
8.	Modernization of Gang Canal	39 works (out of 43 works) relating to rehabilitation of F-Branch (RD 0.00 to 145 m) were under progress for more than three years.
9.	Mahi Bajaj Sagar Project	Due to defective planning, the water did not reach the down stream portion of Nithauwa distributary beyond 2.5 kms and an area of 3,445ha did not receive the benefits of the canal.
Uttar Pi	radesh	
10.	Modernisation of Agra Canal	Three bridges (at Pakwal, Chhajunagar and Lilwari) were still incomplete as of September 2008, although, the project was declared completed in March 2008. During field visit to Agra Canta, supply of politied water was found between Km 2.355 to Km 7.100 of Agra Canal. There were six open sewage drains and six Humepples sewage drains with overe polluting the carall water.
11.	Rajghat Canal Project	Nine out of twenty MoUs signed with the Uttar Pradesh Power Corporation Limited (UPPCL) for execution of works, were still to be finalized, while three MoUs had been rescribed without completing the work. Out of eight rail crossings proposed to be constructed on the canal, only four could be completed, including one defertive canal crossing.
West B	engal	
12.	Hanumata Irrigation Scheme	Construction of one aquaduct at chainage 480.00 m of Right Bank Main Canal (RBMC) was in progress. The bad level of RBMC from chainage 199.89 onwards was higher than the design bed level and fell in mostly rocky zone. All three distributaries of the RBMC were strated after chainage 199.89. As a result, canal valer was not available for insigation from change 199.80 onwards, which mean that the project could caler rowing 41 percent of the target area. Forceful conception by local people of land already transferred to project authorities led to non-execution of works from Ch. 6.89 km to 8.30 km and 13 km to 14.38 km of the Distributary—I of the RBMC. Water for irrigation in AIBP portion of the canals was not available due to land disputes and deleyed execution of works.

Recommendation - 4

MoWR must investigate all cases of incomplete/ non-commissioned projects reported as complete to ensure that there is no diversion or misuse of funds released for these projects. Appropriate action must also be taken against the authorities issuing such false completion certificates.

25

Project Completion

4.2.3 Reasons for Non-Completion

A State-wise analysis of the major reasons for projects not being completed revealed the following position:

 Table 9 - State-wise profile of Reasons for Non-Completion

State	Major Reasons
Andhra Pradesh, Bihar and West Bengal	Non-acquisition of land; delay in execution of works
Assam	Non-acquisition of land; delayed release/ short release of CLA/ Grant; Non-release of State share; law order situation
Gujarat	Lack of proper planning and execution of works in an unsynchronized manner; delay in acquisition of land and execution of contracts; diversion of funds
Haryana	Delayed execution of works
Himachal Pradesh	Lack of electricity connections; non-finalisation of tenders; non-construction of water courses and distributaries
Jharkhand, Meghalaya and Tripura	Non-acquisition of land
Karnataka and Kerala	Non-acquisition of land; delay in construction of distributaries and approach canal works
Madhya Pradesh	Delayed execution of works (primary dam, tunnel work, main canal)
Maharashtra	Incomplete canal and command area works; non-acquisition of land; damaged structures (pre-AIBP components)
Manipur	Delayed construction of dam and spillway
Orissa	Delayed acquisition of land; non-finalisation of rehabilitation and resettlement of displaced persons; non-finalisation of designs; non-construction of bridges over railway and highway crossings; sub-standard execution of works
Punjab	Incomplete works (gates and gearing system on canal distributaries/ water regulators/ cross regulators); damaged structures
Uttar Pradesh	Execution of works in an unsynchronized manner (executing restoration works in lower reaches earlier than upper reaches; absence of drawings); incomplete works at rail crossings and bridges; non-finalisation of MoUs

Recommendation - 5

The major reasons for non-completion of major/ medium/ ERM projects include (a) non-acquisition of land; (b) delays in construction of railway/ highway crossings; (c) improper synchronisation of project components (dealt with elsewhere in this Report), and (d) delayed tendering and contract management. While we note that acquisition of land is a complex and sensitive process, Gol funds should be released only after the State Government certifies that the major portion of the land required for the project (not just for the dam/ headworks but also for the canals) has already been acquired. Further, future releases should be linked to progress in land acquisition.

Better co-ordination with railways and NHAI is required for quick completion of

4.3 Overall Profile of Reported Completion of AIBP MI Projects

Project Completion

As in the case of major, medium, and ERM projects, the earlier audit of AIBP had pointed out poor progress in completion of MI projects also. Out of 3.129 MI projects approved during 1999-2003, 1,677 projects (54 per cent) were completed. However, against the targeted 2.46 lakh ha of IP (23 per cent) was created, of which only 0.11 lakh ha (19 per cent of IP created) was utilized.

The current audit revealed that there was no improvement in completion of M1 projects. Out of 6855 M1 projects sanctioned under AIBP, only 2535 projects (37 per cent) were reported as completed.

Audit scrutiny revealed that the Ministry does not track project-wise details of status of MI projects; it could only furnish total number of projects taken up/completed on a State-wise and year-wise basis. This year-wise data did not even indicate when the projects reported as completed in a particular year were taken up. In the absence of such data, the authenticity of completion of individual MI projects, as reported by MoWR, could not be verified.

4.4 Time and Cost Overrun

Audit scrutiny of the test-checked projects revealed that:

- 48 major/ medium projects (69 per cent of the test-checked projects) and 60 MI projects (18 per cent) suffered from cost over-run;
- 53 major/ medium projects (76 per cent) and 73 M1 projects (21 per cent) suffered from time over-run.

Almost all the major and medium irrigation projects test-checked in Andhra Pradesh, Assam, Guarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Manipur, Meghalaya and West Bengal suffered from time and cost overrun. On the other hand, in Maharashtra, only one out of eight major/medium test checked projects suffered from time overrun; this must, however, be read with the fact that the AIBP components of these test-checked projects merely constituted fractions of the whole projects and also the absence of details of reported expenditure for AIBP projects in Maharashtra.

The states performing poorly in ensuring timely completion of Minor Irrigation Projects within approved cost were Madhya Pradesh, Himachal Pradesh, Orissa, Maharashtra and Meghalaya.

State-wise details of time and cost overrun are given in Annexure – V.

4.5 Achievement of targeted IP and Utilisation of created IP in Test Checked Projects

The ultimate aim of the programme was to create Irrigation Potential (IP) and optimum utilization of the created IP. Audit scrutiny of the records of the implementing agencies revealed that the targeted IP was not created in 25 Major, 19 Medium and 189 Minor Irrigation

Projects in Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand and West Bengal (26 States) out of the test-checked 41 major, 29 medium and 346 minor irrigation projects. Further, even the IP reported as created was not being utilized fully.

Key instances of short creation of targeted IP and non-utilisation of the created IP are given below:

Table 10 - Key instances of Short creation/Non-utilisation of IP

State	Projects	Major Reasons
Andhra Pradesh	Sriramsagar Stage-I; Yerrakaluva Reservoir	No supporting ayacut registers, water release schedules were maintained by the Water Users Association; consequently, potential reportedly created/ utilized could not be verified
Assam	Champamati; Modernisation of Jamuna Irrigation Project	Shortfall in creation of IP due to abnormal delay in completion of projects; wid variation between figures of utilization of created IP furnished by Irrigation Department and by Directorate of Economics and Statistics
Bihar	Western Kosi Canal Project	Utilisation of only 0.24 lakh ha (out of created IP of 1.76 lakh ha) due to non-completion of canal system.
	Sone Canal Modernisation Project	IP of 1.69 lakh ha created under AIBP could not be utilized due to non-completion of Western Parallel Link Canal (WPLC). Further, non-lining of canals/ distributaries resulted in damage to canals and reduction in quantum of water flow.
Chhattisgarh	Koserteda Project	Shortfall in IP creation was due to delay in land acquisition
Gujarat	Sardar Sarovar Project	Against the targeted IP (under AIBP) of 14.40 lakh ha, only 4.60 lakh ha of IF was created, of which only 0.71 lakh ha was utilized as of March 2008
	Mukteshwar; Bhadar-II	Shortfall in IP creation was due to delay in land acquisition
Haryana	Balance Work of WRCP	No IP was actually created, as the works were in the nature of rehabilitation/ repair of existing infrastructure
Himachal Pradesh	Sidhata Project	There was shortfall in IP creation due to non-completion of four out of six Lift Irrigation Schemes
Jharkhand	Upper Shankh; Panchkhero; Tapkara Reservoir	No / negligible land had been acquired for construction of distributaries
Karnataka	Upper Krishna Stage-II; Karanja; Varahi	There was shortage in creation of IP due to delay in construction of distributaries, and non-completion of approach canal works
	Upper Krishna Stage-I	Canal work completed for 5600 ha could not put to use, due to non-creation of field channels.
Kerala	Kallada	Though the project was declared complete, work on minor distributaries was not completed and left at a standstill. Further, a study conducted by the Department during 2006 revealed that seepage was very high (even 30 per cent in certain cases) against the allowable seepage of 10 per cent. This was because almost all the canals were filled with silt, grass and other waste, and also because the canals were not lined or filmings were damaged.
	Muvattupuzha	Non-achievement of targeted IP was due to non-completion of branch canals and distributaries
	Karapuzha	Non-achievement of targeted IP was due to delay in land acquisition

Chapter - 4
Project
Completion

State	Projects	Major Reasons
Madhya Pradesh	Indira Sagar Project Phase-II	The initial length of the canal of 142 km was bifurcated into two phases (0-71 km and 71-142 km), both of which remained incomplete even after a time overrun of over 5 years. The District Road Bridge at RD 42.31 km of main canal was still incomplete even after lapse of 12 years. Consequently, IP beyond 42.31 km could not be utilized, although distribution network covering CCA of 22,236 ha. had been developed up to 71 km.
	Bansagar Unit-II	One of the main canals was breached, due to over topping of another parallel running canal at higher ground levels. The completed portion of the Right Bank Main Canal between km 0 to 38 was able to carry only 1.5 cumes against the envisaged 2.77 cumess, which was essential for achieving the designed IP. Also, the created IP was largely unutilisable, as the key structures for the distribution system were not complete.
	Bawanthadi	IP could not be utilized, as the primary dam section was still incomplete
	Bargi Diversion	The project was divided into two phases – 16-63 km, and 63-104 km. However, IP beyond km 33 was unavailable, as tunnel work at km 33-36 (Phase-I) was still incomplete, after a lapse of five years. Further, in Phase-III, he work of a main railway line crossing at the starting reaches of the Majhoil branch canal was still incomplete even after a lapse of 3 years
Maharashtra	Vishnupuri	IP created could not be utilized, due to non-completion of Part-I works of command area.
	Krishna	The work of Arphal canal (103 – 204 km) taken up during 2002-03 was still to be completed.
	Nandur Madhmeshwar; Khadakpurna (W); Arunavati (W)	Due to completion of fractions of components under AIBP and not the project as a whole, reported IP created was 'theoretical' and could not be utilised.
	Patgaon	IP of 1992 ha reportedly created under AIBP could not be utilized, as out of 17 K.T. Weirs, four K.T. Weirs had collapsed and four K.T. Weirs required major repairs
	Bembala	Due to non acquisition of land for 2300 metre of canal length in chainage 0 to 1500 metre and 1700 to 2500 metre, the work of construction of main canal was stopped since July 2007. Though water was stored in the reservoir, irrigation was not possible.
Manipur	Thoubal	Construction of dam and spillway was lagging far behind; water was flowing in the Left Main Canal and Charangpat Branch Canal only during the rainy season.
	Rongai Valley	Completion of barrage was suspended in April 2003 after 95 per cent execution, due to the contractor's refusal to continue the work, pending sanction of revised estimates and payment of bills.
Orissa	Upper Indravati (KBK)	The progress achieved in extension of left and right canal systems, which were taken up during 2003-04 for completion by March 2008, was only 22 per cent, due to delay in acquisition of land, non finalisation of designs of an aquaduct and non construction of bridges over canal crossings on State/National Highways.
	Rengali	Targeted IP could not be achieved due to non-synchronisation of work of distribution system with the main canal, execution of work in a piecemeal manner, and delayed completion of project work.
	Telengiri (KBK)	Targeted IP could not be achieved, due to delay in land acquisition.

Chapter - 4
Project
Completion

State	Projects	Major Reasons
Punjab	Kandi Canal Extension (Phase II)	Canal siphon at RD 64.109 km was completely damaged
Rajasthan	Indira Gandhi Nahar Project Stage-II	Non-utilisation/ short-utilisation of created IP was due to non-completion of pumping stations and command area development works, and non-construction of water courses in lift areas
	Narmada Canal	Against the targeted 2,240 diggis, only 662 were constructed.
	Mahi Bajaj Sagar	Creation of targeted IP was affected due to delays in environmental clearance and land acquisition.
	Modernisation of Gang Canal	Non-achievement of targeted IP was due to non-completion of distributaries and minors.
Tripura	Khowai	Out of the targeted IP of 4515 ha, only 1453 ha (32 per cent) could be achieved. Non-creation of targeted IP and under-utilisation of created IP was due to non-operation of Left Bank Main Canal and non-execution/non-completion of works in different chainages of the main and branch canals.
Uttar Pradesh	Bansagar Canal	Underground water sprouted up in chainage km 40.7-43.3 km of the Meja-Jirgo Link Canal (MJLC), stopping further excavation. Further, MJRC intersected the existing Upper Khajuri Left Canal at km 43.050, blocking the latter and depriving farmers of existing irrigation facilities.
	Rajghat Canal	Although the project was declared complete in 2007-08, various works for which 22 MoUs were signed with UPPCL during 1997-2006 were still incomplete – 3 MoUs were rescinded, and 9 MoUs were still to be finalized. Further, only four out of eight rail crossings and none of the five bridges over National Highways could be constructed.
	Modernisation of Agra Canal	Although the project was declared complete as of March 2008, three bridges were still incomplete as of September 2008. Also, new bridges were constructed without dismantling the old bridges, which led to silting and growth of weeds in the canal section.
	Modernisation of Lachhura Dam	68 drawings related to the project were pending approval.
	Improving Irrigation Intensity of Hardoi Branch System	Restoration works in lower lying branches were started earlier than those in upper reaches. Further, work was started after a delay of nine months.
West Bengal	Teesta Barrage Project	Only two our of five main canals were completed; 21 out of 35 distributaries pertaining to the completed canals were still incomplete, mainly on account of land disputes.
	Patloi Irrigation Scheme	123 cases of land acquisition disputes resulted in several stretches of canals and distributaries remaining incomplete.
	Hanumata Irrigation Scheme	Land disputes and delayed execution of works resulted in non-availability of irrigation water from the AIBP portion of the canals.

Photographs of 15 test-checked Major and Medium Irrigation projects of 8 States show various bottlenecks viz. High vegetation and breakage in Canals (Bihar); canals without water (Gujarat); incomplete works at railway crossings (Kerala); incomplete works at tunnel and railway crossings (Madhya Pradesh); weeds and siltation in canals (Manipur); incomplete works and slippage of embankments (Orissa); incomplete bridge and defective canal crossing (Uttar Pradesh), and no trace of canal water/work held up due to land dispute (West Bengal).

Photographs of Projects with short-creation/non-utilisation of IP



Western Kosi Main Canal-Bihar: Siltation in upstream



Western Kosi - Bihar : Breakage in Saharghat Branch Canal



Sone Canal Modernisation Project (SCMP) - Bihar: High vegetation

Chapter - 4

Project Completion

Chapter - 4
Project
Completion



Sone Canal Modernisation Project (SCMP) – Bihar : Incomplete Western Parallel Link Canal



Sardar Sarovar Project – Gujarat : Vehalam D Minor – No Water



Sardar Sarovar Project – Gujarat : Jafarpur Minor–No Water



Kallada Irrigation Project - Kerala: Poovattoor Distributary-Bottleneck work in the Railway portion – Work just started



Muvattupuzha Irrigation Project– Kerala : Ezhuthonipadam Acquaduct - Bottleneck work in the Railway portion — Work yet to be arranged



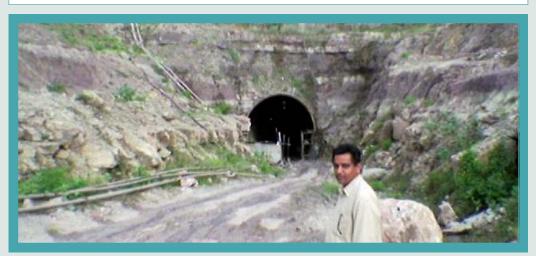
Indira Sagar Project (Canal) – Madhya Pradesh : Punasa Exit Channel – Work in Progress

Project Completion

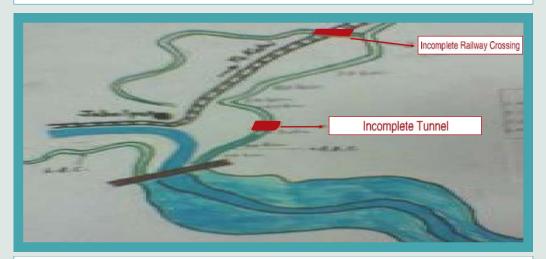
Chapter - 4
Project
Completion



Bansagar Project (Unit-11 -Canal) - Madhya Pradesh: Sihawal canal - Incomplete structure at Rd km 42



Bargí Díversion (Phase I) – Madhya Pradesh: Incomplete tunnel at Rd. km 33 to 35.42



Bargi Diversion (Phase 1 & II) – Madhya Pradesh - Diagram showing incomplete tunnel at Rd. km 33 to 35 and incomplete railway 'X'-ing at the starting reaches of Majholi branch canal





Thoubal Multipurpose Project - Manipur: Siltation, shrubs/weeds in Canal



Thoubal Multipurpose Project - Manipur: Non-functional canal syphon



Right Bank Canal (RBC) of Rengali Irrigation Project – Orissa: Failure of slope and slippage of embankments at RD 31.55 to 34.24 km

Chapter - 4 Project Completion



Upper Indravati Irrigation Project – Orissa : Syphon Aquaduct over river Sagada at RD 2820 M of RBMC remained incomplete due to non finalization of design



Agra Canal Project – Uttar Pradesh: Incomplete bridge at Chhajunagar (despite the fact that the project was declared as completed)



Raighat Canal Project – Uttar Pradesh: Defective canal crossing at Km 0.750 of Bhailwara distributary below rail line and damaged canal due to back flow in the up stream of rail line





Teesta Barrage Project - West Bengal : DNMC of TBP at Ch. 63.585 where no trace of canal water was observed due to land dispute in Uttar Dinajpur District



Patloi Irrigation Scheme - West Bengal: Work of proposed RCC Tunnel at chainage 551.20 in Purulia District held up due to land dispute.

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Recommendation - 6

In case of irrigation projects which have been split into two or more AIBP projects or which have been separated into AIBP and non-AIBP components, MoWR should ensure that linked components of AIBP projects are completed, so as to ensure the creation of targeted IP under AIBP, and commissioning/utilisation thereof.

4.6 Impact on Cropping Pattern

Despite investment of funds in AIBP Projects, there was no change in the existing cropping pattern/introduction of double & multi-cropping system as per the records of the Department of Agriculture / Land Revenue (which were targeted outcomes) in 11 Major, 6 Medium and 128 MI Projects test checked in Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Orissa, Punjab, Rajasthan, Sikkim, Uttar Pradesh and Uttarakhand (18 States).