

## **EXECUTIVE SUMMARY**

### **1. PROJECT IN BRIEF**

Punand irrigation project is major irrigation project on river Punand a tributary of river Girna in Tapi Basin near village Suple Digar, Taluka- Kalwan of District Nasik in Maharashtra state.

The project envisages construction of a composite dam of 706.5 m long (Earth dam 525 m + Spillway 56.25 m +Masonry Dam 125.25 m) and maximum height of 33.28 m. having ogee type spillway of 4 radial gates of size 12 m x 6.5 m. The construction of ICPO is to be on BOT basis with installed capacity of 300 KW.

The project will provide irrigation to the CCA of 17841 Ha through 9.4 km long Suple LBC, 8.5 km long Suple RBC, 34.00 km long Sule LBC, 19.00 km long Sule RBC & 37.10 km long Chankapur RBC in Kalwan & Deola Tashil of Nashik district. The Ultimate Irrigation Potential of the project is 10846 Ha. In addition, the project reservoir is having gross storage capacity of 39.75 Mm<sup>3</sup> with design flood of 1985 Cumecs. The project has provision of 1.30 Mm<sup>3</sup> of water for drinking purpose.

The project is accorded investment clearance by the Planning Commission in Dec-2005 for estimated cost of Rs.157.78 Crore, Subsequently the project cost was revised to Rs 340.56 Crore (PL 2008-09) and approved by the Planning Commission on 22.05.2009.

The physical and financial progress of project is given at table at 1, 2, 3 & 4.

The construction of the project was started in 1982 the project has been brought under AIBP in 2006-07. The project was targeted for completion in March, 2012.

### **2. ORGANIZATIONAL AND MANAGEMENT ASPECTS**

Construction of the project is being done by Tapi Irrigation Development Corporation (TIDC), Jalgaon with following organizational set-up.

- i. Region: Chief Engineer (TIDC), Tapi Irrigation Development Corporation, Jalgaon
- ii. Circle: Superintending Engineer, Nasik Irrigation Project Circle, Dhule
- iii. Division: Executive Engineer, Upper Godavari Project Division, Nasik

The Project Division, Nasik is being assisted by four Sub-Divisions one at Jaidhar, two at Kolhapur-phata and one at Deola.

The Organizational structure is adequate for the execution of physical and financial targets

### **3. PHYSICAL PROGRESS (UPTO Oct -2014)**

Physical progress of AIBP components given at Table 1, 2 &3

#### **4. FINANCIAL PROGRESS (UPTO Oct -2014)**

The project was approved by the Planning Commission in December 2005 for an estimated cost of Rs.157.78 Crore. Subsequently the project cost was revised to Rs 340.56 Crore (PL 2008-09) and approved by the Planning Commission vide communication No. 2(229)/2003-WR dated 22.05.2009 and revised cost has been cleared by TAC in its 97<sup>th</sup> meeting held on 27.03.2009. The expenditure incurred by State Govt. on works component under AIBP is Rs 140.10 Crore up to Oct 2014 and total CA released by Govt. of India is Rs 137.67 Crore. The State share is Rs 15.30 Cr. Financial progress of AIBP components given at Table-4

#### **5. CAD&WM**

The CADWM component of project is not included in AIBP programme and not considered in sanctioned estimate which was approved by TAC of CWC, New Delhi in 2009. However, there are five canals to be constructed under Punand Project , details of canals are given at Table: 5

Out of total CCA (17849 Ha) of the project, for 6521.26 Ha, DISNET work is not executed due to non availability of land from the farmers. Hence CADWM work is proposed for 11328 ha only. Survey work & estimate are under progress by the private agency. After receiving the sanction of the estimates from competent authority, the proposal of execution of CAD work will be submitted to the CWC for Central Assistance or otherwise will be executed by State Government Funds. Present status of CADWM works is given at Table-6.

**Table No-1: Physical progress of the components**

Sr.no	Item	Status of completion
1.	Land Acquisition	95 % Completed
2.	Rehabilitation.	The resettlement of the 3 rehabilitee villages (4 hamlets) having 245 No. families and 1157 persons is resettled at 4 different Gaothan. All civic amenities have almost been completed and project affected persons have been shifted to new Gaothan.
3.	Dam (Suple)	Almost Completed. Remaining works targeted to be completed by 03/2015
4.	Gate (12 x 6.5 mtr.)	All 4 No. of gate have been erected.
5.	Sule pick up weir	Completed in 1998
6.	Chankapur Right Bank Canal	100 % Completed
	Direct Outlets	14 out of 14 completed
	Branch Canals	There are no Branch Canals
	Distributaries	47 % Completed
	Minors	49 % Completed
7.	Suple Right Bank Canal	61 % Completed
	Direct Outlets	4 out of 4 completed
	Branch Canals	There are no Branch Canals
	Distributaries	There are no Distributaries
	Minors	0 % Completed
8.	Suple Left Bank Canal	8 % Completed
	Direct Outlets	none out of 9 completed
	Branch Canals	There are no Branch Canals
	Distributaries	There are no Distributaries
	Minors	There are no Minors
9.	Sule Right Bank Canal	89 % Completed
	Direct Outlets	15 out of 15 completed
	Branch Canals	There are no Branch Canals
	Distributaries	There are no Distributaries
	Minors	0 % Completed
10.	Sule Left Bank Canal	97 % Completed
	Direct Outlets	23 out of 23 completed
	Branch Canals	There are no Branch Canals
	Distributaries	82 % Completed
	Minors	78 % Completed
11.	Hydro-Electric Project.	To be built on BOT basis
12.	Potential Creation	Out of 10846 Ha Potential, 10200 Ha have been created.
13.	Potential Utilization	Out of 10200 ha. Potential created 4735 ha have been utilized in 2013-14. No potential utilization in 2014-15 upto Oct-2014

**Table No-2: Year wise Potential created**

Ultimate Irrigation Potential of the Project.	10846 Ha.
Potential Created during 2006 to 2007	158 Ha.
Potential Created during 2007 to 2008	364 Ha.
Potential Created during 2008 to 2009	290 Ha.
Potential Created during 2009 to 2010	3950 Ha.
Potential Created during 2010 to 2011	3113 Ha.
Potential created during 2011- 2012	1027 Ha.
Potential created during 2012- 2013	1118 Ha.
Potential created during 2013- 2014	180 Ha.
Potential created upto 10/2014 in 2014- 2015	0 Ha.
<b>Total potential created under AIBP</b>	<b>10200 Ha.</b>
Balance potential to be created under AIBP.	646 Ha.

**Table No-3: Component wise Potential created**

Sr. No	Name of Component	Upto 11th Plan		2012-13		2013-14		2014-15	
		IP Creation (Ha)		IP Creation (Ha)		IP Creation (Ha)		IP Creation (Ha)	
		Target	Achv.	Target	Achv.	Target	Achv.	Target	Achv.
1	Chankapur RBC - Main Canal	241.80	241.80	0	0	0	0	0	0
2	Chankapur Dy N0 3	1330.58	1330.58	0	0	0	0	0	0
3	Chankapur Tail Dy	1433.49	1413.62	19.87	19.87	0	0	0	0
4	Chankapur Minor No11&15	203.91	177.02	26.89	0	26.89	0	26.89	0
5	Suple RBC - Main Canal	74.04	74.04	0	0	0	0	0	0
6	Suple RBC Minor No 1 to 5	209.46	209.46	0	0	0	0	0	0
7	Sule RBC- Main Canal	237.94	237.94	0	0	0	0	0	0
8	Sule RBC Minor No1 to 8	732.26	153.08	579.18	125.00	454.18	180.43	273.75	0
9	Suple LBC- Main Canal	161.10	0	161.10	0	161.10	0	161.10	0
10	Sule LBC- Main Canal	445.16	445.16	0	0	0	0	0	0
11	Sule LBC Dy N0 1	271.84	271.84	0	0	0	0	0	0
12	Sule LBC Dy N0 2	515.77	392.08	123.69	0	123.69	0	123.69	0
13	Sule LBC M1 to 11 except 8	974.84	928.38	46.46	0	46.46	0	46.46	0
14	<b>Overall main canal</b>	1160.04	998.94	161.10	0	161.10	0	161.10	0
15	<b>Overall distributory</b>	3551.68	3408.12	143.56	19.87	123.69	0	123.69	0
16	<b>Overall minors</b>	2120.47	1467.94	652.53	125.00	527.53	180.43	347.10	0
	<b>Irrigation trough well, By lift from river and By H.R. of Trucked Dy and Minors</b>	4013.71	1384.0	2629.64	2615.9	13.67	0	13.67	
	<b>Total</b>	<b>10845.9</b>	<b>7259.07</b>	<b>3586.83</b>	<b>2760.8</b>	<b>825.9</b>	<b>180.43</b>	645.56	0
	<b>Total Potential Created</b>								10200

Table No-4: Year-wise expenditure incurred on AIBP components

Year	Total Budget provision	CA released	State share	Total	Exp. Incurred (on works)
2006-2007	22.06	15.98	1.78	17.76	11.96
2007-2008	9.83	3.24	0.36	3.60	5.99
2008-2009	38.37	31.08	3.45	34.53	20.91
2009-2010	73.28	44.87	4.99	49.86	42.97
2010-2011	32.30	-	-	-	27.32
2011-2012	53.47	42.50	4.72	47.22	11.87
2012-2013	25.00	-	-	-	8.57
2013-2014	22.67	-	-	-	6.41
2014-2015 (10/2014)	12.60	-	-	-	4.10
<b>Total</b>		<b>137.67</b>	<b>15.30</b>	<b>152.97</b>	<b>140.10</b>

It may be noted that the total expenditure shown in the Milestone Chart is Rs. 132.312 Cr where as the table shows Rs. 140.10 Cr, because the expenditure on Dam has not been included in it.

Table-5 Details of canals

SI No	Name of canal	CCA in Ha
1	Chankapur Right bank canal	11663
2	Suple Right bank canal	466
3	Suple Left bank canal	265
4	Sule Right bank canal	1597
5	Suple Right bank canal	466

Table No-6: Present status of CAD&WM works

1.	Status of Completion	Ongoing
2.	Total quantity of work involved in CADWM (Ha)	11328 ha
3.	Total quantity of work achieved till Oct -14	0
4.	Target year of Completion	March-2016
5.	Total estimate of CADWM expenditure (Rs. Lakh)	244.33
6.	Total expenditure on CADWM till Oct -14	Nil

## 6. ISSUE IN FOCUS

### a. Irrigation Potential Creation

Punand Irrigation Project is planned for creation of 10846 ha annual irrigation with 61% irrigation intensity on 17841 ha CCA. No potential was created upto March -2006 i.e. before inclusion in AIBP.

It is the 9<sup>th</sup> year for the project under AIBP & 10200 ha of IP is reportedly created by Oct-2014. The balance 646 ha is proposed to be created by 2014-15. **It is to note that the no potential has created during the year 2014-15 (upto 10/2014).** It must be ensured that the balance potential of 646 ha is created in the year 2014-15 after getting the required approval for the time extension.

#### **b. Irrigation Potential Utilization**

Even though 10200 Ha of IP is created upto Oct- 2014, as per the information received from Tapi Irrigation Development Corporation vide Letter No. TIDC/PB-4/ 21 /2014 dated 12/3 /2014, the potential utilized is only 1090 ha. The gap between potential created and utilized is huge. It may be pointed out that as per the new AIBP guidelines, the project can be declared completed only after the CADWM is completed. For continued AIBP funding for the ongoing projects, it is obligatory on the part of project authorities to undertake complete the CADWM work within one year of completion of the project. CADWM authority needs to expedite the work so that the CADWM work gets completed.

The Steps has taken by the project authorities including the programme for full utilization of the potential needs to be submitted.

#### **c. CADWM**

The CADWM work has not yet started. It is brought to the notice of the project authorities that as per the current AIBP guidelines, the completion certificate of the project cannot be accepted till it can be ascertained that CADWM work is completed within one year of completion of the project, even though the component is not included under AIBP.

This work needs to be taken up at priority.

#### **d. Participatory Irrigation Management:**

The status of progress of PIM works needs to be included in the quarterly progress report.

#### **e. Rehabilitation & Resettlement**

There are no R&R issues needing attention.

#### **f. Environmental Issues**

Punand project has been approved by Ministry of Environment and Forests, Government of India, vide their letter no. J/11016/16/82/I.A.1 dated 17.12.1993 subject to the implementation of certain environmental safeguard measures pari-pasu with the construction work (**Annexue-3**). The details of the compliance of condition on approval of Environmental Proposal are given at **Annexure-4**. However, the compliance report on these conditions has not been submitted. This report needs to be submitted on top priority.

# STATUS REPORT

## PUNAND IRRIGATION PROJECT

### Brief

The Project was visited by Director, Monitoring & Appraisal Directorate, Central Water Commission, Vadodara on 18<sup>th</sup> Nov-2014 along with Deputy Director. Discussions were held with Project officials. This report is prepared based on the inputs received from the project officials of the ongoing works and the status of work.

### 1. PROJECT COMPONENTS

The Punand Irrigation Project is being constructed on river Punand, a tributary of river Girna in the Tapi basin near village Suple Digar, Taluka- Kalwan of District Nasik.

The approved components under the AIBP, which have already been /are being executed, are given below:

#### a. Dam at Suple Digar:

The project envisages construction of 706.5 m long composite dam near Suple Digar village (Earthen dam-525m + Spillway-56.25m + Masonry dam-125.25m) with maximum height-33.28 m, gross storage of 39.75 Mcum and live storage of 36.99 Mcum at 716.10 m full reservoir level (FRL). Flood moderation arrangement is provided with 4 spillway gates (size 12.0 m x 6.50 m). The work is almost completed and little work remaining is targeted to be completed by 3/2015.

#### b. Suple Left Bank Main Canal:

Suple left Bank canal (SLBC) takes off from CH 450 m of Suple RBC having 9.40 km length with bed width of 1 m and free board of 0.45 m. The full supply depth of canal is 0.32 m and discharge is 0.07 cumecs. Total Land required acquisition of 15 ha, Out of this 12.89 ha land is in possession, consent for balance 2.11 ha has been taken but formal acquisition is yet to happen. As reported by project authority, land owner in km 1 to 4 has demanded to construct the canal underground by laying pipe line instead of open trench. The proposal for UGPL is approved by competent authority for approval. The works is in progress and proposed to be completed up to March 2015. The overall status of this component is given below

Suple Left Bank Canal			8 % Completed
	Direct Outlets		none out of 9 completed
	Branch Canals		There are no Branch Canals
		Distributaries	There are no Distributaries
		Minors	There are no Minors

#### c. Suple Right Bank Canal

8.5 km long Supple Right Bank Canal (SRBC) takes off from Suple Dam with bed width 2.70 m and head discharge 0.133 Cumecs. Free board is 0.45 m and full supply depth is 1.28 m.

There are 5 Minors and 4 Direct Outlets from this canal. All outlets are complete. The work on its 5 minors is not started yet. Area of Minor No. 2 to 5 is too short (134.85 ha) hence, proposed to be irrigated by constructing Direct Outlets instead. Works of SRBC are in progress & targeted to be completed by 3/2015. The overall status of this component is given below

Suple Right Bank Canal			61 % Completed
	Direct Outlets		4 out of 4 completed
	Branch Canals		There are no Branch Canals
		Distributaries	There are no Distributaries
		Minors	0 % Completed

#### **d. Sule Pick-Up Weir**

Construction of Sule pick-up weir was taken up on Punand River, 6 km downstream of Suple Dam. The work of pick up weir had been completed in 1998.

#### **e. Sule Left Bank Canal**

34.00 km long unlined canal takes off from Sule Pick up weir with discharge capacity of 1.11cumec. The bed width of canal is 3.00 m and full supply depth is 0.80 m with free board of 0.45m. There are 2 Distributaries (Dy), 10 Minors and 23 Direct Outlets from this canal. Dy 1 was completed. Dy 2 is about 76% completed. Minors No. 1, 2, 4, 6, 7, 9 and 10 are completed. Minor No 3 and No. 5 are under progress. No. 8 for 136.89 ha has been truncated. As reported by project authority, one additional minor (No. 11) is planned and tender process in progress. Overall 78% completed.

The status of the Main Canal, Distributaries, Minors and Direct Outlets are as under:

Sule Left Bank Canal			97 % Completed
	Direct Outlets		23 out of 23 completed
	Branch Canals		There are no Branch Canals
		Distributaries	82 % Completed
		Minors	78 % Completed

**f. Sule Right Bank Canal**-This 19 km long Sule Right Bank Canal takes off from Sule Pickup weir. The bed width of canal 2.15 m and full supply depth is 0.58 m with free board 0.45 m. There are 8 Minors and 15 Direct Outlets from this canal. Earth work & structures between km 1 to 7 have been completed. About 80% earthwork & structures in km 8 to 19 are completed. Total 170 structures (including 2 big structures) all are completed. The work on its 8 No. minors is not started, 25.88 ha of land involving 251 farmers is required & so far, is still at persuasion stage. It is very critical may further delay in completion of project. It is, however, targeted to be completed up to 3/2015. All 15 Nos. direct outlets are completed. The overall status of this component is given below:



Sule Right Bank Canal			89 % Completed
	Direct Outlets		15 out of 15 completed
	Branch Canals		There are no Branch Canals
		Distributaries	There are no Distributaries
		Minors	0 % Completed

**g. Chankapur Right Bank Canal**-The canal takes off from existing Chankapur tank. Before this proposal, the existing Chankapur Dam was only a storage dam and was discharging water directly into the Girna River in the lean season for utilization by existing Thengoda Weir on the downstream. Thengoda Weir used this water for its own command area. After the conception of Punand Project, Chankapur RBC was planned to irrigate 7086 Ha of Punand Command Area. This required 25.64 Mm<sup>3</sup> of water to be diverted from Chankapur Dam to Chankapur RBC. To facilitate the normal functioning of the existing Thengoda weir command, 25.64 Mm<sup>3</sup> water is proposed to be released from the Suple Dam into the Girna River which would be utilized by Thengoda Weir. Total length of Chankapur Right Bank Canal is 37. 10 km with bed width 6.05 m & head discharge 3.34 Cumecs, free board 0.60 m & full supply depth 0.6 m. There were 2 Distributaries, 2 Minors and 14 Direct Outlets from this canal. Main canal is complete. DISNET for the 3825.59 ha command area under this canal has been truncated. Out of 87.950 ha for Dy/ Minors 82.35 ha is reportedly in possession, 5.60 ha is yet to be acquired.

Chankapur Right Bank Canal			100 % Completed
	Direct Outlets		14 out of 14 completed
	Branch Canals		There are no Branch Canals
		Distributaries	47 % Completed
		Minors	49 % Completed

Index map of the project is given at **Plate-I**

L-Section of Project is given at **Plate-II**

Salient features of the project are given at **Annexure-1**.

## **2. CHANGE IN SCOPE, IF ANY**

### **2.1 Change in scope in Physical component**

There are mainly two sub- heads in the physical component:

i) **HEADWORKS** –There has been some reduction in quantity and cost of components of the dam and roadwork. Details can be seen in the physical progress section. However, the striking feature is the proposed deletion of power house component of Irrigation-Cum-Power Outlet (ICPO) from AIBP component. It is now proposed to be built on BOT basis. A detailed note on ICPO is at **Annexure - 2**

ii) **CANAL** - There was Change in Project Parameters/Scope – in the main truncation of Distribution Network - DISNET of Chankapur canal, Supple Left Bank Canal, Sule Right Bank Canal, reduction in Structures etc.

## **2.2 Change in completion time**

Project was earlier accorded investment clearance by the Planning Commission, Government of India, New Delhi vide communication no 2(229)/2003-WR dated 05th December 2005 for creation of 10846 ha annual irrigation with 61% irrigation intensity on 17841 ha CCA with an estimated cost of Rs 157.78 Crore (as per 2004-05 price level). Subsequently the project cost was revised to Rs 340.56 Crore (PL 2008-09) and approved by the Planning Commission vide communication No. 2(229)/2003-WR dated 22.05.2009 with the timeline of 2011-12. The second sanction of the project by Planning Commission fixed the target year of completion as 2011-12 for the whole project. However, the AIBP components were stipulated to be completed by 2010-11. Govt of Maharashtra sought extension for target year of completion for AIBP component to 2011-12 vide Ir. No. TIDC/PB4/2011 dated 21.02.2011 directly addressed to Secretary, MoWR, New Delhi. It has been informed by the Project Authorities that a proposal is under preparation for the extension of the timeline up to 2014-15.

## **3. ORGANIZATION SET UP FOR THE PROJECT**

### **EXECUTION**

Construction of the project is being done by Tapi Irrigation Development Corporation (TIDC), Jalgaon with following organizational set-up.

- i. Region: Chief Engineer (TIDC), Tapi Irrigation Development Corporation, Jalgaon
- ii. Circle: Superintending Engineer, Nasik Irrigation Project Circle, Dhule
- iii. Division: Executive Engineer, Upper Godavari Project Division, Nasik

The Project Division, Nasik is being assisted by four Sub-Divisions one at Jaidhar, two at Kolhapur-phata and one at Deola.

## **4. CONTRACTUAL ARRANGEMENTS**

The awards for civil works are made through Local / National Competitive Bidding by giving wide publicity in daily newspaper and this practice is considered adequate. The Executive Engineer is competent for accepting major contracts up to Rs 25 lakhs, Superintending Engineer up to Rs 125 lakhs and Chief Engineer for above Rs 125 lakhs. State Govt conducts pre-qualifying bidding if the estimated cost put to tender is more than Rs 300 lakhs. The claims from contractors for extra item of work that come out due to changed site conditions are submitted by the Engineer-in-charge with technical reports and his remarks to the competent authorities. The Competent Authorities settle these claims.

## **5. DESIGN & DRAWING**

Central Design Organization, Nasik working under State Irrigation Department, prepares design and drawings of dams and its allied works. Design and drawings of C.D. Structures costing above Rs 25 lakhs are prepared by Design Unit working under Superintending Engineer as per prevailing norms of Govt. of Maharashtra. Mechanical part i.e. radial, service and emergency gates, sluice valve etc. are designed and fabricated, by Chief

Engineer, (Mechanical), Nasik under State Irrigation Department. It is reported that detailed construction drawings are readily available at site of the project well in advance of construction.

## **6. QUALITY ASSESSMENT**

Separate Quality Control Organization has its Sub-Division and Division at Nasik & Dhule respectively under the control of Superintending Engineer (Quality Control) Aurangabad. The Quality Control Organization maintains agency-wise records and is responsible for ascertaining the quality of works & materials on Punand project. The standard tests are carried out and results informed to the concerned working body to take the suitable steps for the assured quality of works. The quality control mechanism is as such, in place.

## **7. LAND ACQUISITION AND R&R**

**Land Acquisition and R&R are not under sanctioned AIBP programme.** However, total land requirement (As per modified programme) for the project is 972 ha. About 95% land has been acquired till Oct-2014. For balance 37.22 Ha, land acquisition process is in progress. The resettlement of the 3 rehabilitated villages (4 hamlets) having 245 No. families and 1157 persons is resettled at 4 different Gaothans. All civic amenities have almost been completed and project affected persons have been shifted to new Gaothans.

## **8. ENVIRONMENTAL CLEARANCE**

Punand project has been approved by Ministry of Environment and Forests, Government of India, vide their letter no. J/11016/16/82/I.A. 1 dated 17.12.1993 (**Annexure-3**) subject to the implementation of certain environmental safeguard measures pari-pasu with the construction work. The details of the compliance of condition on approval of Environmental Proposal is given at **Annexure - 4**

## **9. TECHNO-ECONOMIC APPRAISAL AND ESTIMATED COST**

The first estimate of the project was approved by the Advisory Committee on Irrigation, Flood Control and Multi Purpose Projects of GoM, for an amount of Rs 29.92 Crore (Price level 1987-88) in September 1989. However, the project was first approved by the Planning Commission in December 2005 for an estimated cost of Rs.157.78 Crore. Subsequently the project cost was revised to Rs 340.56 Crore (PL 2008-09) and approved by the Planning Commission vide communication No. 2(229)/2003-WR dated 22.05.2009 and revised cost has been cleared by TAC in its 97th meeting held on 27.03.2009. As per the project authorities, the earlier estimate was based on preliminary survey only. The revised estimate of 2009 had been based on actual detailed survey works. In the process, the number of cross-drainage works had gone up from 1000 to about 3000, which resulting the cost escalation of the project. The detailed variation statement is at **Annexure -5**.

There has been no indication by the project authorities that the cost is contemplated to be revised.

## **10. EXTERNAL ASSISTANCE**

Project has not received any external assistance.

## **11. PHYSICAL PROGRAMME & PROGRESS OF AIBP WORKS**

The construction of main dam (Suple dam) including the manufacturing and erection of all 4 Nos. of radial gates, have been almost completed and little work remaining is targeted to be completed by 3/2015.

The construction work of Suple Left bank canal is in progress and targeted to be completed up to march-2015. There are no Branch Canals, Distributaries or Minors from SLBC.

The Works of Suple Right bank canal is in progress & targeted to be completed by 3/2015. Works of all outlets are completed. The work on its 5 minors is yet to be started. Area of minor No. 2 to 5 is too short (134.85 ha) hence, proposed to be irrigated by constructing Direct Outlets instead.

The construction of Sule pick up weir had been completed in 1998. The work of 34.00 km long unlined Left Bank Canal (LBC) takes off from Sule pick up weir has been completed. The Left Bank Irrigation-cum Power outlet is proposed to be constructed on BOT basis. LBC consists of 2 distributaries, 10 minors and 23 direct outlets. Out of these Dy. 1 completed & Dy.2 is about 76% completed, minors No. 1,2,4,6,7,9 and 10 are completed & No. 3,5 are under progress and as reported by Project authorities No. 8 for 136.89 ha has been truncated, one additional minor No.11 is planned & tender process under progress, direct outlets are almost completed. The 19.00 km long Right Bank Canal (RBC) take off from Sule pick up weir. The earthwork & structures have been completed between 1 km to 7 km stretch and about 80% of earthwork & structures have been completed between 8 km to 19 km stretch. The construction of 8 Nos. minors of RBC is yet to be started & 15 Nos. of direct outlets completed.

The Chankapur Right bank canal (CRBC) consists of 2 Distributors, 2 minors and 14 direct outlets. The work of main canal is completed. Out of 87.85 ha of land required for distributaries / minors, 82.35 ha of land is reportedly in possession and 5.60 ha of land is yet to be acquired.

Bar chart of Physical progress of AIBP components (head works, main canals & DISNET) is at **Plate-3**

Dot chart indicating canals along with their branches and distribution system is at **Plate-4**.

Milestone progress chart for various project components is at **Plate-5**.

**Table 7 - PHYSICAL PROGRAMME & PROGRESS OF AIBP WORKS**

Sl. No.	Component under AIBP / Non AIBP	Unit	Estimated Quantity under AIBP	Estimated Quantity as per modified programme under AIBP *	Progress upto 3/2014	Balance on 01/04/2014	Target for the year 2014-15	Achievement upto Oct- 2014		Target date of completion
								Quantity	%	
1	<b>UNIT-I HEADWORKS</b>									
1.1	Dam / Pickup Weir									
	Excavation	Th Cum	446.04	446.04	454.93	nil	nil	0.57	100	
	Embankment	Th Cum	1566.31	1473.24	1438.07	35.17	35.17	0.00	0.00	2015
	Masonry	Th Cum	199.87	162.69	162.69	0.00	0.00	0.00		
	Concrete	Th Cum	23.36	22.73	22.21	0.52	0.52	0.43	82.69	2015
	Gates	Nos.	4	4	4	0.00				
	Road Diversion	Km	3.25	3.25	3.25	0.00				
	ICPO	%	100.00	100.00	17.10	82.90	82.90	0.00	0.00	2015
	Miscellaneous	%	100.00	100.00	106.73	-6.73	-6.73	1.05	-15.60	2015
2	<b>UNIT-II DISTRIBUTION SYSTEM</b>									
2.1	Main Canal & Branch Canal									
	<b>Earthwork</b>	<b>Th Cum</b>								
	Chankapur RBC		1171.12	1171.12	1171.12	0.00	0.00	0.00		
	Suple RBC		147.19	190.55	117.45	73.10	73.10	0.00	0.00	2015
	Sule RBC		355.57	355.57	347.11	8.46	8.46	13.94	164.77	2015
	Suple LBC		162.77	162.77	37.70	125.07	125.07	0	0	2015
	Sule LBC		916.12	916.12	827.99	88.13	88.13	24.04	27.27	2015
	<b>Total</b>		<b>2752.77</b>	<b>2796.13</b>	<b>2501.37</b>	294.76	294.76	<b>37.98</b>	<b>12.88</b>	
	<b>Structure</b>	<b>Nos.</b>								
	Chankapur RBC		220	211	197	14	14	7	0.50	2015
	Suple RBC		46	68	53	15	15	0	0	2015
	Sule RBC		170	170	170	0	0	0	0	2015
	Suple LBC		61	61	1	60	60	5	8.33	2015
	Sule LBC		239	239	233	6	6	2	33.33	2015
	<b>Total</b>		<b>736</b>	<b>749</b>	<b>625</b>	95	95	<b>14</b>	<b>14.73</b>	
2.2	Distributaries &									

Sl. No.	Component under AIBP / Non AIBP	Unit	Estimated Quantity under AIBP	Estimated Quantity as per modified programme under AIBP *	Progress upto 3/2014	Balance on 01/04/2014	Target for the year 2014-15	Achievement upto Oct- 2014		Target date of completion
								Quantity	%	
	Minors									
	<b>Earthwork</b>	<b>Th Cum</b>								
	Chankapur RBC		974.40	746.09	477.03	269.06	269.06	0.72	0.2675	2015
	Suple RBC		42.84	42.84	0.00	42.84	42.84	0.00	0.00	2015
	Sule RBC		110.71	110.71	0.00	110.71	110.71	0.00	0.00	2015
	Suple LBC		25.58	0.00	0.00	0.00	0.00	0.00	0.00	
	Sule LBC		231.86	229.58	169.41	60.17	60.17	3.49	5.80	2015
	<b>Total</b>		<b>1385.39</b>	<b>1129.22</b>	<b>646.44</b>	482.78	482.78	<b>4.21</b>	<b>0.87</b>	
	<b>Structure</b>	<b>Nos.</b>								
	Chankapur RBC		1880	679	524	155	155	0	0	2015
	Suple RBC		93	93	0	93	93	0.	0.00	2015
	Sule RBC		289	289	0	289	289	0.	0.00	2015
	Suple LBC		56	0	0	0	0	0		
	Sule LBC		695	630	493	137	137	26.	18.97	2015
	<b>Total</b>		<b>3013</b>	<b>1691</b>	<b>1017</b>	674	674	<b>26</b>	<b>3.85</b>	
3	<b>Potential</b>	Ha	<b>10846</b>	<b>10846</b>	<b>10200</b>	646	646	0	0	2015

\* Approved by Central Water Commission via letter No 9/19/2010- Mon(c) 95-98 Dated 28.01.2011

## **12. PROJECT POTENTIAL**

Punand Irrigation Project is planned for creation of 10846 ha annual irrigation with 61% irrigation intensity on 17841 ha CCA. The potential creation proposed under AIBP is 10846 ha, out of which no potential was created up to 3/2006 i.e. before inclusion in AIBP.

The Potential created upto March 2013 was 10020 Ha. Hence, as on 1<sup>st</sup> April 2013, 826 Ha of potential was balance. From March 2013 to December 2013, 180 Ha of potential was created. The balance 646 ha is proposed to be created by 2014-15. The reason for this lag is the reluctance of land owners to get their lands acquired. **Out of 10200 Ha Potential created only 4735 ha have been utilized in 2013-14.**

Statement of distributory-wise ultimate potential and potential created so far is given at Table-8

## **13. FINANCIAL PROGRAM AND PROGRESS**

The project was approved by the Planning Commission in December 2005 for an estimated cost of Rs.157.78 Crore. Subsequently the project cost was revised to Rs 340.56 Crore (PL 2008-09) and approved by the Planning Commission vide communication No. 2(229)/2003-WR dated 22.05.2009 and revised cost has been cleared by TAC in its 97th meeting held on 27.03.2009. The expenditure incurred by State Govt. on works component under AIBP is Rs 140.10 Crore up to Oct-2014 and total CA/CLA released by Govt. of India is Rs 137.67 Crore. The State share is Rs 15.30 Cr.

Bar chart of financial progress of AIBP components (head works, main canals & DISNET) is at **Plate-3**

Financial Programme & Progress given at table-9

Table No-8 : Distributory wise ultimate potential and potential created

	Description	Total I P	I.P. Created			Remarks
			By flow I.P	I.P. Through well and lift through river	Total	
<b>SULE LEFT BANK</b>	Main Canal	445.16	445.16	0	445.16	By Direct Outlets 1 to 21
	Dy NO 1	271.84	271.84		271.84	Fully executed
	Dy NO 2	515.77	392.08	0	392.08	Partly executed
	Minor No 1 to 11	1111.73	928.38	136.89	1065.27	Minor No 8 (136.89 Ha) is not executed. This I. P. Through well and lift through river
	<b>Total</b>	<b>2344.50</b>	<b>2037.46</b>	<b>136.89</b>	<b>2174.35</b>	
<b>SUPLE LEFT BANK CANAL</b>	Main Canal	161.10	0	0	0	By Direct Outlets ,Not executed
	Dy	0	0	0	0	Not proposed
	Minors	0	0	0	0	Not proposed
	<b>Total Suple L.B.C</b>	<b>161.10</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
<b>SULE RBC</b>	Main Canal	237.94	237.94	0	237.94	By Direct Outlets 1 to 15
	Dy	0	0	0	0	Not proposed
	Minors No 1 to 8	732.26	458.51	0	458.51	Not executed but I. P. achieved by Direct Outlets
	<b>Total Sule R.B.C</b>	<b>970.20</b>	<b>696.45</b>	<b>0.00</b>	<b>696.45</b>	
<b>SUPLE RBC</b>	Main Canal	74.04	74.04	0	74.04	By Direct Outlets 1 to 4
	Dy	0	0	0	0	Not proposed
	Minors No 1 to 5	209.46	209.46	0	209.46	Not executed but I. P. achieved by Direct Outlets
	<b>Total Suple R.B.C</b>	<b>283.50</b>	<b>283.50</b>	<b>0.00</b>	<b>283.50</b>	
<b>CHANKAPUR R.B.C</b>	Main Canal	241.80	241.80	0	241.80	By Direct Outlets 1 to 14
	Dy NO 1& 2	1073.91	0	1073.91	1073.91	Not executed but I. P. achieved by Through well and lift through river
	Dy NO 3	2325.90	1330.58	995.32	2325.90	Partly executed
	Tail Dy	1433.49	1433.49	0	1433.49	executed
	Minor No 1 to 16 Except Minor No 11 and Minor No 15	1783.29	37.55	1732.07	1769.62	Not executed but I. P. achieved by Direct Outlets, Through well and lift through river
	Minor No 11 and Minor No 15	228.21	177.02	24.3	201.32	Partly executed
	<b>Total Chankapur R.B.C</b>	<b>7086.60</b>	<b>3220.44</b>	<b>3825.60</b>	<b>7046.04</b>	
<b>OVERALL</b>	Main Canal	1160.04	998.94	0	998.94	
	Dy	5620.91	3427.99	2069.23	5497.22	
	Minors	4064.95	1810.92	1893.26	3704.18	
	<b>Total</b>	<b>10845.90</b>	<b>6237.85</b>	<b>3962.49</b>	<b>10200.34</b>	



**Table 9 - Financial Program and Progress of AIBP components**

Sl. No.	Component under AIBP	Estimated Amount under AIBP	Estimated Amount as per modified programme under AIBP	Progress upto 3/2014	Balance on 01/04/2014	Target for the year 2014-15	Achievement		Target date of completion
							Amount	%	
1	UNIT- I HEADWORKS								
1.1	Dam / Pickup Weir								
	Excavation	3.57	3.57	3.3837	0.1863	0.1863	0.0363	19.48	2015
	Embankment	9.36	8.56	8.3439	0.2161	0.2161	0.0000	0.00	2015
	Masonry	16.72	16.18	16.1800	0.0000	0.0000	0.0000		
	Concrete	7.98	7.83	6.9195	0.9105	0.9105	0.1755	19.27	2015
	Gates	7.63	7.63	7.6100	0.0200	0.0200	0.0000	0.00	
	Road Diversion	3.53	3.53	3.4800	0.0500	0.0500	0.0000	0.00	
	ICPO	6.9	4.27	0.7300	3.5400	3.5400	0.0000	0.00	2015
	Miscellaneous	7.59	7.96	8.4959	nil	nil	0.0834	100	
	Total	63.28	59.53	55.1430	4.3870	4.3870	0.2952	6.72	
2	UNIT-II DISTRIBUTION SYSTEM								
2.1	Main Canal & Branch Canal								
	Earthwork								
	Chankapur RBC	4.27	4.27	4.2700	0.0000	0.0000	0.0000		
	Suple RBC	2.21	3.10	2.4388	0.6612	0.6612	0.0000	0.00	2015
	Sule RBC	5.52	5.52	4.8276	0.6924	0.6924	0.6821	98.51	2015
	Suple LBC	1.05	1.21	0.6866	0.5234	0.5234	0	0	2015
	Sule LBC	6.31	7.67	8.0812	nil	nil	0.1930	100	
	Total	19.36	21.77	20.3042	1.4658	1.4658	0.8751	59.71	
	Structure								
	Chankapur RBC	13.33	13.26	12.3588	0.9012	0.9012	0.4898	54.34	2015
	Suple RBC	6.23	10.39	9.8544	0.5356	0.5356	0	0	2015
	Sule RBC	6.45	9.26	11.6382	nil	nil	0.3560	100	

Sl. No.	Component under AIBP	Estimated Amount under AIBP	Estimated Amount as per modified programme under AIBP	Progress upto 3/2014	Balance on 01/04/2014	Target for the year 2014-15	Achievement		Target date of completion
							Amount	%	
	Suple LBC	9.01	8.84	4.7404	4.0996	4.0996	0.1744	4.25	2015
	Sule LBC	20.46	19.10	22.8273	nil	nil	1.0357	100	
	<b>Total</b>	<b>55.48</b>	<b>60.85</b>	<b>61.4191</b>	<b>0.5691</b>	<b>0.5691</b>	<b>2.0559</b>	361.25	
	<b>Total Main Canal &amp; Branch Canal</b>	<b>74.84</b>	<b>82.62</b>	<b>81.7233</b>	<b>0.8967</b>	<b>0.8967</b>	<b>2.9310</b>	326.86	
2.2	Distributaries & Minors								
	<b>Earthwork</b>								
	Chankapur RBC	9.33	7.79	7.0862	0.7038	0.7038	0.0131	1.86	2015
	Suple RBC	0.41	0.41	0.0000	0.4100	0.4100	0.0000	0.00	2015
	Sule RBC	1.05	1.05	0.0000	1.0500	1.0500	0.0000	0.00	2015
	Suple LBC	0.25	0.00	0.0000	0.0000	0.0000	0.0000	0.00	
	Sule LBC	6.19	4.70	3.4860	1.2140	1.2140	0.0149	1.22	2015
	<b>Total</b>	<b>17.23</b>	<b>13.95</b>	<b>10.5722</b>	<b>3.3778</b>	<b>3.3778</b>	<b>0.0280</b>	.082	
	<b>Structure</b>								
	Chankapur RBC	59.14	30.06	30.9629	nil	nil	0.0260	100	
	Suple RBC	2.45	2.45	0.0000	2.4500	2.4500	0.0000	0.00	2015
	Sule RBC	8.75	8.75	0.0000	8.7500	8.7500	0.0000	0.00	2015
	Suple LBC	1.38	0.00	0.0000	0.0000	0.0000	0.0000		
	Sule LBC	20.57	14.85	8.1818	6.6682	6.6682	0.826	12.38	2015
	<b>Total</b>	<b>92.29</b>	<b>56.11</b>	<b>39.1447</b>	<b>16.9653</b>	<b>16.9653</b>	<b>0.852</b>	<b>5.02</b>	
	<b>Total Distri &amp; Minors</b>	<b>109.52</b>	<b>70.06</b>	<b>49.7169</b>	<b>20.3431</b>	<b>20.3431</b>	<b>0.880</b>	<b>4.32</b>	
	<b>Total AIBP Component</b>	<b>247.64</b>	<b>212.21</b>	<b>186.5832</b>	<b>25.6268</b>	<b>25.6268</b>	<b>4.1062</b>	<b>16.02</b>	

#### 14. MONITORING OF PROJECT AT STATE LEVEL

In compliance to Water Resources Department, Government of Maharashtra, Government Resolution No MoN-2008/ (181/2008)/ PLN-3, Mantralaya Mumbai dated. 06.10.2008, the following monitoring cell is established for monitoring the ongoing Major & Medium Project under TIDC.

Sr. No.	Name of Executive Engineer / Dy Engineer / Sect. Engineer.	Designation
1.	Shri. S. Y. Patil	Executive Engineer
2.	Shri. A. R. Patil	Sub Divisional Engineer
3.	Shri. A. H. Warke	Sect. Engineer

As per ref. Govt. Resolution, the work of Monitoring Cell established under Corporation is as under

- A) To collect Quarterly monitoring report of ongoing all Major & Medium project under corporation.
- B) Scrutinize the Quarterly monitoring report.
- C) Monitoring Cell should report to Executive Director ,directly

However, no visit of the officers from Monitoring Cell has taken place for Punand Project.

The copy of Resolution is at **Annexure - 6**

#### 15. COMPLIANCE OF ISSUES/ACTION POINTS CONTAINED IN PREVIOUS 10<sup>th</sup> STATUS REPORT

Compliance report to CWC observations contained in earlier status report is enclosed at **Annexure - 7**.

#### 16. CADWM

The CADWM component of project is not included in AIBP programme and not considered in sanctioned estimate which was approved by TAC of CWC, New Delhi in 2009. However, there are five canals are constructed as given below under Punand Project

Sl no	Name of canal	CCA in Ha
1	Chankapur Right bank canal	11663
2	Suple Right bank canal	466
3	Suple Left bank canal	265
4	Sule Right bank canal	1597
5	Suple Right bank canal	466

Total CCA of project is 17849 ha .Out of total CCA of the project, for 6521.26 Ha, DISNET work is not executed due to non available land from farmer. Hence CAD work is proposed on 11328 ha .Survey work and estimate is under progress by the private agency. After receiving the sanction of the estimates from component authority, the proposal for

execution of CAD work will be submitted to CWC for Central Assistance or will be executed by State Fund.

As informed by project authorities, present status of CADWM works is given below.

Table No-7: Present status of CAD&WM works

1.	Status of Completion: Ongoing or completed?	Ongoing
2.	Total quantity of work involved in CADWM (Ha)	11328 ha
3.	Total quantity of work achieved till March'14	0
4.	Target year of Completion	March-2016
5.	Total estimate of CADWM expenditure (Rs. Lakh)	244.33
6.	Total expenditure on CADWM till March'14	Nil

## **17. POINTS NEEDING ATTENTION**

### **(a) Constraints affecting progress of work**

**i. Technical Inputs** – No such constraint

**ii. Land acquisition** - It is reported that land acquisition for Sule & Suple right minors (25.88 ha & 3.63 ha respectively) is very critical. Further truncation of minors no. 2 to 5 (involving about 12 ha of land) of Suple is reported & only minor no. 1 is being constructed. In the result, instead of 14.23 ha, now only 3.63 ha of land for the minor no. 1 is being acquired. So is the case of Sule, where 25.88 ha land involving 251 farmers are still at persuasion stage. The head reaches are reportedly more problematic. Since land acquisition issue is very critical, top priority needs to be accorded and issues settled at the earliest

**iii. Floating of tenders** – No critical issue has come to the notice

**iv. Procurement of scarce material** - No critical issue has come to the notice

**v. Sufficiency of infrastructures including establishment, labour/machinery etc** – No critical issue has come to the notice

**vi. Finance** – It has been informed by the project authorities during the visit that no further funds will be required under AIBP.

### **(b) Time Extension Proposal**

Target timeline for completion as per 6<sup>th</sup> & the last MoU was 03/2012. It has been informed by the authorities during the visit that the time extension proposal till 2014-15 is under preparation.

It is felt that the time extension proposal is required and considering the delay, time extension proposal needs to be expedited.

**(c) Unspent Central Assistance**

During 2011-12, Rs 42.50 Crore of CA was sanctioned out of which, only Rs 26.84 Crore has been utilized upto 2013-14. As on 01.04.2012, Rs. 31.96 Crore of CA outstood & from this (till 10/2014) only Rs. 4.10 Crore could be spent. Because of truncation of Minors & not starting of ICPO construction saving of outstanding CA is imminent.

The revised physical & financial programme with realistic project completion date need to be worked out and intimated along with saving in the unspent CA.

**(d) Monitoring of Project by Independent Agency**

Though the Monitoring Cell has been constituted by the State Government, it is noted that no visit has been carried out by them. Monitoring visits by the Monitoring Cell needs to be carried out and reported.

However, as per the recent direction of Ministry of Water Resources, the projects under AIBP need to be evaluated concurrently by independent agencies. The template for the same is attached at **Annexure-8**.