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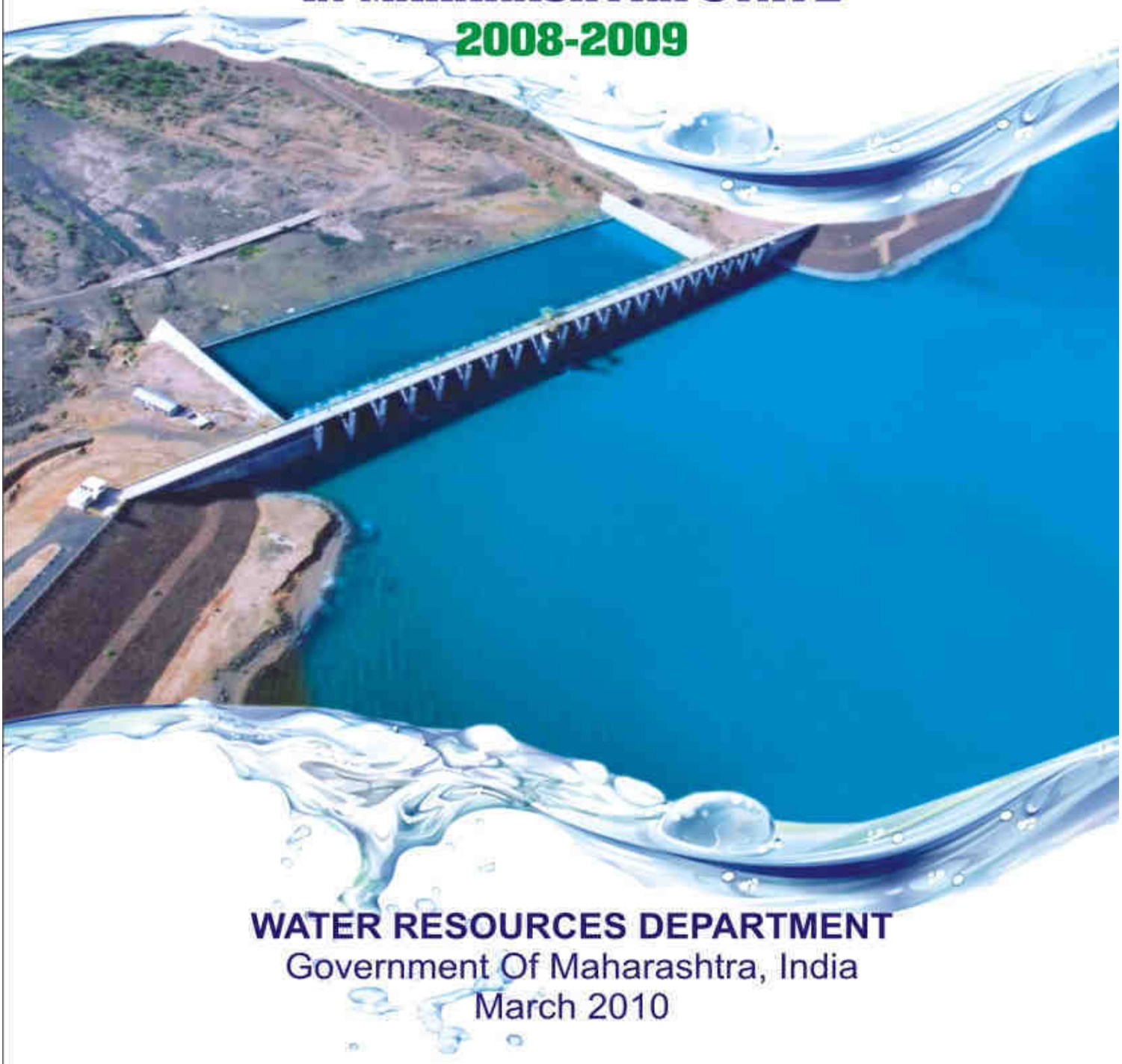
Report On

WATER AUDITING OF IRRIGATION PROJECTS IN MAHARASHTRA STATE

2008-2009



WATER RESOURCES DEPARTMENT

Government Of Maharashtra, India

March 2010

Report on
Water Auditing of Irrigation Projects in Maharashtra State
2008-09

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Government of Maharashtra
Water Resources Department
March 2010

FOREWORD

The geographical area of Maharashtra is divided into five main river basins with 25 Sub-basins. The 45% area of the state is in deficit & highly deficit in water resource region. One of Major challenges before Water Resources Department is to bring the created irrigation potential under actual utilization. So efforts should be made for efficient utilization of available water. Water Resources Department has concentrated its efforts in that direction. Water Auditing of irrigation systems is one of the sector improvement programmes being implemented since 2003-04.

A water audit determines the amount of water used in different sectors, evaporation losses in reservoir & transit losses in distribution system. Water auditing of irrigation projects, is necessary to see that the water use, evaporation & other losses are as per design.

Large numbers of Irrigation projects are constructed in Maharashtra to tap the water resources of the state. Irrigation potential to the tune of 4.486 Mha. is created by the end of June 2008 through 71 Major, 243 Medium & 2940 state sector minor irrigation projects. During last five years irrigation potential utilization status improved from 1.708 Mha. to 2.732 Mha.

I, appreciate the efforts taken by Shri R.B. Shukla, Chief Engineer and his office team for preparation of this report.

I also appreciate the co-operation extended by the Director General WALMI Aurangabad for printing this report in time.

Comments & suggestions on this report will be appreciated.

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C O N T E N T S		
Sr. No.	**Description**	**Page No.**
1	Executive Summary	1-4(i)
2	Chapter-1: Introduction	5-16
3	Chapter-2: Annual Water Account 2008-09	17-20
4	Chapter-3: Observations	21-72
5	Chapter-4: Common observations & Conclusion	73-74
6	Chapter-5: Water Auditing of Irrigation Projects at Administrative Levels – A state Preview Charts I to XVI for WA at Administrative Levels	75-102
7	Annexure	
	Annexure I: Indicators of Major projects	103-139
	Annexure II: Indicators of Medium projects	141-203
	Annexure III: Indicators of Minor projects	205-212
	Annexure IV: Abstract of Silt survey conducted by MERI, Nashik	213-215
	Annexure V: Organization Chart	216

ABBREVIATIONS

CCA	Culturable Command Area
CRT	Converted Regular Temporary
Cum	Cubic Meter
CWC	Central Water Commission
GOI	Government of India
GOM	Government of Maharashtra
Ha	Hectare
IMD	India Meteorological Department
IWM	Irrigation Water Management
ISP	Irrigation System Performance (Area irrigated per unit of water utilized at source in ha/ Mcum)
K.T. Weirs	Kolhapur Type Weirs
Mha	Million hectares
MERI Nashik	Maharashtra Engineering Research Institute, Nashik
MWRDC	Maharashtra Water Resources Development Centre, Aurangabad (formerly MWIC)
MWSIP	Maharashtra Water Sector Improvement Programme
NI Use	Non Irrigation Use
NMC	Nandur Madhmeshwar Canal
MWRRA	Maharashtra Water Resources Regulatory Authority Act, 2005
PIM	Participatory Irrigation Management
PR	Project Report
PIP	Preliminary Irrigation Programme
WALMI	Water and Land Management Institute, Aurangabad
WUA	Water Users' Association
AIC Akola	Akola Irrigation Circle, Akola
AIC Aurangabad	Aurangabad Irrigation Circle Aurangabad
BIPC Buldhana	Buldhana Irrigation Project Circle Buldhana
CADA Abad	Command Area Development Authority, Aurangabad
CADA Beed	Command Area Development Authority, Beed.
CADA Jalgaon	Command Area Development Authority, Jalgaon
CADA Nagpur	Command Area Development Authority, Nagpur
CADA Nashik	Command Area Development Authority, Nashik
CADA Pune	Command Area Development Authority, Pune
CADA Solapur	Command Area Development Authority, Solapur
CIPC Chandrapur	Chandrapur Irrigation Project Circle, Chandrapur
GKLISC Bhandara	Gosi Khurd Lift Irrigation Scheme Circle, Bhandara
JIPC Jalgaon	Jalgaon Irrigation Project Circle, Jalgaon
KIC Ratnagiri	Konkan Irrigation Circle, Ratnagiri
NIC Nagpur	Nagpur Irrigation Circle, Nagpur
NIC Nanded	Nanded Irrigation Circle, Nanded
NKIPC Thane	North Konkan Irrigation Project Circle, Thane
PIC Pune	Pune Irrigation Circle, Pune
SIC Sangli	Sangli Irrigation Circle, Sangli
TIC Thane	Thane Irrigation Circle, Thane
UWPC Amravati	Upper Wardha Project Circle, Amravati
YIC Yavatmal	Yavatmal Irrigation Circle, Yavatmal
WIC Washim	Washim Irrigation Circle, Washim

Executive summary

The geographical area of Maharashtra is 307.78 lach hectors out of which cultivable area is 225 lac hector.

Area is divided in to five major river basins. The Maharashtra water & Irrigation Commission (1999), has proposed delineation of five river basins in to 25 sub basins.

Irrigation potential to the tune of 4.486 Mha is created by the end of June 2008 through 71 Major, 243 Medium & 2940 State sector Minor irrigation projects. Maharashtra is the first state in India to incorporate the subject of water audit in State Water Policy as a sector reform in water management and has taken up the issue since 2003-04.

Details of Year wise projects audited are as exhibited below.

Year	No. of Projects
2003-04	1229
2004-05	1624
2005-06	1957
2006-07	1971
2007-08	2007
2008-09	2110

On receipt of the water accounts, its scrutiny is carried out in MWRDC Office. While scrutinizing the water account of a project, emphasis is given on following points.

i) Total available live storage is tallied with different water uses, evaporation losses, leakages, replenishment received in June and unutilised water at the end of irrigation year.

ii) Season-wise availability and extent of water use.

iii) Irrigation System Performance actual observed as compared to norms fixed by GOM.

During 2008-09, water accounts of 53 major projects (having 74 reservoirs), 194 medium projects (having 196 reservoirs) & 1863 State sector minor projects were audited. The water audit report is limited to these projects only. The storages in the reservoirs in State on 15th October were as follows.

Sr. No.	Percent Storage	Major	Medium	Minor
1	80 to 100	34	101	1002
2	50 to 80	04	26	261
3	Below 50	15	67	600

There is increase of 103 projects over last year for water auditing.

The plan group-wise distribution of project is as follows.

Plan group	Water availability (Cum)/ha	Major	Medium	Minor	Total
Highly Deficit	Below 1500	01	35	352	388
Deficit	1501-3000	12	65	595	672
Normal	3001-8000	25	48	556	629
Surplus	8001-12000	03	28	146	177
Abundant	Above 12000	12	18	214	244
Total		**53**	**194**	**1863**	**2110**

Some project are complex projects such as Khadakwasla, Bhatghar-Veer, Kukadi, Upper Godavari, Purna, Pench, Bagh, Lower Wunna, which have more than one reservoir hence these project complexes are considered as one project to have correct water accounts of these complexes.

Nine indicators, as mentioned below, are used for water auditing of Major projects in water Audit report of 2008-09.

I. Water Availability in Reservoirs on 15th October

II. Percentage of Actual Evaporation to Live Storage

II (A) Percentage of Actual Evaporation to projected evaporation.

III. Target and Achievement of Irrigation Potential Utilisation

IV. Water Use Pattern

V. Irrigation System Performance (For Canals)

VI. Percentage of Planned & Actual Non-Irrigation Use

VII. Percentage of Balance Unutilized Water to Live Storage.

VIII. Conveyance efficiency of main Canals

IX. Actual cropping pattern

For medium projects all above indicators except indicator number VIII & Indicator number II (A) are used for water auditing.

Looking at the number and availability of data, the analysis for minor projects is limited to the following four indicators only.

I. Water Availability in Tanks on 15th October.

II. Percentage of Actual Evaporation to Live Storage

III. Water Use Pattern

IV. Irrigation System Performance

After consolidating and analyzing the Water Accounts of 53 Major, 194 Medium and 1863 Minor Projects in the light of information supplied by the concerned project authority, the main observations are as listed below:

1. There is wide variation in actual evaporation to projected evaporation.

2. Actual irrigation water use on many projects was more than anticipated water use in PIP of the project.

Lapses in discharge measurement on account of nonfunctioning of SWF, non installation of water meter on LI Schemes/ NI schemes, along with unmeasured silt storage may be responsible for apparent excess water use.

Annual actual Area irrigated on canal, reservoir, and river lift (of Major and Medium projects) as compared to PIP is 113 %. However the achievement on some projects (Wan, N.M.C. express, Mukane, etc) is below 50% of the set target in PIP.

3. Irrigation System Performance observed on some projects in Rabbi season (Jayakwadi stage I & II, Girna panzan, Purna complex, N.M.C. express, Pus, Lower Wunna, Kadwa, N.M.weir, Bor, Upper Wardha, Kanher, Dudhaganga, Bhatsa, Kal-Amba, Surya etc.) is below the 60% of the state norms.

4. Irrigation System Performance observed in HW on Manjara, Girna+panzan, Gangapur, Upper Godavari complex, Ghod, Chaskaman, Upper penganga, Neera complex, Warna is satisfactory as compared to state norms. On rest of the projects there is a scope to improve the performance.

5. Conveyance efficiency of canals on Bhandardara, N.M.weir, Chaskaman, Khadakwasala complex is not satisfactory.

It is suggested that, project authority should sort out the realistic reasons for more transit losses on distribution system and take suitable action for improvement.

6. Percentage of Leakages on MI projects is excessively high. (18% to live storage) So also total evaporation losses from available water of 2518 mm^3 was 612 mm^3 i.e. (24%). Thus 42% of water is going in losses.

Water Use:

At state level during the irrigation year 2008-09, actual live storage of 21810 Mcum was available on15th October 2008 against total design live storage of 28108 Mcum. On 53 Major, 194 Medium & 1863 Minor projects considered together (12796 + 1878+ 1239), 15913 Mcum of water is used on canals; Reservoir & River lift for irrigation purpose. Total Non Irrigation water use is (3350+317+113) 3780 Mcum, which is 17 % of the actual live storage. The total irrigation use is 73% of the actual live storage.

Water use on reservoir of all types of projects is (860+369+646) 1875 Mcum which is 12 % of the total irrigation water use.

The total evaporation loss on Major projects is 2249 Mcum (14%), Medium 701 Mcum (23%) and Minor 630 Mcum (24%) observed. Total overall loss of water on account of evaporation at state level is 3580Mcum (16%) of live storage.

Data collected about 53 Major & 194 Medium projects Shows that, a gross Preliminary Irrigation Programme of (1156482 + 249427)= 1405909 Ha. Was framed during the irrigation year. Against the target, actual area irrigated is 1598882ha (113%).

Annual average ISP observed at the state level (excluding MI projects) is 101 ha/Mcum.

Unutilized storages at the end of irrigation year (excluding inflow in HW & design carry over), on Major and Medium projects are 604 Mcum and 337 Mcum respectively. The total unutilized storage as compared to 15th October 2008 live storage is 5%.

Conclusions

To have realistic evaporation data, it is suggested to verify the procedure adopted for collection of evaporation data and co-efficients used while calculating the loss. Where the evaporimeter are yet to be installed, the data collected at Water Resources laboratory from the same climatological zone can be used as an interim arrangement.

Proper action should be taken to calibrate the SWF at canal as well as distributory head, to have realistic data about irrigation water use.

Silt survey of Major projects of age more than 15 years may be taken in hand, so that net water availability (making suitable deduction for silt) for different water uses can be worked out while preparing the PIP and water account shall also be more realistic.

More emphasis may be given to install Water meters on NI water supply as well as Lift Irrigation Schemes so that lapses in flow measurements of these schemes will not affect the data about canal water use

Project authorities are advised to prepare action plan for securing improvement in Water use efficiency and reducing the transit losses.

Project authorities are required to concentrate on full utilization of available water.

The actual irrigation use decreased due to following reasons.

i) Low Kharif utilisation.
ii) Low Water Availability in reservoirs.
iii) Diversion of irrigation water to non irrigation use.

The computed data for above reason is enclosed here with.

Effect of low kharif utilisation on total irrigated area

(Area in lakh ha.)

Sr No	Year	Total Irrigation potential	Irrigation potential in kharif	Actual area irrigated in kharif	Percentage of area irrigated to potential created in kharif (Col 5/ Col 4) x 100	Difference between area irrigated & potential created in kharif (Col 4- Col 5)	Percentage of less irrigation in kharif to total irrigation potential (Col 7/ Col 3) x 100
1	2	3	4	5	6	7	8
1	2002-03	38.12	14.33	4.72	33	9.61	25%
2	2003-04	38.62	14.56	5.18	36	9.38	24%
3	2004-05	39.13	14.80	4.51	30	10.29	26%
4	2005-06	40.03	15.05	5.07	34	9.98	25%
5	2006-07	41.31	15.05	6.57	44	8.48	21%
6	2007-08	43.31	15.80	7.34	46	8.46	19%
7	2008-09	44.86	16.27	7.29	45	8.98	20%

(Reference: Irrigation status report 2008-09, page No.28)

From the above table it can be revealed that the ratio of utilisation to creation in kharif season varies from 30% to 46%. The overall effect on total area irrigated due to less utilisation in kharif season varies from 19% to 26%.

Effect of low availability of water in the reservoirs on total irrigated area

(Area in lakh ha.)

Sr. No.	Year	Total irrigation potential created	Irrigation potential excluding kharif	Area irrigated excluding kharif	Percentage of less storage in the reservoir	Area can not be irrigated due to less storage (Col 4 x Col 6) / 100	Percentage of area can not be irrigated to total irrigation potential created (Col 7/ Col 3) x100
1	2	3	4	5	6	7	8
1	2002-03	38.12	23.79	13.67	34%	8.09	21%
2	2003-04	38.62	24.06	11.60	31%	7.46	19%
3	2004-05	39.13	24.33	12.46	37%	9.00	23%
4	2005-06	40.03	24.98	18.44	16%	3.75	9%
5	2006-07	41.31	26.26	20.24	8%	2.10	5%
6	2007-08	43.31	27.51	20.30	12%	3.30	8%
7	2008-09	44.86	28.59	28.59	25%	7.14	16%

(Reference: Irrigation status report 2008-09, page No.29)

From the above table, it can be seen that the percentage of low availability of water in the the reservoirs during year 2002-03 to 2008-09 varies from 8% to 37% resulting reduction in irrigated area from 2% to 9%. The percentage of reduction in irrigated area to total irrigation potential created varies from 5% to 23%.

Effect of Non Irrigation use on total Irrigated Area

(Quantity in Mm^3)

Sr. No.	Year	Designed live storage	Actual live storage as on 15th October	Water use for irrigation (Mm3/ %)	Water use for non irrigation (Mm3/ %)	Total water use (Col. 5+6)	Net percentage reduction in irrigated area due to NI use
1	2	3	4	5	6	7	8
1	2002-03	28715	18936	12965/75	4236/25	17201	20
2	2003-04	28840	16941	10569/69	4790/31	15359	26
3	2004-05	28889	18298	10603/69	4860/31	15463	26
4	2005-06	29110	24860	13689/74	4926/26	18616	21
5	2006-07	29531	27309	20192/65	5212/35	25404	30
6	2007-08	29115	25489	19763/75	6671/25	26434	20
7	2008-09	33071	24803	18486/73	6880/27	25366	22

(Reference: Irrigation status report 2008-09, page No.12)

Note: Originally in most of the projects, there was no provision of N.I. use at the time of approval to the project reports. In recent years, N.I. provision in some projects is made at the time of approval. Hence overall 5% provision for N.I. use is assumed.

From the above table it can be seen that the non irrigation use during 2002-03 to 2008-09 varies from 25% to 35% resulting reduction in total irrigated area from 20% to 30%.

Total reduction in irrigated area due to above three reasons for year 2008-09 works out to (20% + 16% +22%) =58%.

Actual Irrigated area for year 2008-09 is 1.825mha. (Excluding Area under Wells) so reduced area is (1-1.825/4.486x100)=59%.

Chapter-1

Introduction

Background

The geographical area of Maharashtra is 307.78 lakh hectares of which the cultivable area is 225 lakh ha. The area is divided mainly into five major river basins of Godavari, Krishna, Tapi, Narmada and westward flowing rivers comprising a basin group of 22 narrow sub-basins.

The Maharashtra Water and Irrigation Commission (1999) has proposed delineation of five river basins basically into 25 distinct sub basins for planning of water resources development in the State (Map 1). The classification of sub basins proposed is solely on the basis of natural availability of water. The basic characteristics of sub basins are dictated by the hydrological regime, which in turn, is a function of climate, rainfall distribution and the type and characteristic of draining area.

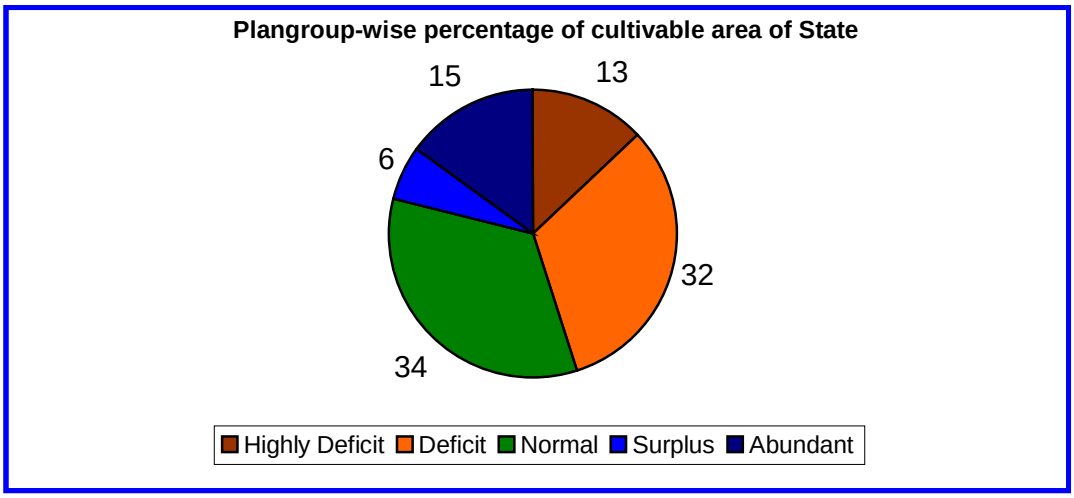
The sub basins are as follows:

Sr. No.	River Basin	Names of Sub basins	Abbreviated name	classification for planning on the basis of availability of natural water per unit CCA
I	Godavari	1) Upper Godavari (Up to Paithan Dam)	Upper Godavari	Normal
		2) Lower Godavari (D/S of Paithan Dam)	Lower Godavari	Deficit
		3) Purna (including Dudhana)	Purna Dudhana	Deficit
		4) Manjra	Manjra	Deficit
		5) Godavari-Sudha-Swarna	Remaining Godavari	Normal
		6) Painganga	Painganga	Normal
		7) Wardha	Wardha	Normal
		8) Middle Wainganga	Middle Wainganga	Surplus
		9) Lower Wainganga	Lower Wainganga	Abundant
II	Tapi	10) Purna (Tapi)	Purna Tapi	Deficit
		11) Girna	Girna	Deficit
		12) Panzara	Panzara	Normal
		13) Middle Tapi	Middle Tapi (Satpuda)	Normal
			Middle Tapi (South)	Deficit

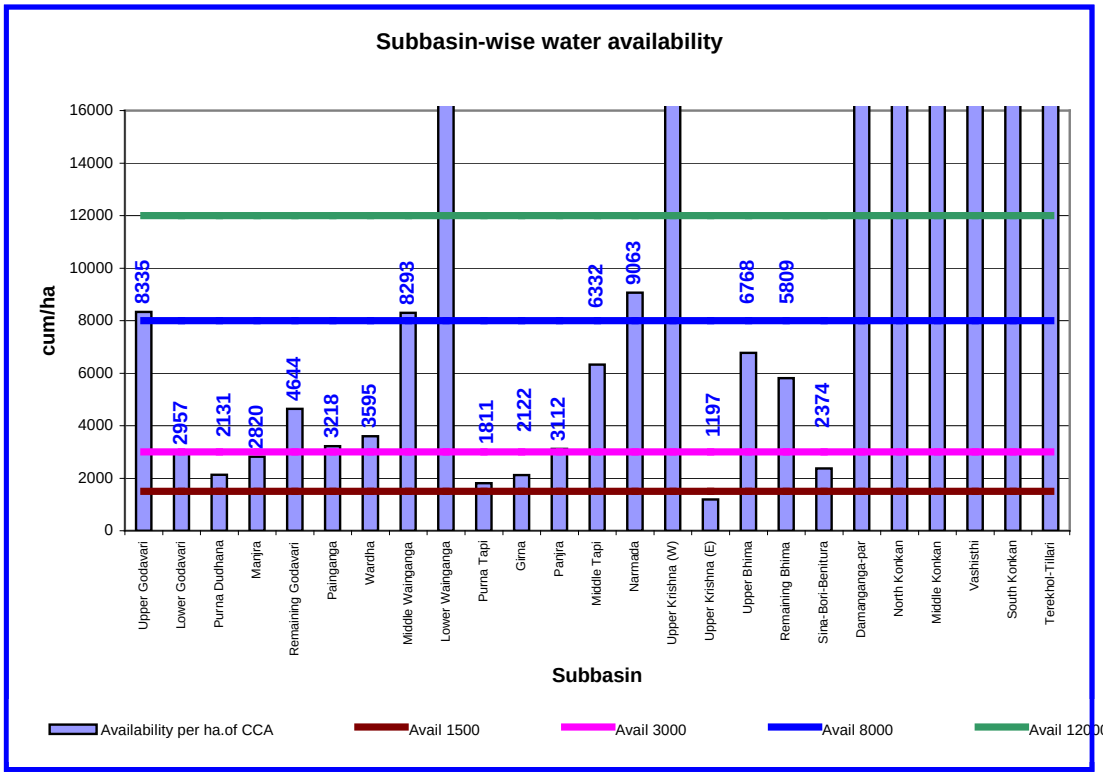
Sr. No.	River Basin	Names of Sub basins	Abbreviated name	classification for planning on the basis of availability of natural water per unit CCA
III	Narmada	14) Narmada	Narmada	Surplus
IV	Krishna	15) Upper Krishna (West)	Upper Krishna (W)	Abundant
		16) Upper Krishna (East)	Upper Krishna (E)	Highly Deficit
		17) Upper Bhima (Up to Ujjani)	Upper Bhima	Normal
		18) Remaining Bhima	Remaining Bhima	Normal
		19) Sina-Bori-Benetura	Remaining Bhima Including Man	Highly Deficit
			Sina – Bori-Benetura	Highly Deficit
V	West Flowing Rivers in Konkan	20) Damanganga-Par	Damanganga-Par	Abundant
		21) North Konkan	North Konkan	Abundant
		22) Middle Konkan	Middle Konkan	Abundant
		23) Vashisthi	Vashishthi	Abundant
		24) South Konkan	South Konkan	Abundant
		25) Terekhol – Tillari	Terekhol – Tillari	Abundant

Classification of sub basins for planning, on the basis of naturally available quantum of water, is given below:

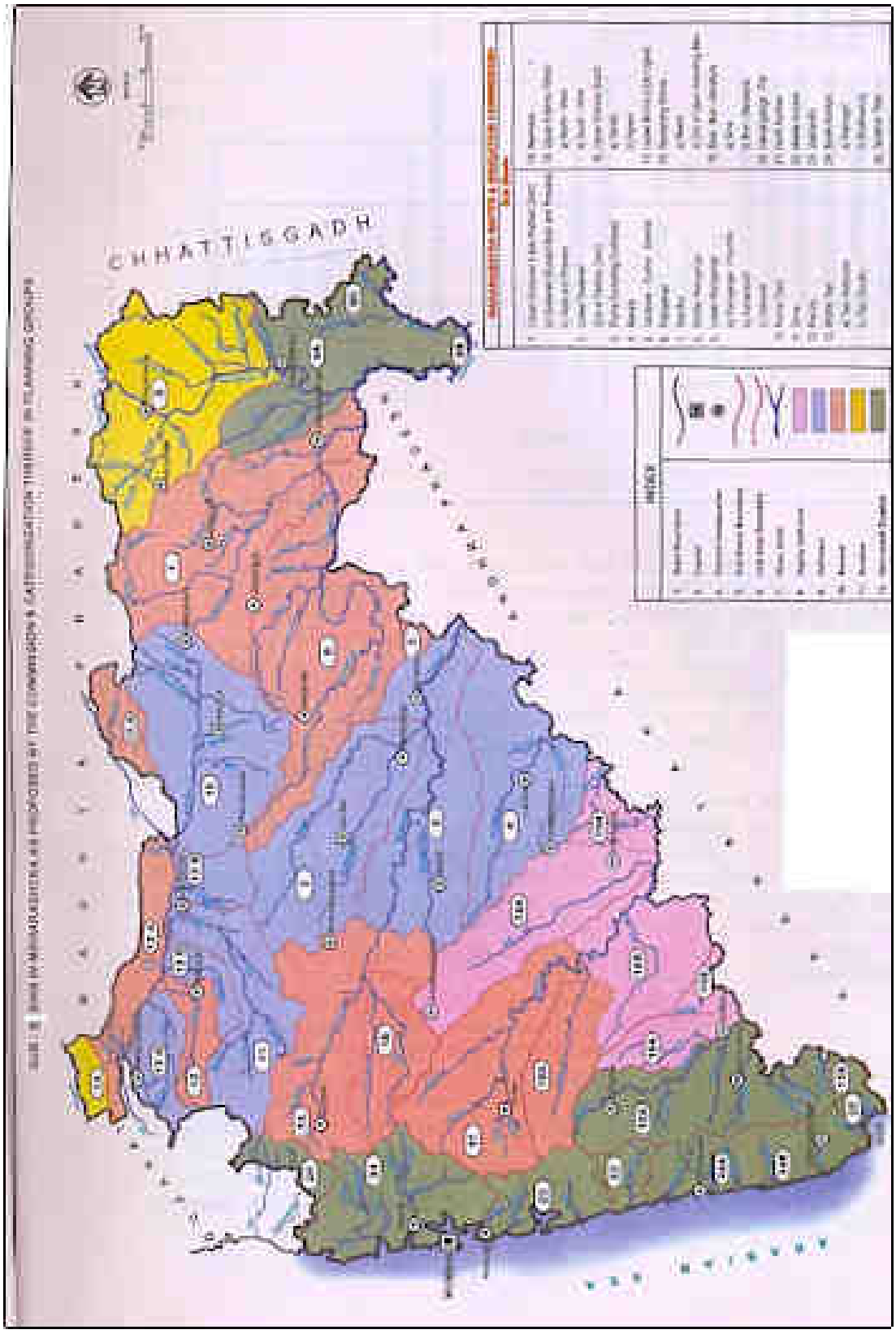
Sr. No.	Plan group	Per ha availability (cum)	Percent of cultivable area of State
1	Highly Deficit	Below 1500	13
2	Deficit	1501-3000	32
3	Normal	3001-8000	34
4	Surplus	8001-12000	06
5	Abundant	Above 12000	15



A graph showing basin-wise availability of water is shown below.



From above graph it is seen that, there are eight sub basins from highly deficit & deficit plan group, which has water availability less than 3000 cum per unit CCA which is a minimum basic water requirement for agriculture. However, these sub basins along with other sub basins are likely to get suffered more in near future considering continuous increase in Non irrigation water use due to growth in population & industrialization. Water Auditing as mentioned in state water policy is an efficient management tool to check & curb the excessive losses, improve Irrigation System performance. The State has already started Water auditing of irrigation projects since last 5 years. Rise in Non irrigation water use from 3267Mcum to 6880 Mcum in last 12 years underlines the urgency of water auditing in Non irrigation water use sector also.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1.2.0 What is Water Auditing?

Water auditing is a systematic & scientific examination of water accounts of the projects. It is an intelligent & critical examination by independent organization. It is a critical review of system of accounting.

A water audit determines the amount of water used in different sectors, lost from distribution system due to leakage & the cost of this lost utility. Comprehensive Water Audit can give a detailed profile of distribution system & water users, there by facilitating easier & effective management resources and improved reliability.

It may also prove as an effective tool for realistic understanding & assessment of present performance level of the service for future expansion

Water auditing process involves checking of sector-wise water use against project planning, Preliminary Irrigation Programme, and assessment of Irrigation System Performance (ISP) and losses actually realized on the projects.

Water audit facilitates comparison between planned Irrigation System Performance (i.e. ha /Mcum) and actual Irrigation System Performance (i.e. ha/ Mcum) realized on the project. This will provide information about loss of water in the system. Water audit thus helps in identifying the causes of low ISP & excessive losses in the system. Service Provider then can initiate the action for minimizing the losses and improving the ISP.

1.3.0 Water Auditing Scenario:

The Central Water Commission, Ministry of Water Resources, GOI & Central Ground Water Board took an initiative in this regard and issued guidelines for water auditing of projects in December 2005. These guidelines are only indicative and on broad spectrum. Every State is required to prepare its own guidelines considering peculiarities and necessities of individual State.

2007.4.0 Water Auditing-State Scenario:

Large number of irrigation projects is constructed in Maharashtra to harness the water resources of the State. Irrigation potential to the tune of 4.486 Mha is created by the end of June 2008 through 71 Major, 243 Medium & 2940 State sector Minor irrigation projects. Maharashtra is the first state in India to incorporate the subject of water audit in State Water Policy as a sector reform in water management and has taken up the issue since 2003-04.

Details of Year wise projects audited are as exhibited below.

Year	No. of Projects
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2005-06	**1957**
2006-07	**1971**
2007-08	**2007**
2008-09	**2110**

With increasing population, urbanization, and industrialization, the water demand is increasing day by day from various sectors.

Table 1 shows the year wise details of storages available, irrigation & non-irrigation water use & Irrigation system performance achieved at State level.

Table 1

Storages available, irrigation & non-irrigation water use & Irrigation system performance.

Irrigation Year	Designed Storage (Mcum)	Actual Storage on 15th October (Mcum)	Water use for		Total water use (Mcum)	Potential created (Mha)	Potential utilized (Mha)	Potential utilized including wells (Mha)	ISP (ha/ Mcum) on canal flow	ISP including Wells (ha/ Mcum)
			Irrigation (Mcum) / %	Non Irrigation (Mcum)/ %						
2000-01	26748	18947	13575/ 78	3858/22	17433	3.706	1.298	1.764	96	130
2001-02	28062	18717	12346/ 76	3980/24	16326	3.769	1.25	1.708	101	138
2002-03	28715	18936	12965/ 75	4236/25	17201	3.812	1.318	1.842	102	142
2003-04	28840	16941	10569/ 69	4790/31	15369	3.863	1.244	1.685	118	159
2004-05	28889	18298	10603/ 69	4860/31	15463	3.913	1.257	1.699	119	160
2005-06	29110	24860	13689/ 74	4926/26	18616	4.003	1.617	2.221	118	162
2006-07	29531	27309	16630/ 65	4293/35	25404	4.132	1.835	2.681	110	161
2007-08	29116	25489	19763/ 75	6671/25	26435	4.331	1.897	2.765	116	168
2008-09	33071	24803	18486/ 73	6880/27	25366	4.486	1.825	2.732	99	148
(Ref: Irrigation Status Report, 2008-09 GOM)										

Water auditing of irrigation projects which are constructed through public investment is necessary to see that the water use, evaporation & other losses are as per design. If there is any variation, as mentioned above, water auditing enables to locate the reasons for the same and facilitate suitable corrective measures.

In compliance to commitment in State Water Policy, Government issued a circular dated 26.06.2003 briefing there in methodology to be adopted for keeping project wise water account and its auditing. Administrative arrangements are set up by creating water audit units under Chief Engineer, Maharashtra Water Resources Development Centre, Aurangabad. Accordingly, the MWRDC office is carrying out the water audit of all State sector projects since last five years.

1.5.0 Administrative set up for Irrigation Management

A chart describing the administrative set up for the irrigation management from the level of Secretary (CAD) to Superintending Engineer who is in charge of number of projects under a Circle office is enclosed in the report as Annexure-V. The Chief Engineer at regional level is overall responsible for the development and utilization of the water resources of Major irrigation projects under his jurisdiction. The Superintending Engineer who assists the Chief Engineer is expected to take periodical review of Major and Medium irrigation projects under his jurisdiction. The Superintending Engineer is the administrative head at the circle level. He is entrusted with full powers to sanction the Preliminary Irrigation Programme of projects under the circle except projects under CADA. The Superintending Engineer has full administrative and financial control over the budget provisions allocated by Government. In addition to above, the Superintending Engineer has to certify the safety of major and medium dams by inspecting them during pre and post monsoon periods.

Executive Engineer is overall responsible for maintenance of irrigation system and water management right up to field level. Apart from technical duties, the

Executive Engineer has to exercise duties as per the Irrigation Act and rules there under Irrigation Water Management is an important task assigned to the Executive Engineer, which mainly involves preparation & implementation of water rotation schedule so as to provide canal water to each individual irrigator or WUA at the pre-decided time. Map-2 showing location of irrigation circles is exhibited on page 8 of this report.

1.6.0 Water Audit Procedure

1.6.1 Checking Water Account

Government of Maharashtra vide circular dated 26.06.2003 has enforced the project authority to submit the annual water accounts of all State sector irrigation projects under a circle in prescribed proformae by 14th August every year. For effective implementation of the decision based on water audit analysis and timely publication of annual water audit report, a time-bound programme as mentioned below is framed & strictly adhered to.

Sr. No.	Particular	Scheduled Date
1	Submission of water accounts to MWRDC office by concerned irrigation circles	14th August
2	Communication of remarks on water accounts to concerned irrigation circles by MWRDC.	31st October
3	Compliance of remarks on water accounts by irrigation circles.	30th November
4	Consolidation of water account data of different projects and preparation of draft Water Audit Report by MWRDC.	15th January
5	Approval to the Water Audit Report by GOM.	20th February
6	Publication of Water Audit Report	22 March (World Water Day)

On receipt of the water accounts, its scrutiny is carried out in MWRDC Office. While scrutinizing the water account of a project, emphasis is given on following points.

i) Total available live storage is tallied with different water uses, evaporation losses, leakages, replenishment received in June and unutilised water at the end of irrigation year.

ii) Season-wise availability and extent of water use.

iii) Irrigation System Performance actual observed as compared to norms fixed by GOM.

iv) Actual evaporation losses as compared to designed evaporation losses.

v) Percentage of leakages through dam and its location, efforts taken by field staff to minimise or stop the leakages.

vi) Actual season wise water use & area irrigated as compared to project planning / Preliminary Irrigation Programme

1.6.2 Inspection of Irrigation offices

To have a cross check over the data submitted in water account & to verify whether record about water storages, water use, different losses along with crop wise area measurements, revenue assessment/ revenue recovery are maintained up-to-date & in prescribed form, annual inspections of Irrigation offices is carried out each year. An annual inspection programme, for inspection of irrigation management divisions, is prepared and communicated to the field officers. According to this programme, inspections are conducted.

During such office inspections, to ascertain the validity of water account data submitted to MWRDC, normally following records are checked.

i) Daily lake level & water storage register.

ii) Daily evaporation record register (Major & Medium projects)

iii) Main Canal gauge register to evaluate water let out in canal for irrigation (daily, rotation-wise, season-wise)

iv) Agency-wise non irrigation water use register.

v) Register for leakages through dam.

vi) Record of measurement of irrigated area

vii) Crop-wise area assessed.

viii) Revenue recovered

Revenue recovery being an important aspect of irrigation management, a review of revenue assessed, recovered, and balance at the end of the year is specially taken during such inspections.

Preparation and sanction of Preliminary Irrigation Programme (PIP) before stipulated period, conducting meetings of canal advisory committee, timely and wide publicity to Public Notice, timely submission of rotation-wise water demands (proforma I and IA) and water use (Proforma III and IIIA) by field offices to controlling authorities, daily gauging of discharges through distributaries/minors plays an important role in Irrigation Water Management of a project. Whether such procedure is followed or not is also verified by scrutinizing the relevant records during field office inspections. The lapses, deficiencies noted during the inspection are then communicated to concerned Executive Engineer under intimation to concerned Superintending Engineer, for submitting relevant clarification and taking proper action for improvement in future.

In order to streamline the working of water audit units, inspection/ methodology, procedure for compliance of water audit paragraphs etc, Water Audit Manual is under consideration for approval.

1.7.0 Water Audit Report 2008-09

1.7.1 During 2008-09, water accounts of 53 major projects (having 74 reservoirs), 194 medium projects (having 196 reservoirs) & 1863 State sector minor projects were received and audited. The water audit report is limited to these projects only. The decrease in total Nos of major projects is due to grouping of reservoirs in a complex project.

At present, there are 63 divisions which are looking after the irrigation management mainly of completed projects in the State. There are many projects under construction where partial irrigation potential is created. On these projects irrigation is managed by construction organization only. Obviously, Water accounts of such projects are not received; hence those projects are not covered in this report.

1.7.2 The annual office inspection Programme for 2008-09 is prepared and communicated to respective management circles. The inspection of management division/ Sub-division / section offices is in progress. The status of inspection (Audit year 2008-09) from September 2009 till December 2009 is as below:

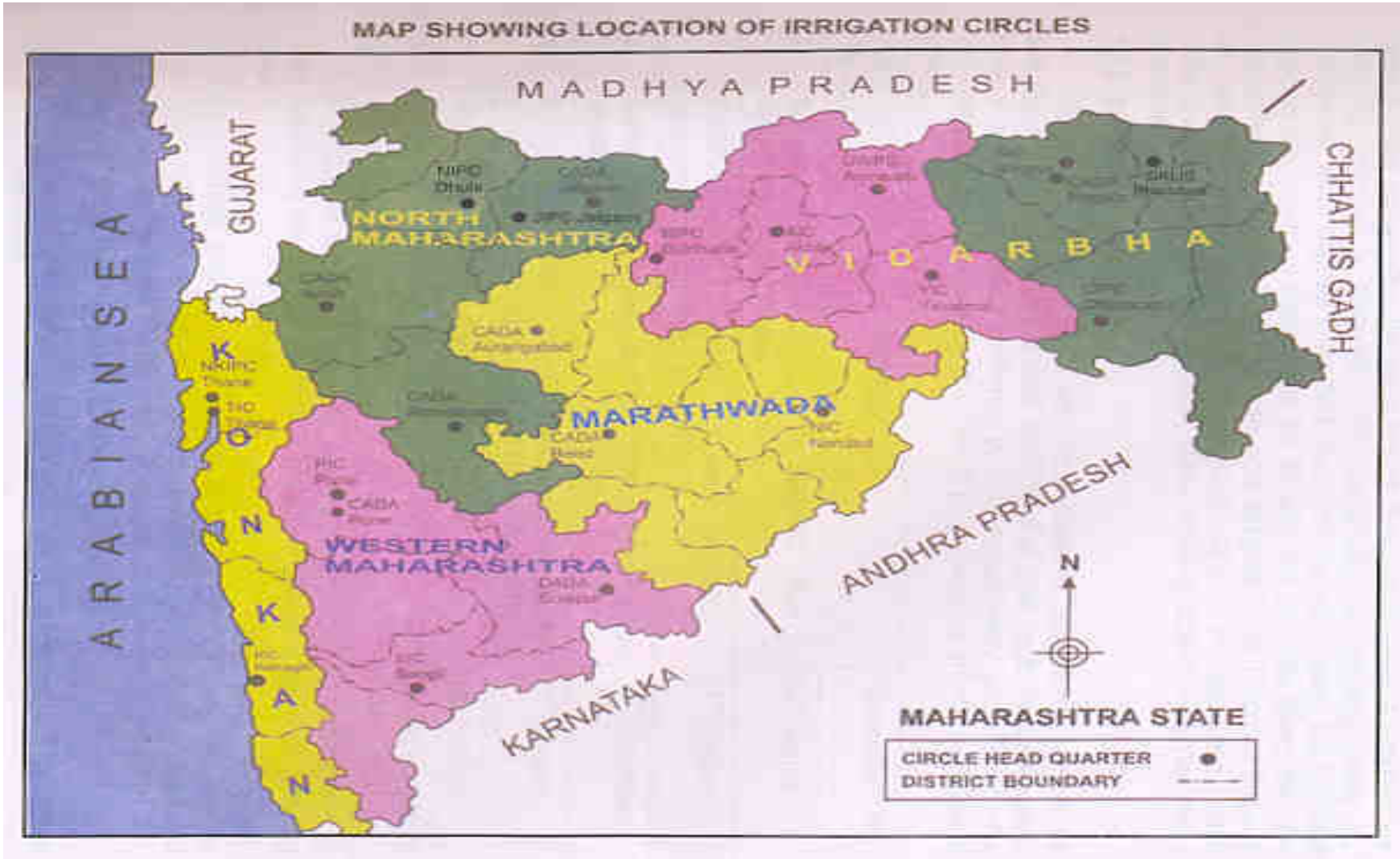
Water audit unit No.	Number of Divisions	
	Total	Inspected
1	20	1
2	21	3
3	22	6
Total	63	10

1.8.0 Supporting activities taken for improvement in IWM

1.8.1 Guidelines for efficient and economical use of water

Detailed guidelines are issued from time to time by Government, for efficient and economical use of water available for irrigation. Some extracts from the Government Resolutions dated 14.03.1988, 02.11.1988, 7.3.2001, 05.12.2001; 21.11.2002 and 20.05.2004 are as follows.

i) Irrigating maximum possible lands with available discharges.
ii) Adopting rotational water supply.
iii) Keeping flow period to the minimum possible by letting maximum possible discharge in canal to minimize the transit losses.
iv) Encourage night irrigation.
v) Encourage farmer's participation in irrigation planning and implementation through canal advisory committees, and village meetings.
vi) Keeping water accounts rotation-wise and season-wise water accounts for watching the efficiency of water use by concerned field staff & officers.
vii) Setting up evaporimeters at every project, having CCA more than 1000 ha, for correct assessment of evaporation.
viii) Providing measuring devices on canals wherever necessary.
ix) The responsibility of giving water account of minor projects rests with the concerned Sub Divisional Engineer and Executive Engineer and with the Executive Engineer & Superintending Engineer in case of major & medium projects.
x) The norms for Irrigation System Performance in Rabi & Hot Weather season are decided as 150 ha/Mcum and 110 ha/Mcum respectively.
xi) Percentage checking of cropped area by Executive Engineer, Sub-Divisional Engineer & Section Officer for assuring 100 percent assessment of irrigated area.
xii) Norms for Quota of water for lift irrigation on reservoir and canals
xiii) Agreement for water supply for Non Irrigation water use (by electronic meter) and assessment of water revenue.


MAP SHOWING LOCATION OF IRRIGATION CIRCLES
MADHYA PRADESH
GUJARAT
ARABIAN SEA
CHHATTIS GADH
NORTH MAHARASHTRA
VIDARBHA
MARATHWADA
WESTERN MAHARASHTRA
KONKAN
ANDHRA PRADESH
KARNATAKA
N
MAHARASHTRA STATE
CIRCLE HEAD QUARTER
DISTRICT BOUNDARY

A statement showing list of important Resolutions and circulars, issued by GOM, from time to time is appended as follows:

Important Government Resolutions / Circulars related with Water Account and Irrigation Management.		
Sr. No.	Particulars	Details of Acts / GRs / Circulars
1	Maharashtra Irrigation Act 1976	
2	Maharashtra Management of Irrigation System by Farmers Act 2005	
3	Maharashtra Water Resources Regulatory Authority Act 2005	
4	Percentage checking of Cropped Area by Executive Engineer, Sub Divisional Engineer & Section Officer	P.W.D. Hand Book No. 25, Item No. 10.
5	Silt accumulation in live storage	Circular BKs 1091 / 468 / 91 / IMP dated 5.5.1992
6	Setting up Canal Advisory Committees	GR (Marathi) CME / 1099 / 179 / 99 IM (P) dated 22.8.2000.
7	Guidelines for Water Use in Reservoirs	GR Misc./ 10 (19/2000 IMP) dated 7.3.2001
8	Farmers' Participation in Irrigation Water Management	GR WUS / 1991 / 417 / IMP dated 5.7.2001 and 23.7.2001
9	Account of Water in Reservoirs	GR (Marathi) Misc. 11(760/01 IMP) dated 5.12.2001
10	Guidelines for sanction to lift water from reservoir, canal, notified river etc.	GR (Marathi) Misc. 10.01/ (378/2001) IM (P) Dated 21.11.2002
11	Irrigation Management and Irrigation Sanctions	Misc. / 10 / 87 / 2001 / IMP dated 31.3.2003
12	Maharashtra State Water Policy 2003	GR Misc. 1002 / 250 / 2002 IM(P) dated 30.7.2003
13	Water Account and Audit Procedure	CDA / 1002 / 226 / 2002 CAD(W) dated 26.6.2003, 12.11.2003 and 14.9.2005
14	Non Irrigation water supply, agreement and assessment of water revenue for NI water use	GR (Marathi) NIWS / 10 / 2001 / (713/2001) dated 11.06.03 and NIWS / 10 / 1001 (713/2001) dated 20.05.2004
15	Watershed Development Works can be taken in tail command.	GR (Marathi) EGS-1005 / 142 / EGS-6, dated 6.9.2005
16	Keeping & maintaining office records ,documents, files about IWM	Misc/2004(140/04)IM(P) Dt.29/1/2005

Important Government Resolutions / Circulars related with Water Account and Irrigation Management.		
Sr. No.	Particulars	Details of Acts / GRs / Circulars
17	Measurement book for NI use & bill recording	Misc/WSR/1006/(135/06) IM(P) Dt.27/4/2006
18	Increase in water rates for NI use	WSR/2006/(396/03) IM(P) Dt.31/7/2006
19	Subsidy in M&R grants to WUA	WUA 1007/(323/2007) IM(P) Dt.22/6/2007
20	50% Concession in water rates for Wheat, Rice, Gram crops under central Govt.food security programme	Misc/2007/(561/2007) IM(P) Dt.11/1/2008
21	To stop 5% concession on Non Irrigation use.	MISC/2007/(172/07)IM(P) dated 31/03/2008
22	Cancellation of water cess on well irrigation.	BKS/10.01/(523/2008)IM(P) Dt. 17/06/2009.
23	Grants to Water Use Association if elections are held unopposed	CDA/1008/(30/2008) dt. 30/07/2009.

Chapter-2

Annual Water Accounts 2008-09

2.1.0 Rainfall during 2008-09

The State received rains from South-West Monsoon from 06 June 2008. Rainfall received during the period from 06 June to 31th October 2008 was 91% normal rainfall. As per standards specified by IMD, out of 355 Talukas in the state, in 126 Taluka the rainfall received was deficient (between 41 to 80%) whereas in 202 Talukas it was normal (81 to 120%). It was more than 120% of average rainfall in 114 Talukas.

With above availability of rainfall, the storages in the reservoirs in State were as follows.

Sr. No.	Percent Storage	Major	Medium	Minor
1	80 to 100	34	101	1002
2	50 to 80	04	26	261
3	Below 50	15	67	600

The proformae and procedure to be adopted for Water Audit, were issued by GOM vide circular dated 26.06.2003, and 12.11.2003 and 14.09.05. It was observed that some of the aspects listed below were not covered in the prescribed proformae and therefore, accurate water accounting & assessment of irrigation system was not possible.

i) Reservoir water account
ii) Post monsoon flow
iii) Season-wise account of NI use & reservoir losses.
iv) Water account of water released in river.
v) Number of rotations and crop-wise break up of irrigated area.
vi) Season-wise break up of Water utilized for Non Irrigation use from rivers & canals.

The proforma for annual water account of major & medium projects was revised by Government vide circular dated 14.09.2005 & proformae 6(A) to 6(D) are issued.

Proforma 6 (A): Annual Water Account of Reservoir
Proforma 6 (B): Annual Water Use Area Irrigated & ISP
Proforma 6 (C): Annual Crop-wise Irrigated Area by Canal/ reservoir/ lifts/ River / Wells
Proforma 6 (D): Water Account of K.T. Weirs

Though irrigation potential of 4.486 Mha is created through 3254 projects, the water accounts of 2008 projects were received in MWRDC office and the same were scrutinized. There is increase of 36 projects over last year for auditing.

The plan group-wise distribution of project reservoirs is as follows.

Plan group	Major (Reservoir)	Medium (Reservoir)	Minor	Total
Highly Deficit	01	35	352	388
Deficit	12	65	595	672
Normal	25	48	556	629
Surplus	03	28	146	177
Abundant	12	18	214	244
Total	**53**	**194**	**1863**	**2110**

Some project are complex projects such as Khadakwasla, Bhatghar-Veer, Kukadi, Upper Godavari, Surya, Purna, Pench, Bagh, Lower Wunna, Makardhokla-Saiki which have more than one reservoir / Pickup weir hence these project complexes are considered as one project to have correct water accounts of these complexes.

The National Water Policy 2002, Maharashtra State Water Policy 2003 has recommended planning, construction and management of water resources projects considering basin or sub-basin as a unit. Therefore, the analysis of water accounts is carried out sub basin-wise considering circle as a unit, as irrigation circle is a service provider in irrigation water management.

Some circles are having projects located in more than one category of Plan group of sub-basins. Therefore, these circles will appear more than once in graphical representation of indicators.

However for taking review, proper actions for improving the performance of different aspects of IWM, performance of irrigation projects evaluated by with the help of water auditing is considered at respective level individually or by grouping them on the basis of regional administrative zones.

2.2.0 About this report:

Nine indicators were used for water auditing of Major and Medium projects in water Audit report of 2007-08.

For water audit report 2008-09, these nine indicators are selected for major projects. Those are;

I. Water Availability in Reservoirs on 15th October
II. Percentage of Actual Evaporation to Live Storage
II (A) Percentage of Actual Evaporation to Projected Evaporation.
III. Target and Achievement of Irrigation Potential Utilisation
IV. Water Use Pattern
V. Irrigation System Performance (For Canals)
VI. Percentage of Planned & Actual Non-Irrigation Use
VII. Percentage of Balance Unutilized Water to Live Storage.
VIII. Conveyance efficiency of main Canals
IX. Actual cropping pattern

For the medium projects all above indicators except indicator number VIII (Conveyance efficiency of main Canals) and Indicator number. II (A) (Percentage of Actual Evaporation to Projected Evaporation) are used for water auditing.

Looking at the number and availability of data, the analysis for minor projects is limited to the following four indicators only.

I. Water Availability in Tanks on 15th October.
II. Percentage of Actual Evaporation to Live Storage
III. Water Use Pattern
IV. Irrigation System Performance

2.2.1 Water Availability in Reservoirs:

The availability of water in the reservoirs depend upon the rainfall in the catchments, storages created on the upstream, watershed development works completed in the catchments. Moreover, for major reservoirs, which perform as flood

control measures also, the reservoir filling is governed by reservoir operation schedule and earlier floods are required to be let out in the rivers and reservoir filling is expected at the end of monsoon. This indicator gives percentage of live storage available on the on-set of Rabi season i.e. on 15th October (15th December for projects in Konkan region) for use to the designed live storage of the project.

2.2.2 Percentage of Actual Evaporation to Live Storage:

As the State experiences hot and arid climate, the extent of evaporation is high. The evaporation further depends upon the shape of reservoir, depth or shallowness and period of retention of water in it. As major quantity of water in the reservoirs is used for irrigation, Government has decided sequence of use as Kharif, Rabi and Hot Weather.

2.2.3 Target and Achievement of Irrigation Potential Utilisation:

Water availability for irrigation on any project during a particular year depends upon yield received in the reservoir along with the reservations for NI use, silt accumulation in created storage etc. For optimum and economical use of water, Preliminary Irrigation Programme is prepared in which provisions for NI use, Evaporation losses are made. Area that can be irrigated with the available storage is decided in the PIP. On many projects there is always curtailment in availability of water for irrigation due to increased NI water use. Naturally it becomes important to see whether at least, area targeted in PIP is actually, irrigated or not. If the achievement is on lower side, it is expected to determine the causes for the same so that action can be focussed on lapses in the IWM.

2.2.4 Water Use Pattern:

The major projects in the State are constructed as multipurpose projects. As per Maharashtra State Water Policy 2003, water supply for domestic purpose and industries has priorities above irrigation. Due to growing population, urbanization and industrialization, the demand for water for non-irrigation uses is increasing. Due to lowering of ground water table, many rural water supply schemes are also being planned considering reservoirs of water resources projects as their source of water supply.

Secondly, the cropping pattern established on the project in general is different than the projected cropping pattern. Naturally, the season-wise water use on the project has wide variation with projected water use. Water use on reservoir lift is distinguishable on some of the projects. Therefore, water use pattern in different projects will give an idea about water use in different sectors.

2.2.5 Irrigation System Performance:

As the State's water resources are scarce, efficient use of water in all sectors of water use is essential. Moreover, the objective of water accounting and auditing is to see that the water in the reservoirs is used efficiently. Irrigation uses about 70 to 75 percent of available water. Presently, the indicator for performance of its use in irrigation sector is considered. Government have decided norms in terms of ha/Mcum Irrigation System Performance in Rabi and Hot weather season.

Though norms for Irrigation System Performance in Kharif season and for lift irrigation are not fixed by GOM, it is felt necessary at least to take review of the actual performance observed on the field.

2.2.6 Percentage of Planned & Actual Non Irrigation Use

Keeping in view the priorities for different uses and reasons for growing demand for non-irrigation uses, it is necessary, to watch the deviations from projected allocations for different sectors of water use. This indicator will give an idea about trend in non-irrigation use and will be base for the reallocation for different uses, if required.

2.2.7 Percentage of Balance Unutilized Water to Live Storage

The only source of water for the State is rainfall. About 88 percent of rainfall is received from June to September and 12 percent after October. Thus, water available in the reservoirs should be fully used (excluding carry over & inflow in HW season) before 30th June every year. This indicator helps in deciding whether there is any unutilized quantity (excluding carry over) in the reservoirs and if it is there, what are the reasons for un-utilization and remedial measures for full utilization.

2.2.8 Conveyance Efficiency of main Canals

Conveyance Efficiency of canals is governed mainly by the leakages through CD Works on the canals, HR / Outlet gates & seepages through embankments. To frame the PIP & to irrigate the area as per set target, conveyance efficiency of the main canals should be known to the concerned field officers. This indicator (at present limited for major projects) will provide the current status of conveyance efficiency with the help of which project authorities can take suitable actions for its improvement in near future.

2.2.9 Actual Cropping pattern

Cropping pattern is always dynamic. It mainly changes with the availability of water for irrigation along with market rates of the agricultural produce. To know the existing trend of cropping pattern on the project, this indicator is introduced.

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Chapter-3
Observations and Conclusions
Major Projects

Indicator- I: Water availability in Reservoirs

Highly deficit plan group:-

CADA Solapur: (Bhima) Ujjani project is having 111% live storage due to some storage against the flaps of the radial gates.

Deficit Plan group:

AIC Akola: Actual Live storage percentage with designed live storage on projects under AIC Akola (Katepurna, Nalganga) was 18 % & 28% respecetively during the irrigation year 2008-09.

BIPC Buldhana: Actual live storage in Wan project under BIPC was 88% on 15th of October.

CADA Beed: In all the three project under this circle 100% yield has received for this year 2008-09 compared to last years lesser availability ranging from 83 to 98%.

NIC Nanded: Manar has received only 28% in 2008-09 live storage compared to last years 97% in 2007-08. Whereas in Purna project yield has decreased to 33% in 2008-09 from 48% in 2007-08.

In Vishnupuri Project yield received is 99% which has considerably increased over last years' yield 35%.

CADA Aurangabad: Jayakwadi project stage-I has been receiving 100% yield consistently for last five years.

AIC Aurangabad: As, under this circle there is no reservoir, availability seems to be zero. For NMC express canal water is released from Mukane reservoir.

CADA Jalgaon & CADA Nashik: Girna project under CADA Jalgaon & Chankapur project under CADA Nashik received 92 % & 100% live storage respectively.

Normal Plan group:

YIC Yavatmal: In Arunawati Project under YIC Yavatmal, actual live storage was 14%

AIC Akola: 83 % actual live storage was available on 15 oct in pus project under AIC Akola.

UWPC Amrawati: Upper Wardha project was 53 % full of actual live storage on 15th October.

CADA Jalgaon & CADA Nashik: All the projects under these circles are having consistency in availability. The percentage of live storage in this year varies from 99 to 100% except Gautami project under CADA Nashik (72%).

NIC Nanded: In Upper Penganga project the yield decreased from 90 % (in 2007-08) to 43% for this year 2008-09.

PIC Pune: All the projects are having consistency in availability of water. Overall availability of water was 100% Khadakwasla and Bhama Askhed is having 99% & 42% availability of water this year. Last year it was 100% & 38%.

CADA Pune: In Ghod and Kukdi projects the availability of water is 100% & 88% respectively last year also both the projects was having 100% storage.

CIPC Chandrapur: 45% Live Storage was available during this year for Bor project. Live storage was comparatively less compared to its last year's storage. (100%)

CADA Nagpur: During the irrigation year, Lower Wunna project had 67% of the designed live storage. Last year this was 99%

Surplus Plan group:

CADA Nagpur: On and average live storage of Bagh, Itiadoh & Pench project on 15th October was 81.30%. Among these projects, Bagh had 27 % of designed live storage, whereas Pench & Itiadoh projects had 16% & 33% designed live storage respectively.

Abundant Plan Group:

SIC Sangli: Dudhganga, Radhanagri, Warna &Tulsi projects are having 99% live storage since last four years consistently.

TIC Thane: Live storages during 2008-09 are as under, Bhatsa (83%), Kalamba (80%) & Surya (60%). During last year, overall average live storage in the above said projects was 74%..

CADA Pune: Dhom and Kanher Projects are having 100% availability of water this year. Last year it was 99.5% availability.

CIPC Chandrapur: Percentages of actual live storage to designed live storage on Asolamendha & Dina project were 22% & 5 % respectively. During last year storages in Asolamendha & Dina were 100% & 68% respectively.

Indicator- II: Percentage of actual Evaporation to Live Storage on 15th October.

Highly deficit plan group:

CADA Solapur: On Bhima (Ujjani) Project percentage of evaporation to live storage is 25%. It is reduced by 1% compared with last year.

Deficit Plangroup:

CADA Jalgaon: The percentage of annual evaporation to actual live storage (on 15th October) of Girna project under CADA Jalgaon is 13%. The percentage of actual evaporation to projected evaporation is 78%.

CADA Nashik: The percentage of annual evaporation of Chankapur project under CADA Nashik is 17%. The percentage of actual evaporation to projected evaporation is 90%.

CADA Beed: Percentage of evaporation in Lower Terna, Manjra & Majalgaon has 44, 33 & 30 respectively just reduced by 1 to 2 %. In Lower Terna project 9% unutilised water by June end & more utilisation in HW than Rabi season affected for more percentage of evaporation. The project authority are advised to be more vigilant for proper & fully utilisation of water.

CADA Aurangabad: Jayakwadi project stage-I has 14% evaporation losses which are as per last years value.

NIC Nanded: In Manar project the actual evaporation for the year 2008-09 is 32 % which has almost doubled over last year (17%), it is mainly due to lesser availability (28%), maximum NI use by canal & 12% unutilized water by June end which goes beyond the permissible limits. In Vishnupuri the evaporation losses is 14% which is admissible.

AIC Akola: Percentage of evaporation as compared to 15th October live storage on projects Kate-purna & Nalganga under Akola Irrigation Circle was 57%.& 32% respectively. Very less storage on katepurna and nalganga projects (18% &28%) may be the reason of higher percentage of evaporation with compare to the actual live storage.

BIPC Buldhana: From 88% of live storage available, the water has been used throughout the year including hot weather season, still the evaporation losses were shown 3% which are very less. As repeatedly instructed in previous reports there are some discrepancies in evaporation data collection. Field authorities are again advised to explore the current procedure and rectify it.

Normal Plangroup:

CADA Jalgaon: In Hatnur project, the percentage of evaporation is 36%, which is nearer to the projected value (42%). More non irrigation use (120.69 Mcum) & 10.98 Mcum water use in hot weather season on reservoir lift has contributed to more evaporation. The percentage of actual evaporation to projected evaporation is 86 %.

CADA Nashik: In all the projects under CADA Nashik, the percentage of evaporation is varying from 3% to 14%, which are in conformity with the projected values. The percentage of actual evaporation to projected evaporation is varying from 69% to 100%.

NIC Nanded: In Upper Penganga project the percentage of evaporation is 23% for 2008-09.There is increase in evaporation over last years value (14%) due to lesser availability in this year.

PIC Pune: Khadakwasla, Pawna, Neera complex, Chaskaman and Bhama Asked all the projects are having 6 to 7 percent evaporation losses. Last year it was 8 to 9%.

CADA Pune: In Ghod and Kukdi complex projects the percentage of evaporation is 23 and 17 percent respectively. The overall percentage of evaporation is decreased from 20.75% to 20.00% this year as compared to last year.

CIPC Chandrapur: On Bor Project evaporation to actual live storage on 15th October during this year in more 10%(5.50.Mcum) as compared to last year percentage (7% 9.53 Mcum)

CADA Nagpur: Out of 126.840 Mcum Live storage available on 15th October was on Lower Wunna project, 37.690 Mcum of water was lost through evaporation. The ratio of evaporation to live storage works out to 30% which is on higher side to some extent. Last year it was (24%). Project authorityare expected to explore the reasons for high rate of evaporation data recorded at the project.

YIC Yeotmal: In case of Arunawati project, evaporation was very high as much as 86%. The high percentage of evaporation this year may be due to very less storage (14%) Project authorities were suggested previously to confirm the evaporation rate by verifying the procedure for data collection and empirical constants used while evaluating the evaporation loss. However, project authorityhave not taken any requisite action regarding the matter so far.

AIC Akola: Evaporation percentage as compared to live storage in case of Pus project under AIC Akola is 19%.

UWPC Amravati: Evaporation losses (28%) on Upper Wardha project under UWPC Amarawati which higher than the project planning.

Surplus Plan group:

CADA Nagpur: Evaporation losses on Bagh & Pench & Itiadoh projects are 26% & 12% & 90% respectively. In Itiadoh project it is too high as live storage available was very less.

Abundant Plan Group:

SIC Sangli:- Percentage evaporation to live storage on different projects under this circle are as below. Dhudhgana (3%), Warna (3%), Tulsi (19%), Radhanagri (6%) compared with last year 1% reduced on Dhudhgana & Radhanagri project & no change in percentage of evaporation on Varna & Tulsi project.

TIC Thane:- Percentage evaporation to live storage on different projects under this circle are as below. Bhatsa (4%), Kalamba (3%), & Surya (7%). Compared with last year. 1% increased on Bhatsa & 1% reduced on surya project & no change on Kalamba project.

Average live storage in the above said projects was 74%.

CADA Pune: Dhom and Kanher projects have 8% and 11% evaporation losses respectively which decreased by 1% in Dhom project & increased by 1% in Kanher project.

CIPC Chandrapur: Evaporation losses on Asolamendha (119%) as compared to 15th October storage (12.66 Mcum) are comparatively high. For Dina project evaporation losses are 211% as compared to 15th October storage (3.04 Mcum) which are very high.

Indicator-II (A): Percentage of Actual Evaporation to the Projected Evaporation.

Highly deficit plan group:

CADA Solapur: Percentage of actual evaporation to the projected evaporation on Bhima (Ujjani) project is 91.75%, compared with last year (96%), it is decreased to some extent.

Deficit Plangroup:

CADA Jalgaon: In Girna project, the actual evaporation is 78% as compared to the projected evaporation.

CADA Nashik: In Chankapur project, the actual evaporation is 90% as compared to the projected evaporation.

CADA Beed: All the three projects under this circle having 100% yield in this year has actual evaporation losses ranging within 72 to 83% of projected evaporation.

CADA Aurangabad: In Jayakwadi project it is observed since last 3 to 4 years that actual evaporation losses as measured by pan Evaporimeter are nearly 50% of the projected evaporation in spite of 100% live storage, resulting to utilise this saved water for Irrigation & NI use as a bonus.

NIC Nanded: In the projects namely Vishnupuri, Purna & Manar actual evaporation losses as measured by pan Evaporimeter are within the range of 29 to 41% that of projected evaporation, Manar & Purna due to lesser availability shows higher evaporation losses 41 & 31% respectively.

AIC Aurangabad: For NMC express canal water is released from Mukane reservoir there fore evaporation losses are borne by Mukane reservoir only .

AIC Akola: Projected evaporation of Katepurna & Nalganga project is 13.78Mcum & 8.5Mcum and Actual evaporation is 8.79 & 6.18 Mcum percentage of actual evaporation with respect to projected evaporation for Katepurna & Nalganga project is 63.80% and 72.71%. Which is higher.

BIPC Buldhana: Projected evaporation of Wan 4.46 Mcum Actual evaporation is 2.33 Mcum percentage of actual evaporation with respect to projected evaporation for Wan project is 52.37%. Which is higher

Normal Plangroup:

CADA Jalgaon: In Hatnur project, the actual evaporation is 86% as compared to the projected evaporation.

CADA Nashik: The ratio of actual evaporation to projected evaporation varies from 69% to 100%.

NIC Nanded: In Upper Penganga Project actual evaporation losses as measured by pan Evaporimeter are 66% of projected evaporation as in this year yield was only 43%.

PIC Pune: In Khadakwasla, Pawna, Neera complex, Chaskaman and Bhama-Askhed project the average percentage of evaporation to projected evaporation comes to 71.70 this year.

CADA Pune: In Ghod and Kukdi complex project the percentage of actual vaporation to projected evaporation losses this year comes to 176.68 and 97.94 respectively.

AIC Akola: Projected evaporation of Pus 15 Mcum Actual evaporation is 14.32 Mcum percentage of actual evaporation with respect to projected evaporation for Pus project is 95.47%.

YIC Yeotmal: In Arunawati project actual evaporation is 20.52 Mcum and projected evaporation is 52.80 Mcum percentage of actual evaporation with respect to projected evaporation comes out 38.86%.

UWPC Amrawati: In Upper Wardha project actual evaporation is 80.24 Mcum and projected evaporation is 96.67 Mcum percentage of actual evaporation with respect to projected evaporation comes out 83%.

Abundant Plan Group:

SIC Sangli:- Percentage of actual evaporation to the projected evaporation on different projects under this circle are as under, Dhudhganga (73%), Radhanagari (82%), Warna (63%) & Tulsi (205%). Compared with last year, on Dhudhganga decreased by 9% & on Warna increased by 4%.

TIC Thane:- Percentage of actual evaporation to the projected evaporation on different projects under this circle are as under Bhatsa (128%), Kalamba (56%). Compared with last year, on Bhatsa increased by 25%.

CADA Pune: In Dhom and Kanher project the percentage of actual evaporation to projected evaporation losses this year comes to 102.26 and 198.36 respectively.

Indicator- III: Target & achievement of Irrigation potential utilization.

Highly deficit plan group:

CADA Solapur: Total area irrigated during this year on Bhima (Ujjani) Project is 102% of PIP. It is increased by 3% compared with last year,

Deficit Plangroup:

CADA Jalgaon: In Girna project under CADA Jalgaon, the percent achievement of actual area irrigated with compared to total area as per PIP is 93%.

CADA Nashik: In Chankapur project under CADA Nashik, total area irrigated is 140% more than the total area as per PIP.

CADA Beed: The percentage of achievement to PIP target in Lower Terna, Majalgaon & Manjra is 94%, 77% & 134% respectively, achievement in Manjra is more than PIP target due to 43% more water utilization to irrigate area in rabbi & HW season against the provision in PIP.

CADA Aurangabad & CADA Beed: Achievement of PIP target in Jayakwadi project stage-I (combined PLBC & PRBC) is 78%.

NIC Nanded: The achievement of PIP target in Purna, Manar & Vishnupuri is ranging from 82 to 120 % which is satisfactory.

AIC Aurangabad: The percentage achievement of NMCanal (express) PIP target is very low i.e. 22 %. Being an ongoing project, though the project authority are advised to plan irrigation programme as per site conditions.

AIC Akola: No irrigation on katepurna project during irrigation year 2008-09 as 18% live storage was available on 15th october. This may be reason for not framing the PIP. It appears that achievement on Nalganga project is 73% of the Preliminary Irrigation Programme though availability of storage was 28%. which is comparatively satisfactory than previous year .

BIPC Buldhana: Wan project authorities are again advised to determine the real causes for very low (44%) achievement in irrigated area against the set PIP though the available storage was 88 %.

Normal Plangroup:

CADA Jalgaon: In Hatnur Project, total area irrigated is 250% more than the total area as per PIP.

CADA Nashik: In all the projects except Bhandardara & Upper Godawari Complex, the area considered in PIP was fully irrigated. However, in Bhandardara Project & Upper Godawari Complex, the actual area irrigated was 87% & 83% respectively of that considered in PIP.

NIC Nanded: In Upper Penganga project the achievement is low i.e. 59% only. The project authorities are required to be more attentive to increase irrigated area to achieve the PIP target by utilizing maximum available water considering probable NI use.

PIC Pune: In Khadakwasla, Pawna, Chaskaman, Neera complex more than PIP area brought under irrigation. But in Bhama asked 96% of PIP Area utilized for irrigation.

CADA Pune: In Ghod project the 100% area is utilized as compare to P.I.P. area. But in Kukdi complex project it is 65%.

CIPC Chandrapur: Percentage of actual area irrigated to PIP is 50%. is slightly more as compared to last year's irrigation (42%) for Bor Project.

CADA Nagpur: Total area irrigated on Lower Wunna project is 7185 ha against no PIP this year. It is slightly more as area irrigated during last year (6000 ha.)

YIC Yeotmal: No irrigation on Arunavati project in 2008-09 as the live storage available was 14%.

AIC Akola: Performance of Pus project is quite unsatisfactory as irrigated area is 57% against the PIP target though the available storage was 83% on 15th october.

UWPC Amravati: On Upper Wardha project, percentage achievement is 90 % against the planned target in PIP though the live storage on 15 th oct was 53%.Certainly satisfactory with comparing to previous year achievement.

Surplus Plan group:

CADA Nagpur: Total area irrigated on projects under the circle is 90499 ha during this year which is slightly more as against 75643 ha irrigated during last year.

Abundant Plan Group:

SIC Sangli: The performance of the projects under this Circle are as under, Dhudhganga (72%), Radhanagari (78%) Warna (68%), & Tulsi (73%). Compared with last year, 3% increase on Dhudnganga, 3% reduced on Radhanagari & Warna 12% increase on Tulsi.

TIC Thane: The performance of the projects under this Circle are as under Bhatsa (107%), Kal-Amba (82%) & Surya (80%). Compared with last year 21% increase on Bhatsa, 18% reduced on Kalamba & 17% increased on Surya project.

CADA Pune: In Dhom and Kanher projects the 50% & 75% of P.I.P. area utilized under irrigation.

CIPC Chandrapur: Asolamendha & Dina projects under this circle are predominantly kharif paddy grown projects & irrigation is on agreement basis. There fore, actual area irrigated is 80% & 99% of planned area in PIP.

Indicator- IV: Water Use Pattern

Highly deficit plan group:

CADA Solapur: Water use pattern on Bhima (Ujjani) Project is as under, irrigation on canal, canal lift, Reservoir lift River lift, NI use, and losses, with respect to P.I.P. provision variations observed are as under.

Evaporation is 8% less than PIP Provision.

NI use is 8% more than PIP Provision.

Water provision for irrigation is made on canal in (PIP) and part of it is utilized on reservoir & river lift. Overall water utilization is 3% less with respect to (PIP) provisions.

Deficit Plangroup:

CADA Jalgaon: In Girna project, the major water use (66%) is in Rabi season.

CADA Nashik: In Chankapur project, the major water use (52%) is for non irrigation.

CADA Beed: In Jayakwadi project stage-II (Majalgoan) the actual use (235.5 Mcum) in Rabi & HW is more than that of PIP provision (200Mcum).

In Lower Terna project the utilization in Rabi is just higher by 15 to 20 % than HW. Considering 100% yield Project authority should manage maximum utilization in Rabi to avoid wastage of water in HW through evaporation.

In Manjra project water used in HW is 1.5 times more than that of used in Rabi, as well as against planning, the project authority are required to be more vigilant.

CADA Aurangabad & CADA Beed: In Jayakwadi project stage-I (PRBC & PLBC) the utilization in HW season is double the PIP provision, also Kharif utilization is more than planned use, the NI use is also more than PIP, the project authority are required to give realistic figures for planning using past experience.

NIC Nanded: In Manar project there is no utilization of water by canal flow for irrigation as water is reserved for NI use.

In Purna project water utilization by canal in Rabi & HW is less than planned but NI use has increased 3 times that of provision in PIP. Project authority should vigilant in preparing the realistic PIP.

In Vishnupuri project the water utilization by canal flow is only in Rabi season. The utilization of NI is double that of planning where as utilization by Reservoir lift is not considered in PIP. Project Authority should prepare realistic PIP.

AIC Aurangabad: In NMCanal less water is being utilized compared to PIP provision. Though the project is ongoing, proper watch on water use & irrigated area is needed.

AIC Akola: As the live storage in katerpurna project was 18% water is utilized for Non irrigation only which is 14.331 Mcum. On nalganga project 55% water (10.51 Mcum) is utilized predominantly for irrigation in Rabi season.

BIPC Buldhana: On Wan project, 58.577 Mcum i.e. 81% of total available water is utilized for irrigation purpose in Rabi season & HW season.

Normal Plangroup:

CADA Jalgaon: In Hatnur project, the major water use (45%) is for non irrigation .The major utilization on Canal is in Rabi season (14%) as compared to gross utilization.

CADA Nashik: In Darna, Gautami, Kashyapi & Mukane projects, there is no Canal system & water is released in to river for feeding N.M. Weir. Water is used for irrigation by lifts on river upstream of N.M. weir.

In Upper Godawari Complex projects major utilization (49%) is on canal in Rabi season with compared to Gross utilization.

NIC Nanded**:** In Upper penganga the water utilization by canal flow in Rabi season is more than PIP, as well as NI use is also crossed by 20% over PIP provisions.

PIC Pune: In Khadakwasla, Pawna projects non irrigation use of water is very high mainly due to supply of water to Pune and Pimpri-Chinchwad Municipal Corporations. Water use for irrigation in Neera complex Bhama asked and Chaskaman projects in all the seasons is as per planning.

CADA Pune: In Ghod and Kukdi projects the most of water is utilised in Rabi and H.W.Seasons.

CIPC Chandrapur: On Bor project, water use for irrigation is in Rabi only, (40.210 Mcum only) last year there was a Rabi use of (61.79 Mcum)

CADA Nagpur: On Lower Wunna project, 86.104% Mcum water use of total utilization of water (133.95 Mcum) is predominantly for irrigation in Rabi season.

YIC Yeotmal: 14% storge availability in Arunavati project appears the prime cause for the non utilization of water for irrigation purpose Only 10% water utilised for Non irrigation purpose.

AIC Akola: On Pus project, 74% (51.589 Mcum) of total available storage (75.85Mcum) utilised for canal Irrigation & reservoir lift i.e. 4.739 Mcum in Rabi & HW season.

UWPC Amrawati : On Upper Wardha project very less 25% (72.442 Mcum) of Total storage (288.39 Mcum) is utilised in Kh, Rabbi & HW Season which is comparatively very less than previous Irrigation years though the project is 53% full of storage on 15th October. Water use for Irrigation on reservoir lift is 11.911 Mcum.

Surplus Plan group:

CADA Nagpur: Bagh, Itiadoh, & Pench projects are paddy predominant projects. Most of the water is used for Kharif & HW paddy crop only. Project wise water use for irrigation as compared to gross use on Bagh, Itiadoh & Pench is 89%, 79% & 72% respectively. On Pench project percentage of irrigation water use in Kharif, Rabi & HW is about 32%, 23%, & 10 of total water use respectively. 330.14 Mcum water is used for Non irrigation purpose on Pench project.

Abundant Plan Group:

SIC Sangli: Most of the irrigation done on river lift against the water provision made on canal utilization in PIP provision. Same situation like Dhudhganga project has been observed on Warna, Tulsi & Radhanagari projects under this circle.

TIC Thane: On Bhatsa & Surya Project NI is 5% & 21 % more than the PIP provisions.

CADA Pune: In Dhom and Kanher projects most of water use is in Rabi and H.W. by canal.

CIPC Chandrapur: Kharif season is the principle season on Asolamendha & Dina projects. Irrigation water utilization for Kharif paddy on these projects is 60.310 & 58.055 Mcum respectively.

Indicator-V: Irrigation System Performance (Canal)

Highly deficit plan group:

CADA Solapur: Performance regarding irrigation efficiencies on Bhima (Ujjani) project are as under (efficiency ha/m3)

Sr. No.	Particulars	Rabi	H.W.
1	On canal irrigation	83	48
2	Irrigation on Reservoir lift	145	121
3	Irrigation on River lift	195	145

Irrigation efficiencies on canal utilization needs to be improved compared with the state target.

Deficit Plangroup:

CADA Jalgaon: In Girna project, the ISP lowered from 65ha/Mcum (2007-08) to 56ha/Mcum (2008-09) in Rabi season. How ever there is increase in the irrigation system performance in H.W. season from 83 ha/Mcum (2007-08) to 138 ha/Mcum (2008-09). But still the ISP is below Govt norms. According to field officers, this is due to 50 to 60 years old canal system under Jamda weir & pervious strata in tail reach.

CADA Nashik: In Chankapur project, there is no irrigation in HW season. The irrigation system performance in Rabi season lowered from 150 ha/Mcum (2007-08) with 3 rotations to 149 ha/ Mcum (2008-09) with 2 rotations.

CADA Beed: In Manjra & Lower Terna ISP of Rabi is closer to state norms improving last years value, but in HW season, condition is vice versa. In Majalgaon achievement is 50% of the targeted ISP. The project authorities have to take more efforts to achieve the targets.

CADA Aurangabad & CADA Beed: In Jayakwadi project stage-I the ISP is low (Rabi 75 ha/Mcum & HW 52 ha/Mcum), though slight improvement over last year it is half way from the required norms i.e. 150 & 110 ha/Mcum respectively. In PRBC under CADA Beed ISP of HW is too low (28 ha/Mcum) compared to PLBC (57 ha/Mcum). Project authority should give proper watch on water utilization & irrigated area.

NIC Nanded: In Purna project ISP is improved (106 & 54 ha/Mcum) over last years ISP (75 & 32 ha/Mcum) for Rabi & HW season respectively. but still it is away from required norms. In Manar project irrigation by canal is nil. In Vishnupuri project ISP of Rabi season increased from 90ha/Mcum (2007-08) to 120 ha/Mcum. The project authorities have to take efforts to achieve the required norms.

AIC Aurangabad: The ISP of NMCanal is very low i.e. 37 & 6 ha/Mcum, in Rabi & HW season respectively. Though it is ongoing project project authority should be watchful for proper utilization of water & measurements of irrigated area.

AIC Akola: On Katepurna project, no canal & lift irrigation due to 18% storage so ISP observed in all season is 0 ha/ Mcum. On Nalganga project, ISP observed in Rabi season 100ha/Mcum. It is again advised to project authorityto explore the reasons for low realization of ISP in Rabbi Season continuously in consecutive years though IWM over large portion of command area is handed over to WUA & water is supplied

on volumetric basis. The actual area irrigated and water supplied to the area should be carefully cross checked by project authority to observe the satisfactory ISP to the extent of state target.

BIPC Buldhana: ISP of Wan project is 90 Ha/ Mcum & 19 Ha/Mcum in HW respectively which are very less than state Norms. It is advised to project authority to explore the reasons for low realization of ISP and to take requisite action to achieve state target value

Normal Plangroup:

CADA Jalgaon: In Hatnur Project, the ISP is just lowered from 74ha/Mcum (2007-08) to 73 ha/Mcum (2008-09) in Rabi season. Though 4 rotations are given in Rabi season, the irrigation system performance is much below the Govt. norms (@50%). As per project authorities, the ISP is lower due to following reasons.

i) Irrigation on scattered area

ii) No Night Irrigation.

iii) Inclination to Irrigation on Well instead of flow irrigation.

CADA Nashik: In Bhandardara project, there is increase in irrigation system performance in Kharif season. However the ISP for Rabi season & HW season lowered as compared to last year (2007-08). There is much scope to improve the ISP to achieve the state norms.

In Kadwa project, there is slight improvement in irrigation system performance in all the three seasons over last year's performance. But the existing ISPs are much below the state norms. As per field officers, the ISP is low due to-

1- There is much percolation from canal embankment in km 0 to 88.
2- Major leakages through canal structures.
3- The command area is in tail reach only (Km 60 to 88).
4- Mostly the strata is pervious.

As such due to more conveyance losses in the disnet system, the performance is lowered.

In Mula project, though the irrigation system performance is just improved in Rabi & H.W. season from 89ha/Mcum to 90ha/Mcum and from 53ha/Mcum to 57ha/Mcum respectively, the ISP is much below the state norms. Improvement in the performance is expected as the water is given to flow irrigation on volumetric basis to the W.U.Associations all over the command area.

NIC Nanded: In Upper Penganga project though the ISP improved over last years value 53 & 38 ha/Mcum to 75 & 76 ha/Mcum in Rabi & HW respectively, it is still less than required norms. The project authority need to be more vigilant to improve the performance.

PIC Pune: In Khadakwasla project in Kharif season performance by canal is 137 ha/Mcum with three rotation, in Rabi season 98 ha/Mcum and in H.W. is 67 ha/Mcum with three rotation respectively.

In Chaskaman Project in rabi season the performance is 97 ha/Mcum with three rotation and in H.W. Season the performance is 80 ha/Mcum with four rotations. The performance is quite good.

In Neera complex on NLBC the Kharif, Rabi and H.W. performance is 161 ha/Mcum, with two rotation 105 ha/Mcum and 47 ha/Mcum respectively with three rotation. And in NRBC the Kharif performance is 153 ha/Mcum with three rotation and 130 ha/Mcum and 104 ha/Mcum in rabi and H.W. season with three rotation in each season. The performance is quite good for Neera complex.

CADA Pune: In Ghod project only one rotation was given in Kharif season and ISP comes to 153 ha/Mcum where as in Rabi season with two rotations ISP is 144 ha/Mcum, in H.W. season with three rotations the ISP comes to 72 ha/Mcum. The performance is decreased in kharif and H.W. season but increased in Rabi as compared to last year performance.

In Kukdi project with two rotation kharif performance is 547 ha/Mcum where as in Rabi season the performance is 99 ha/Mcum with two rotations, in H.W. season the performance is 49 ha/Mcum with two rotations. In Kharif and Rabi season the performance is increased but in H.W. season it is decreased considerably as compared to last year performance.

CIPC Chandrapur: On Bor Project, as compared to state target ISP observed in Rabi i.e.(56ha/Mcum) is too low compared to the State norm as well as last years performance. Project authority are advised to take stringent action to improve the system performance.

CADA Nagpur: In case of Lower Wunna project, ISP observed in Rabi is 78 Ha/ Mcum which is less as compared to state norms.

YIC Yeotmal**:** No canal irrigation due to 14% storage availaIibility so ISP is not observed on Arunavati project.

AIC Akola: In case of Pus, ISP observed for Rabi 65 Ha/ Mcum only. No change in ISP compared to last three years performance indicates that, project authority are neither exploring the reasons for low ISP values nor taking suitable action for improving the ISP.

UWPC Amravati: On Upper Wardha project, ISP realised in Rabi (63ha/Mcum)), is appreciably below the state Norms. It is even low when compared to its last three year's performance. It appears that field authorities, ignored the suggestions illustrated vide previous reports and not taken suitable action to enhance ISP

Surplus Plan group:

CADA Nagpur: ISP realised in kharif season on Bagh project is 146 Ha/ Mcum. On Itiadoh & Pench project, it is 117 & 110 Ha/ Mcum. On and average the ISP on these two projects for kharif season has rolled down compared to its last year performance.

Abundant Plangroup:

CADA Pune: In Dhom project the kharif performance is 26 ha/Mcum, with one rotation the Rabi performance is 79 ha/Mcum and in H.W. it is 33 ha/Mcum. With five rotation each.

In Kanher project kharif performance is 13 ha/mcm with one rotation. Where as in Rabi season the performance is 58 ha/Mcum with five rotations. In H.W. season the performance is 33 ha/Mcum with five rotations. As compared to last year the performance is decreased in all the seasons.

CIPC Chandrapur: On Asolamendha & Dina project ISP observed in kharif season is 153 Ha/ Mcum & 188 Ha/ Mcum respectively. Which is less as compared to last years performance (154 ha/Mcum & 373 ha/Mcum)

SIC Sangli: Projectwise irrigation efficiencies in difference seasons are as under:

Projects	Particulars	Rabi	H.W.
Dhudhganga	Canal	10	9
	Reservoir lift	-	-
	River lift	100	63
Warna	Canal	107	77
	Reservoir lift	-	-
	River lift	161	106
Tulsi	Canal	-	-
	Reservoir lift	-	-
	River lift	130	103
Radhanagari	1)Canal	-	-
	2)Reservoir lift	-	-
	3)River lift	130	111

All the project under SIC Sangli the irrigation efficiencies are on lower side compared with the state norms availability of water in this vicinity is comparatively more.

TIC Thane: Performance of the irrigation efficiencies on the projects, Surya, Bhatsa, & Kal-Amba are as under:- (Efficiencies ha/m3)

The ISP of Bhatsa, Kal-Amba and Surya is 43, 34 and 40 respectively.

Most of irrigation done in Kokan season only. Achieved irrigation efficiency in Kokan Season on all the above projects is less than the state norms, Reasons for this is steep command area and percolating strata.

Indicator-VI: Percentage of Planned and Actual Non Irrigation Use.

Highly deficit plan group:

CADA Solapur: Performance of the Bhima (Ujjani) Project NI use is 108% with respect to PIP provisions.

Deficit Plangroup:

CADA Jalgaon: In Girna project, the actual NI Use is 85% than that considered in PIP.

CADA Nashik: In Chankapur project, the actual non irrigation use is lower (29.06 Mcum) than that considered in PIP (64.06Mcum). As per field officers, the provision of NI Use in PIP is inclusive of transit losses in river. How ever the actual use is at canal head of pickup weir D/s of reservoir. The total water use at reservoir head including transit losses in river works out to 52.44 Mcum.

CADA Beed: In Manjra there is no provision for NI use in the project report. The actual use is 30% less than PIP. In case of Lower Terna actual use is 27% of projected provisions but overtakes PIP by 38%. In Majalgaon project though there is no provision for NI, the actual use is closer to planning.

CADA Aurangabad & CADA Beed: Though in Jayakwadi project stage-I there is no provision for NI use in the project report actual use is more than that of PIP provision by 54%.

NIC Nanded: In Manar project the actual use is less than PIP but it is 6.58 times more than the provision in project report. In Vishnupuri project actual NI use is 2 & 5 times that of provision in PIP & project report respectively.

Purna project has actual use of 3 times more than PIP. Lack of planning affects projected irrigation. The project authority should be careful in assessing the realistic demand preparing PIP.

AIC Aurangabad: There is no NI use in NMCanal as reported by Field officers.

AIC Akola: Actual NI use on Katepurna project was 44% of the provisions in the project report. The same was more (123%) of the reservations set in the PIP.

Actual NI use on Nalganga project was 101% of the provisions made in the PIP.

BIPC Buldhana: On Wan project, actual NI use is excessive as compare to quota reserved in PIP which is 140%.

Normal Plangroup:

CADA Jalgaon: In Hatnur project, the actual N.I. use is higher than that considered in project report as well as in PIP (133% & 111% respectively).

CADA Nashik: In Bhandardara, Gangapur, Kadwa & Mula projects, the actual non irrigation use is exceeded to the provision of PIP (150%, 127%, 190% & 105% respectively). Care should be taken while preparing the PIP so that actual N.I. use will not be excess. Sanction to the enhanced N. I. use shall be accorded by the competent authority.

NIC Nanded: In Upper Penganga Project though there is no provision for NI use in project report, actual NI use is 43% more than PIP provision.

PIC Pune: In Khadakwasla, Pawna projects the N.I. use is more than project provision. In Neera complex 88% and in Chaskaman projects 43% of N. I. use of PIP provisions. But in Bhama Askhed no N.I. use.

CADA Pune: In Ghod and Kukdi projects the N.I. use is 92% and 98% of PIP provision respectively.

CIPC Chandrapur : Actually N.I. use is Nil as compared to projected 6.350 Mcum & PIP provision 0.150 Mcum during this year also.

CADA Nagpur: on Lower Wunna project 64% of storage reserved for NI use was actually used during the irrigation year.

YIC Yeotmal: Actual NI water use on Arunavati project was 15% in Project report & PIP. Water reservations on account of NI use appears to have gone waste. In spite of repeated remarks project authority are not exercising proper care while reserving water for NI use.

AIC Akola: On Pus project non irrigation use is excessive against the project report provisions and reservations set in PIP which is 296% and 177% respectively.

UWPC Amrawati: On Upper Wardha project actual NI water use is 57% that of considered in PIP.

Surplus Plan group:

CADA Nagpur**:** Actual NI water use on Pench project was184% of the provisions in project report and However it was 131% of the quota considered while preparing the PIP.

Abundant Plangroup:

CADA Pune: In Dhom project the N.I. use is 10% of that project provisions.

SIC (Sangli): N.I. use, on Dhudhganga, Warana & Radhanagari is 153%, 86%, & 86 % respectively, with compared to the PIP provisions.

TIC Thane: N.I. use, on Bhatsa, Kal-Amba, Surya is 105%, 106%, 71%, respectively, with compared to the PIP provisions.

Indicator-VII: Percentage of Balance Un-utilized Water to Live storage (15th October).

Highly deficit plan group:-

CADA Solapur: Performance Bhima (Ujjani) Project NI use is 100% water utilization for diff. purposes hence percentage of un-utilized water is nil.

Deficit Plangroup:

CADA Jalgaon: There is a no balance unutilised water remained in reservoir at June end in Girna project.

CADA Nashik: In Chankapur project the balance unutilized water remained in reservoir at June end is to the tune of 4%.

CADA Beed: In Lower Terna unutilized water is 9% by June end. Manjra & Majalgaon has nil unutilized water by June end.

CADA Aurangabad: In Jayakwadi project stage-I the percentage of unutilized water is nil.

NIC Nanded: Manar has 12% unutilized water by June end. It is due to lesser actual use against PIP for irrigation & NI use. In Purna & Vishnupuri unutilized water by June end is Nil.

AIC Akola: unutilised storage on katepurna & nalganga project is nil.

BIPC Buldana: On Wan project 0.51% of available live storage remained as unutilized storage at the end of irrigation year.

Normal Plangroup:

CADA Jalgaon: In Hatnur project, there is a no balance unutilised water remained in reservoir at June end.

CADA Nashik: In Bhandardara, Kadwa & Mukane projects, the percentage of balance unutilised water at June end is 3%, 3%, &15% respectively.

PIC Pune: In Khadakwasla, Chaskaman, Neera complex projects the average un-utilisation of water is nil. But in Pawna and Bhama Askhed project it is 18 & 15% respectively. The project authorities should pay attention for full utilisation of water.

NIC Nanded: In Upper Penganga Project unutilized water by June end is nil. It was 33% in last year due to 90% availability compared to this years' only 43%.

YIC Yeotmal: On Arunavati project, unutilized storage appear to be nil

AIC Akola: In case of Pus project, unutilized storage is nil of the storage on 15th oct

UWPC Amravati: On Upper Wardha project 40% of available storage is remained unutilized at the end of irrigation year. The unutilized percentage is more than previous year. As mentionrd in previous reports the project is eight monthly projects. The command area is mainly traversed by Black Cotton Soil. Also the command area lies in assured rainfall zone. Therefore, practically there is very low demand for water for kharif Jowar & cotton (which contributes substantially in designed cropping pattern) kharif & Rabi season. Therefore according to field authorities water remains unutilized at the end of the irrigation year. For better water utilization, a new cropping pattern is approved by the competent authority It appears that the field authorities have not taken any positive efforts for Preparation and implementation of PIP as per

new cropping pattern along with motivating cultivators for cotton crop so as to utilize available storage.

CIPC Chandrapur: On Bor project unutilised storage appears to be nil

CADA Nagpur: unutilised storage appears to be nil

Surplus Plan group:

CADA Nagpur: On Bagh, Itiadoh and Pench project unutilised storage appears to be nil

Abundant Plangroup:

CADA Pune: In Kanher project 6% water remained unutilised.

CIPC Chandrapur: On Dina project unutilised storage appears to be nil

SIC (Sangli): Percentage of un-utilized water, on Dhudhganga, Warna, Tulsi, & Radhangari project is 3%, 19%, 31%,& 0% respectively.

TIC Thane: Percentage of unutilized water on Surya, Bhatsa, Kal-Amba is 3%, 8% & 12% respectively.

Indicator VIII: Conveyance efficiency of main Canals (%)

Highly deficit plan group:

CADA Solapur: Conveyance efficiency realized in Bhima (Ujjani) project as below

Rabi Season		HW Season	
LBC	RBC	LBC	RBC
70	55	55	45

Deficit Plan group:

CADA Jalgaon: Conveyance efficiency of Panzan left bank canal (Girna Dam) is 63% in Rabi and H.W. seasons. However the conveyance efficiency of canals from Jamda weir & Dahigaon weir is as below.

Canal	Jamda weir		Dahigaon weir	
	Rabi	HW	Rabi	HW
LBC	73%	30%	41%	60%
RBC	77%	70%	No RBC	No RBC

CADA Nashik: In Chankapur project, the conveyance efficiency of left bank canal is 73% & 77% in Rabi and H.W Season respectively. The efficiency of right bank canal in Rabi Season is 77%.

CADA Aurangabad & CADA Beed: Jayakwadi stage- I the conveyance efficiency of Left Bank canal is 91% & 78% and in R.B.Canal it is 61% & 59% for Rabi and HW season respectively. Project authorities under CADA Beed should be very watchful for leakages through canals & structures and for remedy to minimise it, as conveyance efficiency is reduced in this year.

In Manjra project the conveyance efficiency of LBC & RBC is very low i,e, ranging in between 44 to 51% only. It was in between 67 to 75% last year. The Project authorities are required to improve the conveyance efficiency by needful measures.

NIC Nanded: As there is no utilisation for irrigation by canals in Manar conveyance efficiency is Nil.

AIC Akola: Conveyance efficiency realized on Nalganga project in Rabi season was 69%.

BIPC Buldhana: On Wan project it was 94% & 99% for Rabi & HW. respectively.

Normal Plan group:

CADA Jalgaon: In Hatnur project, the conveyance efficiency of right bank canal is 56% in Rabi Season. There is no irrigation in H.W. season.

CADA Nashik: In Bhandardara project, the conveyance efficiency of L.B.Canal in Rabi and H.W. season is 38% & 40% respectively. However, for R.B.Canal it is 51% & 48% respectively. This is because of the water is let out through canals from ozar pick up weir, 85 km D/s of Bhandardara project.

In Gangapur project the conveyance efficiency of L.B.C. in Rabi and HW season is 67%.

In Mula project, the conveyance efficiency of left bank canal in both the seasons (Rabi & H.W.) is lower than that of right bank canal. Project authority is

required to give more attention to improve the efficiency of the left bank canal.

NIC Nanded: In Upper Penganga Project the conveyance efficiency is in the range of 86 to 78% for both canals and seasons.

AIC Akola: On the main canal system of Pus project, conveyance efficiency attained was 73% & 72% only in Rabi season.

CIPC Chandrapur: The conveyance efficiency canal of Bor project appears to be 37 which is less as per last year results (70%)

PIC Pune: In Khadakwasla, project in Rabi and H.W. season 33% and 26% conveyance efficiency obtained respectfully.

In NRBC (Veer project) the conveyance efficiency in Rabi and H.W. Season is 52% in Rabi season and 45% in H.W. season.

CADA Pune: In Ghod project 65% conveyance efficiency is obtained in Rabi season where as in H.W. it is 52%. In Kukdi complex Conveyance efficiency in Rabi and H.W. season is 50% and 38% respectively.

Surplus Plan group:

CADA Nagpur: For Bagh & Itiadoh Project data seems to be misleading so conclusion could not be drawn.

Abundant Plan group:

CIPC Chandrapur: Data for Asolamendha & Dina Project was not supplied with water account so results could not be drawn.

CADA Pune: In Dhom project in Rabi season the conveyance efficiency of canal is 57% in H.W. it is 46%.

In Kanher project the conveyance efficiency in Rabi season is 49% and in H.W. it is 46%.

TIC Thane: For Kal-Amba and Surya project data seems to be misleading so conclusion could not be drawn..

Indicator IX: Actual cropping pattern.

Highly Deficit Plangroup:

CADA Solapur: 40 perennial crops, 28% Rabi crops 18% HW crops 15% Kharif crops.

Deficit Plangroup:

CADA Aurangabad & CADA Beed: In Jayakwadi Project Stage-I percentage of Rabi seasonal & perennial crops is 38% & 14%, where as it is 27% & 12% in two seasonal & HW respectively.

CADA Beed: The percentage of Perennial crops in Manjra projects are 62% which is too high, where as it is 35% & 26% in Majalgaon & Lower Terna project respectively.

AIC Aurangabad: There is maximum Rabi crops (88%) and no perennials.

NIC Nanded: The trend towards Rabi crops in Vishnupuri, Manar & Purna projects is high which ranges from 65 to 75 %.

AIC Akola: Rabi seasonal are the principle crops on Nalganga (70%) projects with 40% Two seasonal as secondary crops.

BIPC Buldana: On Wan project Rabi crops were irrigated over 92% of total irrigated area.

CADA Jalgaon: In Girna project, about 69% crops are under Rabi season. The perennial crops are about 1%.

CADA Nashik: In Chankapur project, 61% crops are under Rabi season.

Normal Plangroup:

NIC Nanded: In UPP percentage of Rabi seasonal is 67%, where as it 13 & 12% for HW and perennials.

AIC Akola: percentage of Rabi & HW seasonal ON Pus projects were 83% with 8% two seasons 5% H W seasons & 4% perennials respectively.

YIC Yeotmal: On Arunavati project Rabi and H W seasonal were77 &19% where as Perennial crops were on2% of the irrigated area

UWPC Amrawati: On Upper Wardha project, 66% crops were under Rabi season and 10% in two seasonal &24 % perennial crops.

CADA Nagpur: & CIPC Chandrapur: Rabi seasonal crops irrigated on Lower Wunna & Bor projects were 98% and percentage of perenials were less 0.12% and 1.52% as compared to last years results 1.08% and 2.19%

CADA Jalgaon: In Hatnur project, major percentage of crops (51%) is under Rabi season and 26% crops (Sugarcane and Banana) are under perennial.

CADA Nashik: In Bhandardara project, the percentage of crops under Rabi and perennial is 51% and 18% respectively. The predominant crops under Rabi season are Wheat, Rabi Jawar, Soya bean and Gram. In perennial, the predominant crop is sugarcane.

In Mula project, the percentages of crops in Rabi, HW and Perennial are 50%, 19% & 14% respectively.

In Darna project, the percentage of crops in Rabi and H.W. season are about 53% and 13% respectively and in Gangapur project percentage of crops in Rabi & Perennial season is above 65% 29% respectively.

In Kadwa project, the prominent crops (63%) are under Rabi season.

In Gautami & Kashyapi projects 100% crops are under Rabi Season.

PIC Pune: In Khadakwasla, project the major percent of irrigation crop is in Rabi 35%. The major irrigation in Chaskaman, Pawna, NRBC & Bhama-askhed crops are in Rabi season.

CADA Pune: In Ghod and Kukdi complex the major irrigation crops are in Rabi and H.W. Season.

Surplus Plan group:

CADA Nagpur: Bagh (100%), Itiadoh (100%) & Pench (90%) projects are Kharif predominant. Rabi seasonal percentage on Pench Project was 6%

Abundant Plan group:

CIPC Chandrapur: Asolamendha (100%) & Dina (100%) projects are totally Kharif projects growing mainly paddy crop.

CADA Pune: In Dhom and Kanher projects the major irrigation crops are 64% and 48% respectively in Rabi season.

SIC Sangli: All the projects under this circle having predominatly perennial crops.

TIC Thane: All the projects under this circle having predominantly paddy in Kokan season.

Medium Projects.

Indicator-I: Water Availability in reservoirs on 15th October.

Highly Deficit Plan-Group:

CADA Solapur: Percentage of availability of live storage Medium Projects are as below, Asti, (77%) Higni Pargaon (101%) Mangi (100%) & Jawalgaon (100%). Bori (77%), Ekhurkh (31%), Bhudhihal (0%). Compared with the last year, water availability in Mangi is considerably increased this year.

CADA Beed: Harni, Banganga, Ramganga, Talwar, Kada, Kadi, Ruti, Kurnoor, Khandala, Benitura & Khasapur projects have received 100% yield for the this year. Turori & Sakat received minimum yield i.e. 16 & 29% respectively, rest of projects ranges within 44 to 75% yield.

PIC Pune: Sina, Ranand, Tisangi projects have 100% storage this year. Khairy and Mhaswad project have 92% & 46% storage but Nher and Andhali projects have 29% & 24% storage this year. Last year all the projects have 100% storage.

CADA Pune: Yeralwadi project has 89% storage this year. Last year it was 100%.

Deficit Plangroup:

CADA Beed: Bindusara, Gharni, Mahasangvi, whati, Terna, Rui, Sangmeshwar & Raigavan have received 100% yield for this year. Belpara, Deverjan & Masalga having yield below 28% , rest of the projects ranges within 46 to 91% yield.

CADA Aurangabad: Gadhagad, Pir Kalyan, Purna Nevapur & Kalyan Girija have received nearly or equal to 100% yield in this year 2008-09. Ajantha Andhari have minimum yield of 14% where as in Dhamna live storage is below sill. Rest of the projects having yield ranging from 30 to 84%.

AIC Aurangabad: Wakod has only 30% yield in this year.

NIC Nanded: Only Kudala & Karadkhed has received sufficient yield (99 & 71% respectively) in this year. Rest of the projects have received below 35% yield.

AIC Akola: Live storage in Medium projects under this circle on 15 th oct. was as given below.

Shahanoor 72% , Uma 2%, Morna 21% , Nirguna 15% ,Dnyanganga 59% , Mas 36% & Paldhag 100 % full of storage respectively. Comparatively less storage in most of the projects than previous year.

BIPC Buldhana: Live storages in Pentakali 47%, Mun 48%, Torna 87%

& in Utawali project 100% storage in the irrigation year 2008-09.

UWPC Amravati: Chandrabhaga project had 100% live storage & Purna had 93% storage on 15th of October.

CADA Jalgaon: In last year 6 projects (out of total 10 projects) had 100% availability. However, in this year 8 projects are having 100% availability. Tondapur & Bhokarbari projects are having 21% & 48% availability respectively.

CADA Nashik: All the (3) projects had 100% live storage since last two years. JIPC Jalgaon: In Bahula project, the availability of water is 13% only.

Normal Plangroup:

CADA Aurangabad: All the projects under this circle & plan group received sufficient yield ranging from 78 to 100%, where as Bor Dahegoan has received 50% yield for this year.

NIC Nanded: All the projects under this circle & plan group received sufficient yield i.e. above 97%.

AIC Aurangabad: Shivna Takli under this circle which comes in this plan group received 96% yield.

AIC Akola: Following project under this circle had live storages on 15th October as mentioned below.

Koradi 9% ,Borgaon 26% , Lower pus 91% ,Waghadi 46% ,Goki24%, , &Saikheda 100%.

WIC Washim: Sonal & Ekbhurji projects are now newly incorporated under this circle had storages 0% &78% respectively.

YIC Yeotmal: Adan project had very less storage i.e. 6% and Nawargaon project had 99% storage on 15th oct .

CADA Jalgaon: In five projects, the yield received was 100%. The yield received in Karwand and Sonwad projects in this year is 97%.

CADA Nashik: In all the projects, the yield was 100% for successive five years except Ghatshil pargaon. The yield received in Ghatshil pargaon in this year is 56%.

JIPC Jalgaon: In Bhokar and Mor projects, the availability of water is 100% & 99% respectively.

PIC Pune: Nazre, Kasarsai and Wadiwale have respectively 75%, 100% and 100% water availability this year.

Surplus Plan group:

CADA Nagpur: Live storages on projects in Middle Wainganga sub basin had low percentages varying from 3% to 98% average 29% over all

CIPC Chandrapur: Live storage on Labhansarad (100%), Pakkadigudam (100%) and on Chandai & Chargaon it was 10% & 44% respectively.

Abundant Plan group:

SIC Sangli:- Percentage of availability of live storages in different projects are as below, Chitri (100%), Kadvi (100 %), Khumbhi (100%), Patgaon (100%), Morna(100 %), Shidhewadi (92%), Yeoti Masoli (100%) Kasri (100%), Chikotra (100%), Jagamhatti (81%), Overall availability is (89%).

TIC Thane:- On Rajanalla complex, percentage of water availability of live storage is (80%). This project has additional Storages feeding availability the design capacity, Wandri (95%).

CIPC Chandrapur: Under this Plan group Naleshwar & Ghorazari project had 10% & 6% live storage respectively. Compared with last year, storages are having very low figure

NKIPC Thane: In Hetwane project storage increased to 86% as compare to 69% last year storage.

KIC Ratnagiri: In Natuwadi project the storage remains same to 97% as compare to last year storage.

Indicator-II: Percentage of actual Evaporation to live storage on 15th October.

Highly Deficit Plan-Group:

CADA Solapur: Percentage of evaporation on different projects are as below Ashti (45%), Hingni (31%), Mangi (19%), Bori (23%), Ekrukh (41%), Jawalgaon (35%), compared with last year over all percentage has been increased 10 to 15%.

CADA Beed: Turori has 101% evaporation; this may due to lesser availability i.e. just 16% only. In Kambli, Sakat & Khandeshwar evaporation ranges from 85% to73% which is very high. Rest of the projects has 50 to 22% evaporation losses. The Project Authorities should plan maximum irrigation in Rabi season to avoid extra evaporation losses in HW as well as measurements of evaporation losses should be realistic.

CADA Pune: Yeralwadi project has 27% evaporation losses. It has been decreased by 3% as compare to last year 30% evaporation losses.

PIC Pune: In Khairy, Sina, Ranand, Tisangi, Mhaswad and Andhali projects the average evaporation losses is 20%. In Nher project 103% evaporation losses due to less availability of live storage. The project authorityare advised to explore the current procedure and rectify it where ever necessary so as to have precise data.

Deficit Plangroup:

CADA Aurangabad: Karpara has 102% evaporation losses which is very high (availability is 34%), Upper dudhana, Galhati & Masoli has evaporation losses ranging from 54 to 72% which are very high. Rest of the projects has evaporation below 41%. In Purna Nevpur project having very less evaporation only 3% in spite of having 100% availability which is unbelievable. The project authority should be careful for measurements of evaporation losses according to norms. Pan Evaporimeter to be installed in the periphery of the projects for most accuracy.

CADA Beed: Devarjan project has 74% evaporation losses which are very high (availability 23%), Bindusara & Mahasangvi has evaporation losses to the extent of 22 to 23% which are within the permissible limit, rest of the projects crossed the permissible limit ranging from 30 to 50%. The project authority should be vigilant and utilize the water efficiently. The calculation of evaporation losses should be verified by taking correct Mesh factor (1.144 instead of 1.444) & seasonal factors as per Government Resolution.

AIC Aurangabad: Wakod has 59% evaporation losses which is high.

NIC Nanded: All the five projects namely Karadkhed, Kudala, Kundrala, Mahalingi & Pethwadaj has the evaporation losses ranging from 18% to 35%

AIC Akola: Uma, Morna, Nirguna & Mas these projects had evaporation ratio more than 20%. Dnyanganga had evaporation ratio 14% which was low among all medium projects under this circle where as Morna project had exceptionally very high i.e. 47%.

BIPC Buldhana: Pentakali,Mun, Torna had very high evaporation ratio with compare to live storage on 15th oct which is above 20%.Only Utawali project had 15 % .

UWPC Amravati: On Chandrabhaga project evaporation ratio was low as 7% & Purna project had high as 24%..

CADA Jalgaon: In Tondapur & Bhokarbari projects, the actual evaporation seems to be 76% & 32% of the live storage as the availability in reservoirs in these projects is 21% & 48% respectively.

CADA Nashik: In Haranbari project, the actual evaporation is 127% more than the provision in the project report. Hence the project authority is required to assess the evaporation correctly.

JIPC Jalgaon: The percent evaporation of Bahula project under JIPC Jalgaon is 122 % of available live storage as the water availability was less (13%).

Normal Plangroup:

CADA Aurangabad: All the projects has higher evaporation losses ranging from 34% to 71%.

Project authorities are advised to look into the calculations of evaporation losses and plan irrigation programme carefully to avoid losses.

NIC Nanded: In Dongargaon and Nagzari projects the evaporation losses are quite more than permissible i.e. 32 & 33% respectively, where as it is 18% in Loni within the range.

AIC Aurangabad: In Shivna Takli evaporation losses are 20% which are within the permissible limit.

AIC Akola: Very high evaporation ratio of all the projects under this circle

Koradi, Borgaon, Lower pus, Waghadi, Goki, & Saikheda which were above 30%. Borgaon & Goki exceptionally very high 80%, 71% repectively. Evaporation data of Koradi project should be carefully checked by field authorities as evaporation ratio appears to be tremendous high.

WIC Washim: Ekbhurji project under this circle had high evaporation ratio i.e above 30 %.

YIC Yeotmal: Adan project evaporation ratio data should be verified by field authorities as the ratio appears to be tremendous high.

CADA Jalgaon: In Abhora project, though the actual evaporation is 25% of live storage, it is exceeded (196%) to the provisions of project report. As such it is required to assess the evaporation precisely.

CADA Nashik: In Alandi project, though the actual evaporation is 16% of available live storage it has been exceeded to project provision (152%).Similarly in Mandohol project the actual evaporation is 25% of live storage but it is exceeded to project provision (151%). Hence it is required to assess the evaporation precisely.

JIPC Jalgaon: The percentage of evaporation in Bhokar & Mor projects are 21% & 15% respectively. The evaporation in Bhokar project is within the limit of projected evaporation but in case of Mor project it has been exceeded (203%) to the project provision. The project authority is required to assess the evaporation correctly.

PIC Pune: In Kasarsai and Wadiwale projects the evaporation losses are 16% and 15% respectively but in Nazre project it is 32% which is very high.

CADA Pune: In Visapur project the evaporation losses is 32% which is very high as compare to last year’s evaporation losses of 18%.

Surplus Plan group:

CADA Nagpur: Evaporation percentage on all projects was on an average 31%. The same was exceptionally high & low. On Bagheda 699%, Chandpur 1517%, and Sangrampur 140%. It was comparatavely low on Managad 22%. All above percentages are more than 100% as evaporation losses were mainly from dead storage.

CIPC Chandrapur: Evaporation percentage on all projects was on and average 42 %. The same was exceptionally high on Chandai 403% & Labhansarad 44%. It was low on Panchadhara 14%

Abundant Plan group:

SIC Sangli: Percentage evaporation on different projects under this circle is to the tune of 7 to 10% only, except Shankh project, which has percentage evaporation 58%.

TIC Thane: Percentage evaporation on Rajanalla complex is 8%.

CIPC Chandrapur**:** On Naleshwar and Ghorazari, evaporation is very higher site i.e. 173% & 187% overall evaporation is 102%

NKIPC Thane: Hetwane project has 8% of evaporation losses this year. It is remains same as compare to last year.

KIC Ratnagiri: Natuwadi project is having 4% of evaporation losses this year. It is increased by 1% as compare to last year.

Indicator-III: Target & Achievement of Irrigation potential utilization.

Highly Deficit Plan-Group:

CADA Solapur: Achievement of irrigation potential compared with PIP provisions of medium projects are as under:-

Asti (19%), Hingni Pargaon (88%), Mangi (79%), Bori (81%), Ekrukh (82%) and Jawalgaon (71%).

CADA Beed: Sakat and Ramganga have achieved a very high percentage i.e., 665 and 439 this shows PIP is not realistic, as area considered for planning is very less compared to the actual irrigated area. Kambli & Kadi project has achieved 80% & 69% as against PIP respectively. The rest of projects have achieved very less and some projects have no PIP figures. The Project Authorities are advised to prepare & sanctioned the PIP well before the season starts to act accordingly so as to use the water judiciously.

CADA Pune: In Yeralwadi project 80% area has been brought under irrigation this year. Last year it was only 30%.

PIC Pune: For five projects average area under irrigation is 59%. In Nher and Andhali projects area under Irrigation is nil due to less availability of storage. Project authority is advised to take more efforts to enhance the area under irrigation.

Deficit Plangroup:

CADA Aurangabad: In Masoli, Anjana Palshi, Sukhana, Gadagad ,Girija & Lahuki projects have attained targets 432%, 303%, 156%,153%,146% &125% respectively which is more than planned, this shows PIP is not realistic. Kalyan Girja & Jivrekha have attained 95% & 90% of planning. Pir Kalyan, Purna Nevpur and Upper Dudhana have achieved lower target of 73%, 62% and 56% respectively. Rest of have attained a low achievement between 37% to 21%. While some of the projects due to lesser availability have no PIP, therefore their achievement with respect to PIP is also Nil. Project authorities are advised to prepare realistic PIP considering all sources as there is huge variations in the results.

CADA Beed: As PIP is not prepared for Masalga, Sangmeshwar and Raigavan projects achievement with respect to PIP shows to zero though there is actual irrigation done. In Sindhaphana, Bindusara & Mahasangvi projects achievement is 250%, 232%, 153%, against the PIP target this shows PIP is not realistic as well as lack of irrigation planning for available water. Rui, Sakol, Devarjan, Belpara, Terna, Tiru & Renapur has achieved nearby PIP target. Rest of the projects has achieved a low target below 50%. Project authority is advised to prepare realistic PIP considering all sources of water use.

AIC Aurangabad: Due to lesser availability PIP is not prepared for Wakod project.

NIC Nanded: In Karadkhed achievement with respect to PIP is zero in spite of actual irrigation done, In Kundrala achievement is 3 times of PIP where as Mahalingi & Kudala have achieved PIP target, Pethwadaj has attained 46% of target. Project Authorities are advised to prepare realistic PIP considering all sources well before season starts and follow it fully.

AIC Akola: Total actual area irrigated on projects under this circle was 3920 ha against planned area of 6527 ha in PIP (60%). Achievement on Dnyanganga was appreciably satisfactory (210%) and same on Morna, Mas &Paldhag were (90%,

81%& 79%) respectively. Area irrigated on Nirguna (48%) shahanoor (26%) appreciably less than the targated PIP. Reasons for low potential utilization on this project needs to be sorted out for necessary action as mentioned previously. Positive efforts should be taken by project authority to achieve the target.

BIPC Buldana: Achivements on Pentakali Man & Torna were 111%, 75 % &74% respectively. Where as on Utavali, it was 381% against the low target set in PIP.

UWPC Amwarati: Achivements on Chandrabhaga & Purna was '0' because of the non provisions of target in PIP though the storages were 100% & 93% respectively

CADA Jalgaon: In Jamkhedi project, the actual area irrigated was 51% as compared to that of PIP. The project authority is required to improve the performance.

CADA Nashik: In all the projects, achievement of actual area irrigated is exceeded (101 to 183%) to total area considered in PIP.

JIPC Jalgaon: Mostly the project has achieved the target.

Normal Plangroup:

CADA Aurangabad: The achievement in Kolhi and Dheku projects is 141% and 131% where as in Ambadi project it is 81% of PIP target.

NIC Nanded: The achievement in projects namely Nagzari, Loni and Dongargoan is ranging in between 46% to 68% of PIP which is poor.

AIC Akola: Achievements on projects under this circle were as mentioned below.

Borgaon 28%, Goki 48%, Lower Pus 45% Saikheda 41% Waghadi 16% WIC Washim: Sonal & Ekbhurji projects under this circle had 0% achievements. Sonal project had 0% storage but in case of Ekburji project it could not be appreciated that why the target set in PIP was 0 though the storage was 78%.

Actual irrigation on Ekbhurji project is 461Ha.

YIC Yeotmal: Actual area irrigated on Adan project was 29Ha against the set target o due to 6% storage only. On Nawargaon project was 74%of the area contemplated in PIP though the storage was 99%.

CIPC Chandrapur: Area irrigated on Amalnalla (0%) Pothra (75%) Dham project 60% compared with last, performance of Amalanala is very very poor one.

CADA Jalgaon: Out of 7 projects the target is nearly achieved in 5 projects. Improvement is required in the performance of Malangaon Project. In Abhora & Aner projects the project authority not reported the figures of area planned as per PIP.

CADA Nashik: Mostly all the projects have achieved the target (71% to 120%).

JIPC Jalgaon: In Bhokar (Mangrul) Project, there was no irrigation. However in Mor project, 53% target is achieved.

CADA Pune: In Visapur project the 95% area is brought under irrigation this year as that of PIP.

PIC Pune: In Nazre, Wadiwale and Kasarsai projects more than PIP area is brought under irrigation this year.

Surplus Plan group:

CADA Nagpur: Area irrigated on Bodalkasa, BetekarBothli, Sorna, Chulband, Managad, Khairbanda, Umri, Kolar and Rengepar is in the range of 91% to 100% It shows that, on these projects, PIP was prepared with under- utilization of available water.

CIPC Chandrapur: On Chandai, Chargaon & Labhansarad percentage of area irrigated to area considered in PIP was 124, 179 & 79 respectively. In case of Chargaon, PIP appears to be prepared with under- utilization of available water.

Abundant Plan group:

SIC Sangli:- Achievement of irrigation potential on Chitri project is (90%) against the provision made in PIP whereas on Kadvi (28%), Kumbhi (0%), Chikotra (148%), Kasari (46%) Patgaon (61%), Morna (137%), Yeotimasoli (244%), Jagamhatti (118%), Sidhewadi (95%).

TIC Thane:- Achievement of irrigation potential on different projects compared with the PIP provisions are as under:-

Rajanala complex (98%), & Wandri (57%).

CIPC Chandrapur: Ghorazari & Naleshwar are Kharif paddy grown projects. Area irrigated is more that planned in PIP. In last year, No PIP figure are reported in water audit this year.

NKIPC Thane: In Hetwane project only 25% area is brought under irrigation. Project authority are advised to take more efforts to enhance the area under irrigation.

KIC Ratnagiri: Due to heavy leakage through canal system. In Natuwadi project 4% area is brought under irrigation this year.

Indicator-IV: Water Use Pattern

Highly Deficit Plan-Group:

CADA Solapur: On Ashti, Hingni (Pargaon), Mangi, Ekrukha, project most of irrigation water use on reservoir lift only, and there were no provisions made in PIP.

CADA Beed: The utilization on reservoir lift is more than canal flow in most of the projects such as Chandani, Benitura, Khandeshwar. Ramganga, Sakat, Khasapur, Banganga, Harni, Kada, Khandala, Talwar, & Ruti where as in Turori it is only by reservoir lift being lesser availability. The Project Authorities should be vigilant and use water judiciously in all the seasons. Efforts to be taken to improve irrigation through canals by special measures.

AIC Akola: More than36% of available water was used on canal for Rabi & HW seasons. On Nirguna Shahanoor, Morna, Paldhag & Mas projects, Irrigation water use was predominant in Rabi season.

BIPC Buldhana: On Pentakli Mun, Torna project, water use on canal in Rabi season was predominant, where as on Utawali, HW season is predominant.

UWPC Amwarati: On Chandrabhaga & Purna project, water use in Rabi as well as in HW is similar.

CADA Pune: In Yeralwadi project only Rabi water utilization is 10.40 Mcum as against 17.48 Mcum available water.

PIC Pune: In Khairy, Sina, Nher, Mhaswad, and Tisangi project the most of water use is in Rabi and H.W. season.

Deficit Plangroup:

CADA Aurangabad: In Galhati, Pir Kalyan, Kalyan Girija & Karpara the utilization of water by reservoir lift is more than canal flow, Most of the projects have nil irrigation in HW. Anjana Palshi, Masoli, Ajantha Andhari & Dhamna having utilization only by reservoir lift .In Lahuki, Jui & Khelna inspite of having live storage 81%,43% & 30% respectively no irrigation by Reservoir lift .

CADA Beed: Sakol, Tiru, Gharni, Mahasangvi, Terna, Rui & Whati have more reservoir lift than canal irrigation. In Masalga, Devarjan, Renapur, Sangmeshwar & Raigavan have only reservoir lifts. There is a trend towards irrigation through reservoir lift only in most of projects; the Project Authorities are advised to use the water judiciously in command area.

AIC Aurangabad: In Wakod project out of 2.03 mm^3 live storage only 0.17 mm^3 water utilized in Rabi season. Rest of the water is lost in evaporation.

NIC Nanded: In Kundrala water use is more by reservoir lift than on canal. Mahalingi and Petwadaj have only reservoir lift.

CADA Jalgaon: In all the ten projects the utilisation of available water is quite good.

CADA Nashik: In Kelzar project, the major water use (56%) is on river lift.

JIPC Jalgaon: In Bahula project, the major water use (46%) is on reservoir lift.

Normal Plan Group:

CADA Aurangabad:- Kolhi has more water use by reservoir lift than on canal. Rest of the projects has even distribution. Though lesser availability of water, utilization by canal and reservoir lift seems to be proportionate in Dheku project.

NIC Nanded: In all the three projects viz., Loni, Dongargaon & Nagzari utilization by reservoir lift is negligible in spite of 98% availability of storage. It shows that Project Authorities are not watchful towards water utilization by Reservoir lift in submergence area of the projects.

AIC Aurangabad: In Shivna Takli in spite of having 96% water availability very less utilization for irrigation Rabi & H.W. through canal and negligible by reservoir lift.

AIC Akola: Water use on Borgaon, Lowerpus, Goki, Waghadi & Saikheda projects had comparatively more irrigation water use in Rabi season.

WIC Washim: On Ekbhurji projects under this circle had predominant water use in Rabi season along with reservoir lifts.

YIC Yeotmal: Moreover 34% of available water was used for irrigation in Rabi on Adan project.

CIPC Chandrapur: on Amalanalla, Dham, & Pothra major projects most of the irrigation done on canal an Rabi season. About 21% water was used on Dham & Pothra for lift irrigation on reservoir.

CADA Jalgaon: In Abhora, Aner, Malangaon, Panzara & Sonwad projects, the major water use (flow irrigation) is in Rabi season (46%, 33%, 54%, 53% & 59% respectively).

CADA Nashik: In Bhojapur & Mandohol Projects, the predominant use in flow irrigation is in Rabi Season (50% & 44% respectively). However, In Ghatshil paragon project 57% utilisation is on reservoir lift and in Waldevi project 30% utilisation is for NI use.

JIPC Jalgaon: In Bhokar (Mangrul) project, 40% utilization is in H.W. season. In Mor project, major utilization (37%) is in rabi season by flow irrigation.

CADA Pune: In Visapur project the most of water use is in Rabi and H.W. by canal.

PIC Pune: In Nazre and Kasarsai project the most of water use is in Rabi season. In Wadiwale projects there is only lift irrigation utilization.

Surplus Plan group:

CADA Nagpur: In Bagheda, Betekar (Bothli), Bodalkasa, Chandpur, Chorkharamara, Sangrampur, irrigation water use is predominant in kharif season.

Chandrabhaga, Kanholibara, Khekranalla, Kolar, Makar Dhokada, Pandhrabodi, had more irrigation water use in Rabi season.

Irrigation water use in HW season is appreciable on Chulband, Kanholibara, and Khairbanda & Khekranalla.

There is no water use for non irrigation on all projects except Chandrabhaga, Kolar, Makar Dhokada, and Pandharabodi

CIPC Chandrapur: 55% of available storage was utilised for catering water mainly in Rabi season.

Abundant Plan group:

SIC Sangli: Trend of water use for irrigation by river lift. PIP made for irrigation on canal in rabi and H.W. seasons, and almost on all the medium projects i.e. Chtri (48.25 MM^3), Kadvi (29.89 MM^3), Kumbi (70.82 MM^3) Chikotra (36.11), Jagamhatti (31.47 MM^3) Kasari (79.92 mm^3), Patgaon (77.73 MM^3) Krishna –(Khodsi) (68.04 mm^3) use of water for irrigation done through river letting, and then water lifting from river.

TIC Thane: On Rajnala complex, and on Wandri projects most of the water use for irrigation in Kokan season (15 Nov. to 31 March) and very few part of irrigation water used in H.W. season.

CIPC Chandrapur: On Ghorazari project, the available live storage is utilised in Kharif and Rabbi Seasons. However, it is predominant in kharif season. On Naleshwar project 72% of available storage is utilised for kharif season.

NKIPC Thane: In Hetwane project most of water use for non irrigation purpose (37.099 Mcum).

KIC Ratnagiri: In Natuwadi projects the most of water use is in Rabi season (21.972 Mcum).

Indicator-V: Irrigation System Performance (Canal)

Highly Deficit Plan-Group:

CADA Solapur:- (Irrigation efficiency ha/mm3) performance of different medium projects are as under.

Project	Rabi	H.W.	Remarks
Ashti	165	111	Irrigation on reservoir lift
Hingni(Pargaon)	173	99	Canal
	145	198	Reservoir
Mangi	155	101	Canal
	211	166	Reservoir lift
Ekrukh	180	104	Reservoir lift
	137	-	Canal
Jawalgaon	169	159	Reservoir lift.
	-	108	Canal
Bori (Solapur)	200	175	Reservoir lift.

CADA Beed: In Ruti, Banganga, Ramganga, Khandeshwar, Chandani, Khasapur & Sakat have attained the State norms in Rabi season i.e., 150 ha/Mcum. Khasapur too has attained good efficiency. Talwar, Kada, Kadi, Kambli, Mehkari, Kurnoor and Benitura have low ISP in Rabi season. Benitura has very low ISP i.e. 43 ha/Mcum. In Khandala ISP of canal in Rabi is very high i.e. 432 ha/Mcum as compared to ISP by Reservoir lift (192 ha/Mcum). This shows that utilization by canal & Reservoir is not actually measured. Ruti, Kada, Mehkari; Kurnoor & Benitura have low ISP in HW season.

CADA Pune: In Yeralwadi project the irrigation system performance on canal in Rabi season is 50 ha/Mcum which is low as compare to last years value of 69 ha/Mcum.

PIC Pune: In five projects Khairy, Sina, Ranand, Mhaswad, &Tisangi the average Rabi irrigation system performance is 117 ha/Mcum and H.W. it is 70 ha/Mcum which is low as compare to last years performance.

Deficit Plangroup:

CADA Aurangabad:- Galhati, Girija, Lahuki, Gadadgad, Pir Kalyan, & Purna Nevpur have attained ISP above State norms i.e. 150ha/Mcum. Lahuki has ISP 359 ha/Mcum in Rabi which is too high, Sukhana & Upper Dudhana have low ISP in Rabi . Lahuki & Gadadgad have attained state norms in HW. Lahuki in fact has 570 ha/Mcum & Gadadgad has 219 ha/Mcum.The rest of projects have no utilization by canal in HW. Higher values of ISP indicates that measurements of actual water use shown to lower side by the Project authorities. Project authorities are advised to be more careful in measurements of water use as well as irrigated area.

CADA Beed:- Sindhapana, Tiru & Terna are the only projects which have attained its state target for this year in Rabi, Sindhapana has attained 224 ha/Mcum &Tiru has attained 293ha/Mcum maintaining there last years performance . Bindusara, Gharni, Whati & Tawarja have attained quite good ISP(above 100ha/Mcum) compared to last years very low performance . Mahasangvi & Bindusara has attained only 74 & 94 ha/Mcum against last years 77 & 124 ha/Mcum. Tawarja and Sangmeshwar have attained state target ISP for canal in HW. In fact Sangmeshwar has attained high ISP

of 284ha/Mcum in HW. Gharni & Terna have low ISP for canal in HW. Rest of the projects has no utilization through canal system. The Project authorities are advised to use the water judiciously so that justice may given to all the farmers on all the available systems of the projects.

AIC Aurangabad: Wakod project has ISP of 360 ha/cum in Rabi which is higher indicating inaccuracy of Project authorities in measurements of water.

NIC Nanded:- Kundrala, Karadkhed & Kudala are the projects to have attained state target for the Rabi ISP. Kundrala has attained 645 ha/Mcum higher ISP for Rabi. There is no utilization of water through canal either in Rabi or HW in Mahalingi & Pethwadaj projects. Kudala is the only project which has attained (111 ha/Mcum) state target for HW. The Project authorities are advised to use the total available water judiciously so as to achieve required ISP resulting increase in Irrigated area and production.

AIC Akola: ISP realised on shahanoor in Rabi & HW 65 & 14 respectively season very low against the State norm. Similarly on Morna & Nirguna project ISP realised in Rabi season were very low (33, 88). On Mas &Paldhag ISP realised comparatively better than above projects but low compared to state norm (Mas 118 in Rabi, Paldhag 108 in Rabi & 100 in HW season)

BIPC Buldana: ISP attained on Pentakli & Utawali project in Rabi season is above the state norm value in Rabi season (186, 195 respectively) but low to state norm in HW season on Utawali project (58). On Mun project in Rabi season (100ha/Mcum) On Torna (104 in Rabi, 68 in HW season) which is very low compared to the state norm.

UWPC Amaravati: ISP attained on Chandrabhaga & Purna were very low (35, 113 ha/Mcum in Rabi) compared to the state norm in Rabi.

CADA Jalgaon: In Manyad project, the performance in rabi season was low (69ha/Mcum) in-spite of two rotations. As per field officers, the low performance was due to major leakages through canal in km 0 to 7.

In Kanoli & Bhokarbari projects, (in spite of 3 & 4 rotations respectively in Rabi season) the irrigation system performance is below 60% of the Government norms. (115 Ha/Mcum & 68 Ha/Mcum respectively).

As per field officers, the ISP in Kanoli project is low due to old disnet system that too in pervious strata and scattered irrigated area. In case of Bhokarbari project, the ISP is low due to major leakages through the canal structures.

The project authority is required to be vigilant for improvement in the irrigation system performance in both the above projects.

CADA Nashik: In Kelzar project, the irrigation system performance in Rabi season is 159 Ha/Mcum inspite of two rotations.

JIPC Jalgaon: In Bahula project, there was no irrigation by canals.

Normal Plangroup:

CADA Aurangabad: Kolhi, Dheku, Ambadi & Tembhapuri projects have attained ISP to state norms in Rabi. Kolhi the only project in which irrigation through canal in HW is done & has ISP of 200 ha/Mcum.

NIC Nanded: None of the projects have attained state norms for Rabi in this plan group. Only Dongargoan project has attained 179 ha/Mcum ISP in HW where as it is reduced from 101 (2007-08) to 31 ha/Mcum (2008-09) in Loni project.

AIC Akola: ISP attained on following project i.e. Borgaon (154 ha./Mcum in Rabi), Goki 84 ha/Mcum in Rabi Lower pus (66 ha /Mcum in Rabi 37 in HW), Saikheda (60 ha/Mcum in Rabi 17 ha/Cum in HW), Waghadi (26 Ha/cum, were very low compared to state norm. except Borgaon .

WIC Washim: On Ekbhurji project under this circle had attained ISP in Rabi season 147 ha/Mcum which is just close to state norm.

YIC Yeotmal: ISP realised on Nawargaon project 86 ha/cum in Rabi season was low compared to state Norm.

CIPC Chandrapur: ISP observed on Amalnall & Pothra is Nil. this year compared with last year 100% reduced to the state target. ISP on Dham 76 ha/mm3 its Rabi and 342 mm3 in HW this performance is very good.

CADA Jalgaon: In Aner project, the average irrigation system performance of the canals is 150 ha/Mcum in Rabi season & 110 ha/Mcum in HW season. The performance of Right Bank Canal is very low as compared to that of Left Bank Canal. The ISP of RBC in Rabi and HW season is 49 ha/Mcum inspite of 5 rotations in each season. More attention should given by the project authority to improve the ISP of RBCanal.

In Sonwad project, inspite of 3 rotations in Rabi season on LBC the ISP is too low i.e. 64 ha/Mcum which is lower as compared to last year(68 ha/Mcum).

In Abhora project, in spite of 4 rotations in rabi season, the irrigation system performance was 88 ha/Mcum. The ISP of HW season was 144 ha/Mcum with two rotations. As per field officers, the performance is low due to demand received for irrigation was on scattered area.

CADA Nashik: In Mandohol project, the performance was as low as 71 ha/Mcum with 2 rotations in rabi season. As per field officers, the whole command of this project is in tail reach and the canal losses are to the tune of 80 to 85% resulting in low performance in rabi.

In Bhojapur project, the irrigation system performance was 98 ha/Mcum with 2 rotations in rabi season. The ISP is just improved as compared to last year (82 ha/Mcum with 2 rotations) .

The project authority is required to be more vigilant for improvement in the performance in above mentioned projects.

JIPC Jalgaon: In Bhokar project, there is no flow irrigation on canals. However in Mor project, the irrigation system performance in H.W.season is 72 ha/Mcum with 6 rotations .The ISP is too low as compared to Government norms. The project authority is required to be more vigilant for improvement in the performance.

CADA Pune: In Visapur project Rabi and H.W. season irrigation system performance comes to 209 ha/Mcum and 185 ha/Mcum which is very good.

PIC Pune: In Nazre project the Rabi season. Irrigation system performance comes to 179 ha/Mcum which is satisfactory.

Surplus Plan group:

CADA Nagpur: Over all performance ha/mm3 in kharip season is 416 in Rabi season is 163 & in H/W season is 186 performance is very good.

CIPC Chandrapur: Overrall ISP (ha/mm3) on projects Chandai, Chargaon, Labhansarad, Pakdigudam, Panchadhara complex is 273 in kharif, 83 in Rabi & No irrigation is H/W season.

Abundant Plan group:

SIC Sangli: (Irrigation Efficiency= ha/mm3) performance of different medium projects are as under:

Project	Rabi	H.W.	Remarks
Chitri	192	146	River lift Irrigation
Kadvi	129	82	River lift Irrigation
Kumbhi	119	65	River lift Irrigation
Chikotra	150	136	River lift Irrigation
Jangmhatti	174	189	River lift Irrigation
Kasari	115	101	River lift Irrigation
Patgaon	81	71	River lift Irrigation
Morna	119	141	Reservoir lift
	-	-	
Yeotimasoli	382	16	Canal
	145	15	Reservoir
Krishna canal	108	53	Canal
Khodsi Backweir	159	78	Reservoir lift.

On most of the projects, irrigation has been done by lifting water from Dam & letting in to river & then lifting from river.

TIC Thane: (Irrigation efficiency ha/mm3) performance of different projects are as under.

Project	Rabi /Kokan	H.W.	Remarks
Rajnalla complex	52	-	Canal
Wandri	30	-	Canal irrigation.

NKIPC Thane: In Hatwane project the rabi Irrigation system performance is 28 ha/Mcum which is very low. Project authority is advised to take efforts for improvement of performance.

KIC Ratnagiri: In Natuwadi project the Rabi Irrigation system performance is 3 ha/Mcum which is very low. Project authority is advised to take efforts for improvement of performance.

Indicator-VI: Percentage of Planned and Actual Non-Irrigation Use.

Highly Deficit Plan-Group:

CADA Solapur: Percentage of NI use compared to projected use as well as PIP provision on different projects are as under:-

Projects	Project provision (%)	PIP provision (%)
Ashti	0	14
Bori (Solapur)	17	15
Hingni(Pargaon)	120	103
Ekrukh	64	0
Jawalgaon	0	0
Mangi	0	103

CADA Beed: In Benitura & Banganga NI use is as per project report and PIP too, where as it has 30% variations in Turori & Chandani with provisions in project report. In Kada project NI use is against the project report as well as 7 times of PIP.

CADA Pune: In Yeralwadi project the non irrigation water use is 91% of PIP.

PIC Pune: In Nher project the non irrigation use is as per PIP provision. In Sina projects 26% N.I. Use of PIP provisions but in Khairy, Andhali Mhaswad, Ranand and Tisangi the N.I. Use is Negligible.

Deficit Plangroup:

CADA Aurangabad: Girija the only project having provision in project report for NI use and its percentage with respect to PR & PIP is 50 & 151% respectively. Other projects namely Ajantha Andhari, Jui, Khelna, Sukhana, Purna Nevpur, Pir Kalyan have NI use nearly to PIP provision, where as it is less than PIP in Masoli (30%) & (50%) in Upper Dudhana projects .

CADA Beed: Most of the projects under this circle having no provision for NI use except Raigavan, Renapur, Tawarja & Terna. In case of Raigavan actual NI use is 7 times that of projected provisions and against no provision in PIP, project authorities are advised to watch NI use as it is increasing year to year. Other projects namely Bindusara, Gharni, Mahasangvi, Masalga, Sakol, Sindhaphana, Tiru & Whati have their NI use ranging from 72 to 100% of PIP provisions.

AIC Aurangabad: Wakod has no actual NI use though there is provision of 1.95 Mcum in project report.

AIC Akola: Actual non irrigation use on Shahanoor, Mas, Paldhag & Uma were high compared to the quota reserved in PIP of the project. Same were very low compared to the provisions made in PIP on Morna, Nirguna & Dnyanganga projects. Project authority should be more careful regarding NI provisions while framing the PIP so that Actual non irrigation use should be correct to the provisions to the maximum extent and should not affect the water availability for irrigation.

BIPC Buldhana: Actual Non-irrigation use on Mun project is 66% & Pentakli project 144% of Quota reserved in PIP of the project.

CADA Jalgaon: In Tondapur project, the actual NI use is 302% more than that of PIP. However in Bori project, the actual NI use is only 37% than that considered in PIP.

Proper care should be taken while preparing PIP so that there will not be much difference in actual NI use and that considered in PIP.

CADA Nashik: In Haranbari and Kelzar projects, the actual NI use is 94% & 111% as compared to PIP provisions.

Normal Plangroup:

CADA Aurangabad: Ambadi and Kolhi have utilization in spite of no provision in project report. Kolhi and Dheku have more utilization than PIP. Dheku has 10 times utilization of PIP. More realistic figures are expected from project Authorities.

AIC Aurangabad: Shivna Takli has 1.5 Mcum achive NI use against 3.79 Mcum provision in project report & Nil in PIP.

NIC Nanded: All the three projects namely Dongargaon, Loni & Nagzari has no provision in project report for NI use, only Nagzari project has actual NI use nearest to PIP provision.

AIC Akola: Actual non irrigation use on Koradi project 104% Waghadi 124% of PIP, where as it was very low than PIP provisions on Lowerpus,&Saikheda projects.

WIC Washim: On Sonal project under this circle non irrigation use was 75% of PIP provisions.

YIC Yeotmal: On Adan & Nawargaon projects NI use was 26%, 59% respectively of PIP provisions.

CIPC Chandrapur: Actual non irrigation use on Pothra 85% of the quota reserved in PIP of the project. Low utilization of water against NI reservation curtails the water availability for irrigation. There fore, more attention is needed at project level while reserving water storages for NI use in PIP

CADA Jalgaon: In Suki project (Suki Pickup weir), the actual NI use is 57% than that anticipated in PIP.

CADA Nashik: In all the projects, the actual NI use is varies from 83% to 100% as compared to PIP provisions.

Proper care should be taken in case of Suki project while preparing PIP so that there will not be much difference in actual NI use and that considered in PIP.

CADA Pune: In Visapur project 96% utilization of N.I. provisions.

PIC Pune: In Nazre project of N.I. use is 98% this year as compare to PIP provisions.

Surplus Plan group:

CIPC Chandrapur: Actual NI water use under this circle overall projected & percentage with report to PIP is Nil.

Abundant Plan group:

SIC Sangli: Percentage of NI use compared to projected use, as well as PIP provisions on different project are as under:

Projects	Projected use %	PIP % provision
Chitri	133	109
Kadvi	0	178
Kumbhi	0	21
Chikotra	5	0
Jagamhatti	0	76
Kasari	0	0
Patgaon	0	0
Shidhewadi	0	78
Yeoti Masoli	0	100
Krisna canal & Khodsi back water	95	95

TIC Thane: NI use, on medium projects Rajnalla complex & Wandri is nil.

NKIPC Thane: In Hetwane project N.I. Use is more than PIP provision

KIC Ratnagiri: In Natuwadi Project non irrigation use is 99% of PIP provision.

Indicator-VII: Percentage of Balance Unutilized Water to Live Storage on 15th October.

Highly Deficit Plan-Group:

CADA Solapur: Percentage of unutilized water to the storage on 15th October, of different projects are as under:-

Projects	Mangi	Hingi (Pangaon)	Ekrukh	Ashti	Jawalgaon
% unutilized water	14%	31%	8%	0%	14%

CADA Beed: Almost all the projects have no unutilized water by June end, except Banganga & Ramganga which has 14% unutilized water.

CADA Pune: In yeralwadi project full utilisation of water is achieved this year.

PIC Pune: In Khairy, Mhaswad, Tisangi, Ranand, Nher and Sina projects 9 to 43% water remain unutilised. The project authority is required to take efforts for maximum utilization of water.

Deficit Plangroup:

CADA Aurangabad: Kalyan Girija & Anjana Palashi has 11.57% & 8% unutilized water by June end. Rest of the projects does not left unutilized water.

CADA Beed: Only Terna & Bindusara project has 8.5% and 2.5% unutilized water by June end.

AIC Aurangabad: Wakod has no unutilized water by June end.

NIC Nanded: None of the project has unutilized water by June end.

AIC Akola: Unutilized storage compared to 15th October storage on Paldhag project only was 10%

BIPC Buldana: Only on Utawali project unutilised storage was 21%, which was 64% previous year. Project authority should increase their positive efforts towards maximum utilisation of available live storage.

UWPC Amrawati: On Chandrabhaga & purna projects unutilised storages were 65% & 62% respectively. It appears that project authority had not taken efforts for maximum utilisation of available storage.

CADA Jalgaon: Generally in all the projects there is no unutilised water balance at June end.

CADA Nashik: In Kelzar project, the unutilised water was 5% at June end.

Normal Plangroup:

CADA Aurangabad: Ambadi & Tembhapuri project has 15% and 13% unutilized water by June end. Rest of the the projects has no unutilized water.

AIC Aurangabad: Shivna Takli has 19% unutilized water by June end.

NIC Nanded: Loni project have 21% unutilized water by June end where as in Dongargaon & Nagzari has nearly 2% of unutilized water.

AIC Akola: Unutilised storage percentage on most of the projects under this circle was 0%.

WIC Washim: On Ekbhurji project under this circle unutilised storage percentage was 10%.

YIC Yeotmal: On Nawargaon project unutilised storage percentage was 17 % during 2008-09.

CIPC Chandrapur: Percentage of unutilized storages compared to 15th October live storage in case of Amalnalla & Dham project under CIPC Chandrapur was 0 & 10% respectively.

NIC Nagpur: On Jam & Kar water has remained balance. i.e.27% & 7% repectevely.

CADA Jalgaon: In Abhora & Suki projects, the unutilised water at June end was to the tune of 20% & 28% respectively.

CADA Nashik: In Waldevi project, the unutilised water at June end was to the tune of 10% .

JIPC Jalgaon: In Bhokar (Mangrul) and Mor projects, the unutilised water at June end was to the tune of 57 % and 37 % respectively.

The project authority is required to utilize the available water fully so as the unutilized water at June end will be as minimum as possible.

CADA Pune: In Visapur project full utilization is achieved this year.

PIC Pune: In Nazre, wadiwale and kasarsai projects full utilization of water is obtained this year.

Surplus Plan group:

CADA Nagpur: Percentage of unutilized storages compared to 15th October live storage Wana 5.42 Chorakhmara 7.92% Projects authorities may explore the project wise reasons for under unutilisation of water storages.

Abundant Plan group:

SIC Sangli: Percentage of unutilized water on different projects are as under:

Projects	Chitri	Kodri	Kumbhi	Chikotra	Kasari	Pategaon
% unutilized water to the live storage	0	23	1	24	13	25

TIC Thane:- Percentage of unutilized water to the live storage on 15h October on different projects are as under:

Projects	Rajnalla complex	Wandri
% unutilized	0% Electricity generation project and multi use	5%

CIPC Chandrapur: Percentage of unutilized storages compared to 15th October live storage in case of Naleshwar was (0%).

NKIPC Thane: In Hetwane 53% water remains unutilised.

KIC Ratnagiri: In Natuwadi 1% water remains unutilised.

Indicator IX: Actual cropping pattern.

Highly Deficit Plangroup:

CADA Beed: Most of the projects have maximum irrigation in Rabi crops. Kambli & Kadi & Banganga has 100%, 96% & 93% Rabi crops. Mehkari & Ruti have more than 80% Rabi crops. Rest of the projects has more than 60% Rabi crops.

CADA Pune: In yeralwadi project the major irrigation crops are in Rabi 98% and Perennial 2%.

PIC Pune: In Seven projects most of crops are in Rabi and H.W. Seasons.

Deficit Plangroup:

CADA Aurangabad: In this plan group there is trend of projects having maximum Rabi crops i.e. above 80%.

CADA Beed: Gharni is the only project having 90% Rabi crops. Raigavan has 90% perennial crops. The trend for irrigation for Rabi & Perennial over others is 50-50, in most of the projects.

NIC Nanded: Most of the projects have more than 50% Rabi crops, very negligible area of perennial crops are seen in most of the projects.

AIC Aurangabad: Wakod has 100% Rabi crops..

AIC Akola: On all 7 projects under the circle, Rabi seasonal is predominant (71 to 98 %). On, Morna, Dnyanganga & Paldhag Two seasonal & perennials were irrigated on 2 to 15% and the perennials just high on Shahanoor project (16%).

BIPC Buldana: Rabi seasonal on Mun, Torana & utawali were 52 to 96 % of the total irrigated area.

CADA Jalgaon: In Manyad, Kanoli, Bori, Jamkhedi and Burai projects, the major percentage of irrigated crops (56 to 99%) was under rabi season.

CADA Nashik: In Haranbari, Kelzar and Nagya sakya projects, the percentage of irrigated crops under rabi season varies from 79 to 84%.

Normal Plangroup:

CADA Aurangabad: All the three projects have maximum irrigation in rabi season.

NIC Nanded: Loni project has maximum rabbi crops i.e. 75%, Nagzari project has 44% rabi.

AIC Aurangabad: Shivna Takli has 75% Rabi crops

AIC Akola: Average cropping pattern observed under the circle was Rabi 71%with two seaeonals 20%. HW &Perennials were also predominant on, Lowerpus ,Waghadi, Goki &Saikheda .

WIC Washim: On Ekbhurji project under this circle Rabi seasonal was predominant along with HW seasonal 1%.

YIC Yeotmal: Rabi seasonal on Navargaon project was 67% & Two seasonal 33 % of the total irrigated area.

CIPC Chandrapur: Overall Rabi seasonal is predominant & perennial crops to few extent

NIC Nagpur: Overall Rabi seasonal are predominant & kharip seasonal to some extent. .

CADA Jalgaon: In all the projects, the major percentage of irrigated crops (47% to 61%) is under rabi season.

CADA Nashik: In Adhala, Bhojapur, Mandohol and Ghatshil Pargaon projects,59%, 80%, 94%, and 80% crops are irrigated in rabi season respectively. However, in Alandi and Waldevi projects, the percentage of irrigated crops in rabi season was 34% and 50% respectively.

CADA Pune: In Visapur project 46% perennial crops are taken

PIC Pune: In Nazre project 99% crops are in Rabi season. But in Kasarsai and Wadiwale projects Kharif, Rabi and Perennial crops are taken.

Surplus plan group

CADA Nagpur: Average cropping pattern observed on projects under the circle

The kharif seasonals are predominant & Rabi seasonal to same extent.

CIPC Chandrapur: The Rabi seasonal are predominant & kharif seasonal to same extent;

Abundant plan group

CIPC Chandrapur: on Naleshwar & Ghorazari projects 100 % area was irrigated in Kharif.

Minor Projects

Indicator-I: Water Availability in Tanks

Highly Deficit Plan-Group:

CADA Solapur:- Over all percentage availability of water storage in M.I.Tanks is 70.09% of live storage capacity.

SIC Sangli:- Over all percentage of availability of water storages in M.I. Tanks under this plan group is 59.88% of live storage capacity.

CADA Beed: The average availability of water in reservoirs is 77% which has increased over last years 61%.

PIC Pune: Minor projects under PIC Pune are having 69% average water availability this year.

Deficit Plangroup:

CADA Beed: The average availability of water has increased to 72% from last years 61%.

CADA Aurangabad: The average availability has increased by 10% over to last years 49%.

NIC Nanded: The average availability has tally with last years 56%.

AIC Aurangabad: The average availability of water has 38 %.

AIC Akola: Water availability in AIC Akola deficit plan group was under 44%.

BIPC Buldhana: Live storages on all the projects were 51%.

WIC Washim: All projects under this circle had 44% storage on 15th October.

CADA Nashik: The average water availability is increased from 91% to 91.5% as compared to last year.

CADA Jalgaon: The average water availability is 60%.

Normal Plangroup:

NIC Nanded**:** The average availability of water has reduced to 22% in this year which was 61% for last year (2007-08).

AIC Akola: Average water availability in the projects under this circle was 41%.

BIPC Buldhana: Live storages on all the projects were22%

WIC Washim: All projects under this circle had 23% storage on 15th October.

YIC Yeotmal: The availability of water in minor projects under this circle was 61% in the year 2008-09.

UWPC Amaravati: Single M.I. project Chargad under this circle was 100% full during the irrigation year 2008-09.

CIPC Chandrapur: Due to satisfactory rain during monsoon average live storages in minor projects is in the range of 99 %.

CADA Jalgaon: Average water availability is reduced from 97% to 70% as compared to last year.

CADA Nashik: Average water availability is 97% to 86% as compared to last year.

PIC Pune: Minor projects under PIC Pune having average 83% water availability this year.

CADA Pune: The availability of water in minor projects is 84% this year.

Surplus Plan Group:

CADA Nagpur: Due to low rains during monsoon, average live storages built up in minor projects were 90% only.

CIPC Chandrapur: average storage in projects under the circle was 99%

Abundant Plan group:

SIC Sangli and TIC Thane: Over all percentage of availability of water storages in M.I. tanks, are 96.66% & 98.56% respectively to its live storage capacities.

CADA Nagpur: Due to low rains during monsoon, average live storages built up in minor projects were 95% only.

CIPC Chandrapur: Due to satisfactory rain during monsoon average live storages in minor projects was 91 %

NKIPC Thane: The average water availability is 71% this year.

KIC Ratnagiri: The average water availability is 93% this year. Last year it was 91%.

CADA Pune: The water availability this year is 88%

Indicator-II: Percentage of Actual Evaporation to Live Storage (15th October).

Highly Deficit Plan-Group:

Average percentage evaporation in M.I. storages as under:

CADA Solapur: 34.02% & under SIC Sangli 27.48% respectively.

CADA Beed: The average evaporation of the Minor projects is increased to 29%, nearly double than last year (2007-08)

PIC Pune: The percentage of evaporation is 19.4% which is more than last year.

Deficit Plangroup:

CADA Beed: The average evaporation of the Minor project is slightly reduced to 29% than that of 35% in 2007-08.

CADA Aurangabad: The average evaporation of the Minor projects is increased to 37% than that of 22% last year.

NIC Nanded: The average evaporation of the Minor projects (24%) is nearly tally with last year value26%.

AIC Aurangabad**:** The average evaporation of the Minor projects is 50% of live storage. The Project authorities are advised to use the total available water judiciously with proper planning & watch.

AIC Akola, BIPC Buldhana & WIC Washim: In Minor projects under these circles, the rate of evaporation was high i.e. 38% 26% & 25% as evaporation was measured by using data of near by laboratory or on ad-hoc basis.

CADA Nashik: The average percentage evaporation to live storage is 20%.

CADA Jalgaon: The percentage of evaporation to live storage is 24%.

Normal Plangroup:

NIC Nanded: The average evaporation of the Minor projects is slightly reduced by 3% over last year value 27%.

AIC Akola, BIPC Buldhana, WIC Washim, YIC Yeotmal & UWPC Amaravati

The rate of evaporation in minor projects under these circle were very high as 40% ,26% ,28%, 29% & 22% respectively .

CADA Nashik: The percentage of evaporation to live storage is 17%.

CADA Jalgaon: The percentage of evaporation to live storage is 18%.

PIC Pune: The percentage of evaporation is 18.6% which reduces from 21% of last year.

CADA Pune: The projects are having evaporation losses of 29%.

Surplus Plan Group:

CADA Nagpur & CIPC Chandrapur**:** Percentage of Evaporation in case of minor projects in CADA Nagpur was comparatively high, that is 20% & for CIPC Chandrapur circle it is reasonable moderate i.e. 8% only.

Abundant Plan group:

Average percentage evaporation in M.I. Tank storages as under:

SIC Sangli	8.81%
&	
TIC Thane	12.04%

CADA Nagpur & CIPC Chandrapur**:** Evaporation percentage on projects under these circles was moderate i.e. 18 & 15% respectively.

NKIPC Thane: The minor projects are having percentage of evaporation losses 10.7% this year.

KIC Ratnagiri: Percentage of evaporation losses is 8.5% this year. Last year it was 9.5%.

CADA Pune: The projects under CADA Pune are having percentage of evaporation 16%.

Indicator-III: Water Use Pattern

Highly Deficit Plan-Group:-

CADA Solapur: Water use for irrigation in Rabi season and H.W. season on canal and mostly on reservoir lift.

SIC Sangli: Water use for irrigation in karif, rabi & H.W. season canal/river lift mostly on reservoir lift.

CADA Beed: Nearly 43% of available water was used for irrigation by reservoir lifts as it consists of storage tanks, where water use by only lift can possible. Since about 50% of available water is lost by evaporation & leakages Project authorities are advised to minimize these losses by proper use of water & with special measures or repairs wherever necessary.

PIC Pune: For minor projects water use for irrigation is in Rabi season through canal and reservoir lift.

Deficit Plangroup:

CADA Beed: Major water utilization on reservoir lift is (37%) & by canal flow is just 7 % for irrigation, where as 6% for NI use and remaining 50% lost by evaporation & leakages.

CADA Aurangabad: Water use by canal flow & Reservoir lift is nearly same i.e.25% and nearly 50% lost by evaporation & leakages out of total utilization.

NIC Nanded: Rabi water utilization 13% and reservoir lift 37% are the prominent water use for irrigation & negligible for NI, rest of water is wasted through evaporation & leakages.

AIC Aurangabad: One third of total available water is just utilized through reservoir lift, remaining being lost by evaporation & leakages. Project authorities are advised to minimize these losses by proper use of water & with special measures of repairs wherever necessary.

AIC Akola: In case of Minor projects water use is predominant in Rabi season. 12 % of storage was utilised through reservoir lift. 11% water was lost through leakages.

BIPC Buldhana: In case of Minor projects water use was predominant in Rabi season. Water use through reservoir lift was@ 25% where as 5 % water was lost through leakages.

CADA Jalgaon: The prominent use is in Rabi season on canal and on reservoir lift.

CADA Nashik: The prominent use is in Rabi season on canal and on reservoir lift.

Normal Plan group:

AIC Akola: Water use on Rabi on projects under this circle was predominant of the total live storage. 23% water was lost through leakages.

BIPC Buldhana: Water use was predominant in rabbi season on canal irrigation 18% and 35% on reservoir lift.

YIC Yeotmal: 34 % water was utilised for irrigation in Rabi season.through canal & reservoir lift

UWPC Amravati: 73% water was utilised in Rabi season through canal &reservoir lift

WIC Washim: Only16% water was utilised for Rabi &HW season.

CADA Nagpur: Water use is predominant i.e. 66% on projects in this circle under canal irrigation in Rabi season.

CIPC Chandrapur: Water use is 50% on projects canal irrigation in Rabi season in this circle.

CADA Jalgaon: The prominent water use is in Rabi season by flow irrigation.

CADA Nashik: The prominent use is in Rabi season on canal and on reservoir lift.

PIC Pune: Most of water use is in Rabi and H.W. season through canal and reservoir lift.

CADA Pune: Water use is predominant in Rabi season through reservoir lift and canal irrigation.

Surplus Plan group:

CADA Nagpur: Water use in Kharif was predominant (33%) with 31% water use for HW paddy in HW season.

Abundant Plan group:

SIC Sangli: Water use for irrigation in kharif, Rabi & H.W. seasons on canal and mostly on reservoir lift.

TIC Thane: Water use for irrigation in Kharif, Rabi & H.W. seasons on canal as well as on reservoir lift.

CADA Nagpur & CIPC Chandrapur**:** Projects under CADA Nagpur had utilised 68% water for crops in Rabi where as 68% water was used for irrigating crops in Kharif season on projects under CIPC.

NKIPC Thane: For minor projects maximum water use through reservoir lift and canal in Rabi and H.W. season.

KIC Ratnagiri: Maximum water use through canal in Rabi season.

CADA Pune: Maximum water use through canal in Rabi season.

Indicator-IV: Irrigation system performance. (Canal)

Highly Deficit Plan-Group:

CADA Solapur:- Water use efficiency i.e. ha/mm3 in Rabi season is 187.20 and in H.W. season is 128.03.

SIC Sangli: Water use for efficiency in karif, rabi & H.W. season it is mostly on reservoir lift.

CADA Beed: Performance of indicator though seems to better & improved compared to last year in both seasons, higher values in HW (283ha/Mcum) shows inaccuracy in water measurements.

PIC Pune: The projects are having good ISP in Rabi and H.W. Season

Deficit Plangroup:

CADA Beed: There is improvement over last years ISP (52 & 32ha/Mcum) by 118 & 55 ha/Mcum in Rabi & HW season respectively in this year2008-09.

CADA Aurangabad: The performance in all the three seasons achieved the state norms.

NIC Nanded: The performance of indicator in Rabi 111 ha/Mcum (2007-08) has improved to 163 ha/Mcum keeping unchanged in HW 88 ha/Mcum this year too.

AIC Aurangabad: The performance of indicator in Rabi 186 ha/Mcum which is good. No irrigation in HW.

AIC Akola & BIPC Buldana**:** ISP observed on canals in Rabi season on projects under these circles was 133Ha/Mcum. However it was too low i.e. 50 ha/Mcum in HW season.

CADA Jalgaon: The irrigation system performance in Rabi season is 144 Ha/mcum.

CADA Nashik: The Irrigation system performance in Rabi and HW season is 230 Ha/Mcum and 200 Ha/Mcum respectively.

Normal plan group:

AIC Akola BIPC Buldana, YIC Yeotmal UWPC Amravati & WIC Washim**:** ISP observed on canals in Rabi season & HW season on projects under these circles were 91 & 96 Ha/Mcum,(AIC Akola) 385 Ha/Mcum (BIPC Buldana) in Rabi only, 47 & 23 Ha/Mcum (YIC Yeotmal), 66 Ha/Mcum.(UWPC Amravati) in Rabi only, 79 Ha/Mcum.(WIC Washim) in Rabi only respectively appears to be in range of too low to too high.

CADA Nagpur: The performance indicator of all three season is good with 209, 141 & 234 ha/Mcum

CIPC Chandrapur: The performance indicator is less compare to state target in Rabi seasonal (103 ha/Mcum & in HW season 19 ha/Mcum.

CADA Jalgaon: The Irrigation system performance in Rabi and HW season are 74 ha/Mcum & 171 ha/Mcum.

CADA Nashik: The system performance in Rabi and HW season are 168 ha/Mcum & 101 ha/Mcum respectively.

PIC Pune: The ISP is good in all the seasons.

CADA Pune: The ISP in Rabi and H.W. season is good.

Surplus Plan group:

CADA Nagpur & CIPC Chandrapur: The system performance on the projects under these circles both in Rabi and HW season on canal was low i.e. 90Ha/Mcum & 48 Ha/Mcum and 64 ha/M/cum and 31 ha/Mcum respectively.

Abundant Plan group:

SIC Sangli: Irrigation system performans for irrigation in Rabi is 129.34 & in H.W. it is 112.60.

TIC Thane: Irrigation system performans in Rabi season is 66.01 and in H.W. season is 63.56.

CADA Nagpur & CIPC Chandrapur: The system performance on the projects under CIPC both in Rabi and HW season on canal was low i.e 80 Ha/Mcum & 46 Ha/Mcum respectively and for CADA Nagpur it is some what better that i.e. 110 ha/Mcum & 212 ha/Mcum

NKIPC Thane & KIC Ratnagiri: The projects under NKIPC Thane and KIC Ratnagiri are having low performance in all the seasons.

Chapter 4

Observations and Conclusions

After consolidating and analyzing the Water Accounts of 53 Major, 194 Medium and 1863 Minor Projects in the light of information supplied by the concerned field offices, the main observations are as listed below:

4.1 Observations

4.1.1 There is wide variation of water availability in the storage % in the reservoir from 5% to 100%. The live storage of Katepurna (18%), Arunavati (14%), Itiadoh (10%), Dina (5%) is very less. At State level water availability is 80% (av.)

4.1.2 There is wide variation from 3% to 211% in evaporation to live storage on 15th October. The projects Wan, Bhandaradara, Dudhaganga, Kal-Amba, Warna, is having 3% evaporation. The maximum evaporation percentage on Itiadoh 90%, Arunavati 86%, Katepurna 57%, Lowerterna 44%, Manjra 33%, Manar 32% and Upper Wardha 28% is observed. The Asola Mendha & Dina is having more than 100% evaporation. More percentages are observed as water availability is less.

At state level average % evaporation to live storage is 14%.

4.1.3 There is wide vatiation from 28% to 205% in evaporation with respect to projected evaporation. The maximum evaporation on Tulsi (205%), Ghod (177%) & Bhatsa (128%) is observed with respect to projected evaporation. At state level percentage evaporation with respect to projected evaporation is 72%.

4.1.4 Actual irrigation use on many projects was more than anticipated water use in PIP of the project. PIP of some projects is not prepared by project authorities. The following project authorities of the projects should take note of it.

1) Lower Wuna complex, 2) Kashyapi 3) Arunavati 4) Darna 5) Goutami Godavari 6) Mukane 7) Bagh 8) Itiadoh 9) Pench complex

Also for 37 Medium projects PIP is not prepared.

The less percentage of irrigation use on Wan 44%, N. M. C. express 22%, Pus 57% is observed.

In some projects achievement is more than 100% which shows that realistic PIP is not prepared on the basis of availability of water. The state level average is 116%.

4.1.5 Annual actual Area irrigated on canal, reservoir, and river lift (of Major and Medium projects) as compared to PIP is 113%.

4.1.6 Irrigation System Performance observed in Rabbi on some projects (Jayakwadi stage I & II, Girna panzan, Purna complex, N.M.C. express, Pus, Lower Wunna, Kadwa, N.M.weir, Bor, Upper Wardha, Kanher, Dudhaganga, Bhatsa, Kal-Amba, Surya etc.) is below the 60% of the state norms.

4.1.7 Irrigation System Performance observed in HW on Manjara, Girna+panzan, Gangapur, Upper Godavari complex, Ghod, Chaskaman, Upper penganga, Neera complex, Warna was satistactory as compared to state norms. On rest of the projects there is a scope to improve the performance.

4.1.8 Conveyance efficiency of canals on Bhandardara, N.M.weir, Chaskaman, Khadakwasala complex is less which indicated more transit losses on distribution system of the respective projects.

It is insisted that, project authorities should sort out the realistic reasons for more transit lossess take suitable action for improvement.

4.1.9 Percentage of Leakages on MI projects is excessively high. There are number of projects where total available water is lost in evaporation and leakages.

4.2 **Conclusions**

4.2.1 To have realistic evaporation data, it is suggested to verify the procedure adopted for collection of evaporation data and co-efficients used while calculating the loss. Where the evaporimeter are yet to be installed, the data collected at Water Resources laboratory from the same climatological zone can be used as an interim arrangement.

4.2.2 Proper action should be taken to calibrate the SWF at canal as well as distributory head, to have realistic data about irrigation water use.

4.2.3 Silt survey of Major projects of age more than 15 years may be taken in hand, so that net water availability (making suitable deductuion for silt) for different water uses can be worked out while preparing the PIP and water account shall also be more realistic.

4.2.4 More emphasis may be given to install Water meters on NI water supply as well as Lift Irrigation Schemes so that Lapses in flow measurements of these schemes will not affect the data about canal water use

4.2.5 Project authorities are advised to prepare action plan for securing improvement in Water use efficiency and reducing the transit losses.

4.2.6 Project authorities are required to concentrate on full utilisation of available water.

4.3 OBSERVATION ON SEDIMENTATION STUDIES

4.3.1 Sedimentation studies is carried out by MERI Nashik for 44 projects. Out of which 6 projects are hydro electric/ water supply/ private projects. Water audit of balance 28 Major & 10 Medium projects is received by this office.

After auditing, it is observed that, loss due to silt is shown in 8 Major projects only but reduction in live storage is not accounted for except in three projects.

4.3.2 The actual rate of siltation is more than designed rate of siltation (3.57 ha.-M/ 100 Sq.Km. /year) for Ujjani (9.09), Kanher (12.25), Panshet (33.25), Bhatghar (40.94), Karanjwan (20.12), Lower Wunna (13.60), Gangapur (11.48), Dhom (13.36), Majalgaon (20.34), & Lower Terna (16.25) projects.

Comments:

Field officers should reduce live storages according to reduction of live storages due to silt accumulation. At present, unnecessarily they are giving account of water quantum which is not with them.

Chapter 5

Water Auditing of Irrigation Projects at Administrative Levels – A State Preview

5.1 Conventional method of Water Audit

In the State Water Policy as well as in the Second MWIC Report, it has been categorically mentioned to plan the use of available Water Resources & implement the Irrigation Water Management considering basin or sub-basin as a unit. The commencement of process of Water auditing, the water account is analyzed circle wise only, referring a project in particular wherever necessary. As mentioned here before, the State's 25 sub basins are classified in to five Plan groups in accordance with the availability of water per unit ha of CCA of that sub basins. There are about 23 Circles which deals with the Irrigation Water Management. Numbers of circles, depending upon the location of a project under their jurisdiction, are related with more than one plan group. As a result, the performance of such circles obtained by analyzing the water account can not be visualized or summarized very easily. Moreover, it was experienced that Indicator wise analysis such water audit report didn't give the consolidated picture of performance of such individual circle or region as a whole.

Analysis of a circle or region as a whole is necessary for knowing the current status of that Region /circle for taking the administrative review as well as framing the action strategy at regional as well as at circle level for bringing improvement in the performances of irrigation projects.

5.2 Water Auditing at Administrative levels

In addition to the current conventional method of water audit analysis, an attempt has been made to consolidate, evaluate/analyze the water account region wise, circle wise. The results thus obtained gives the project category wise (Major/Medium/Minor), region as well as circle wise information about water availability, water use in different water use sectors, water losses along with area planned in PIP, Area actually irrigated & annual average irrigation System Performance achieved during the irrigation year.

Project category wise details about water availability, water use, Area irrigated, Irrigation System performance attained etc at different Administrative levels are given in Table 5.1 to 5.6 appended here with.

5.3 State level preview

5.3.1 Water Use:

From the information shown in above mentioned tables it appears that, at state level during the irrigation year 2008-09, actual live storage of 21810Mcum was available against total design live storage of 28108 Mcum on 15th October 2008. On 53 Major, 194 Medium & 1863 Minor projects considered together (12796 + 1878+ 1239), 15913 Mcum of water was used on canals; Reservoir & River lift for irrigation purpose. Total Non Irrigation water use was (3350+317+113) 3780 Mcum, which is 17% of the actual live storage. The total irrigation use is 73% of the actual live storage.

Water use on reservoir of all types of projects was (860+369+646) 1875 Mcum which is 12% of the total irrigation water use.

Total evaporation loss on Major projects is 2249 Mcum (14%), on Medium 701 Mcum (23%) & on Minor 630 Mcum (24%) of the actual live storage.

5.3.2 Area Planned and Irrigated

Data collected about 53 Major & 194 Medium projects Shows that, a gross Preliminary Irrigation Programme of (1156482 + 249427) 1405909 Ha. was framed during the irrigation year. Against the target, actual area irrigated was 1598882 ha (113 %).

5.3.3 System Performance

Annual average ISP observed at the state level (excluding MI projects) was 101ha/Mcum.

5.3.4 UnUtilised storages

Unutilized storages at the end of irrigation year (excluding inflow in HW & design carry over), on Major and Medium projects were 604 Mcum and 337 Mcum respectively. Major project wise details are given in Table 5.1 to 5.3. The total unutilized storage as compared to 15th October 2008 live storage was 4.5%.

5.3.5 Water Auditing at Region/ Circle Administrative Level

Region, Circle wise and project wise data attached in enclosed tables 5.1 to 5.6 and charts I to XVI attached herewith are self sufficient to explain the irrigation performances of any revenue region or irrigation Circle in particular. The Analysis also can be extended to respective CE'S Administrative zone by consolidating the data of concerned Circles together.

Considering the Geographical continuity of area and where more or less similar climatological condition under a Regional Chief Engineer's zone persists, the data obtained here will be helpful to concerned project authorities.

Table 5.1: Project Wise Details Of Water Availability, Water Use On Major Projects (2008-09) - Page 1 of 2

Water: Mcum

Circle	Project	Design Live Storage	Actual Live Storage 15 Oct	Total Irrigation Use	NI Water Use	Evaporation Losses	Water Use On Reservoir	Unutilised Storage	Irrigated Area (ha)		Average ISP on (ha/Mcum)
									PIP	Actual	
CADA Nagpur	Bagh Complex	268.96	73.64	205.22	4.09	19.08	1.41	0.00	0.00	23209.48	113.10
CADA Nagpur	Itiadoh	318.85	51.75	178.73	0.00	46.57	0.00	0.00	0.00	17489.00	97.85
CADA Nagpur	Lower Wunna Complex	189.18	126.84	88.56	7.71	37.69	2.46	2.56	0.00	7184.79	81.13
CADA Nagpur	Pench Complex	1375.26	459.17	986.13	330.14	57.12	0.02	2.46	0.00	49801.00	50.50
CIPC Chandrapur	Asolamendha	56.38	12.66	65.97	0.00	15.02	0.00	0.00	11500.00	9198.00	139.44
CIPC Chandrapur	Bor	127.42	57.44	40.21	0.00	5.80	0.00	0.00	4500.00	2256.00	56.11
CIPC Chandrapur	Dina	67.54	3.04	58.06	0.00	6.42	0.00	0.00	11000.00	10913.00	187.98
AIC Akola	Katepurna	86.35	15.40	0.00	14.33	8.79	0.00	0.00	0.00	0.00	0.00
AIC Akola	Nalganga	69.32	19.11	10.51	1.01	6.18	4.55	0.00	2070.00	1513.00	143.96
AIC Akola	Pus	91.27	75.85	56.33	4.03	14.32	4.74	0.00	6890.00	3917.00	69.54
BIPC Buldhana	Wan	81.96	72.30	58.58	8.43	2.33	0.00	0.37	9700.00	4263.00	72.78
UWPC Amravati	Upper Wardha	548.14	288.39	72.44	28.74	80.24	11.91	117.24	7900.00	7118.20	98.26
YIC Yavatmal	Arunawati	169.92	23.87	2.72	2.36	20.52	2.72	0.00	0.00	279.00	102.57
CADA Pune	Dhom	331.05	331.05	304.94	1.26	28.04	1.35	0.00	40800.00	20206.00	66.26
CADA Pune	Ghod	154.80	154.80	148.28	7.53	35.02	22.62	0.00	17767.05	17768.89	119.84
CADA Pune	Kanher	271.68	271.68	265.01	0.19	31.00	2.20	17.18	21400.00	15975.00	60.28
CADA Pune	Kukadi Complex	864.39	759.71	602.74	4.45	128.63	28.52	0.00	83350.00	54137.00	89.82
CADA Solapur	Bhima (Ujjani)	1517.00	1688.91	1690.43	82.17	415.80	340.74	0.00	204390.00	208735.15	123.48
PIC Pune	Bhama Askhed	217.10	91.47	50.32	0.52	6.72	1.54	13.45	8700.00	8355.60	166.04
PIC Pune	Chaskaman	214.50	214.50	83.36	1.51	15.74	4.24	3.70	11440.00	12454.00	149.39
PIC Pune	Khadakwasla Complex	808.65	800.57	301.85	535.88	59.23	5.40	13.24	17622.00	45245.02	149.89
PIC Pune	Neera Complex	931.93	932.01	1331.25	58.02	67.08	30.29	0.92	144709.00	154186.63	115.82
PIC Pune	Pawana	241.11	241.22	36.96	227.40	14.47	3.19	43.57	1090.00	1982.34	53.63
SIC Sangli	Dudhaganga	679.11	679.11	61.36	0.00	23.59	0.00	19.60	25050.00	17932.00	292.27
SIC Sangli	Krishna LIS Complex	0.00	0.00	506.05	62.79	0.00	0.00	0.00	0.00	196187.00	387.69
SIC Sangli	Radhanagari	219.97	217.64	340.54	49.35	14.07	0.00	0.01	52440.00	40943.00	120.23
SIC Sangli	Tulshi	91.92	91.92	33.24	4.69	17.13	0.00	28.40	6070.00	4449.00	133.84
SIC Sangli	Warana	779.35	782.06	296.15	5.35	22.41	0.00	149.52	56810.00	38840.00	131.15
TIC Thane	Bhatsa	942.10	782.34	62.84	733.99	30.84	0.00	65.99	2500.00	2667.17	42.45
TIC Thane	Kal-Amba	528.13	423.19	103.51	69.22	13.50	0.00	52.09	4167.00	3400.29	32.85
TIC Thane	Surya	286.31	172.12	138.92	34.00	12.05	24.00	5.90	4600.00	3683.02	26.51

Table 5.1: Project Wise Details Of Water Availability, Water Use On Major Projects (2008-09) - Page 2 of 2

Water: Mcum

Circle	Project	Design Live Storage	Actual Live Storage 15 Oct	Total Irrigation Use	NI Water Use	Evaporation Losses	Water Use On Reservoir	Unutilised Storage	Irrigated Area (ha)		Average ISP on (ha/Mcum)
									PIP	Actual	
CADA Jalgaon	Girna+Panzan	525.06	484.59	334.31	53.84	64.73	3.25	0.00	24895.00	23063.00	68.99
CADA Jalgaon	Hatnur	255.00	255.00	56.67	120.69	92.58	15.21	0.00	2575.00	6668.00	117.66
CADA Nashik	Bhandardara	304.10	328.10	348.76	46.79	8.82	0.01	10.36	30625.00	26744.00	76.68
CADA Nashik	Chankapur	76.85	76.85	14.22	29.06	12.84	0.81	2.86	1770.00	2452.00	172.43
CADA Nashik	Darna	202.43	202.43	9.71	28.32	21.60	6.03	0.19	0.00	1721.86	177.37
CADA Nashik	Gangapur	159.42	158.54	50.20	147.21	15.36	4.08	0.00	2229.00	7173.56	142.91
CADA Nashik	Gautami	53.34	38.36	1.08	0.00	2.54	1.08	0.00	0.00	140.31	129.92
CADA Nashik	Kadwa	52.91	52.91	43.48	0.38	7.19	3.20	1.59	1425.00	2125.49	48.89
CADA Nashik	Kashyapi	52.43	52.42	0.70	0.00	2.08	0.70	0.00	0.00	94.76	135.37
CADA Nashik	Mukane	125.33	125.33	3.57	1.38	8.43	3.57	18.71	0.00	1209.70	338.85
CADA Nashik	Mula	608.80	608.92	549.79	43.99	62.57	5.28	0.00	36484.00	40942.00	74.47
CADA Nashik	NMWeir	7.28	7.27	291.52	40.39	0.00	0.00	0.00	12549.00	16810.60	57.67
CADA Nashik	Upper Godavari	336.18	333.64	264.57	65.24	35.25	0.61	20.77	28659.00	23767.59	89.83
AIC Abad	NMC Express Mukane	0.00	0.00	51.06	0.00	0.00	0.00	0.00	6600.00	1441.00	28.22
CADA Abad	Jayakwadi Stage I	2170.94	2170.94	1565.05	208.79	295.62	215.00	0.00	141006.00	110548.00	70.64
CADA Beed	Jayakwadi Stage II	312.00	312.00	235.49	10.63	92.16	12.42	0.00	20100.00	15465.00	65.67
CADA Beed	Lower Terna	91.22	91.22	36.76	15.04	40.02	0.00	8.12	5500.00	5153.52	140.20
CADA Beed	Manjra	176.96	176.96	133.39	26.43	57.97	12.79	0.00	10800.00	14442.81	108.27
NIC Nanded	Manar	138.21	39.22	8.42	17.23	12.72	8.42	4.90	1000.00	918.00	109.03
NIC Nanded	Purna Complex	890.22	265.32	219.68	73.85	53.66	13.91	0.00	24800.00	20276.00	92.29
NIC Nanded	Upper Penganga	964.10	411.27	302.17	79.56	96.57	4.07	0.00	39000.00	23131.00	76.55
NIC Nanded	Vishnupuri	80.79	80.02	94.00	61.52	10.95	57.72	0.00	10000.00	12046.00	128.15
Grand Total:		**20113**	**16185**	**12796**	**3350**	**2249**	**860**	**604**	**1156482**	**1340623**	**105**

Table 5.2: Circlewise Details of Water availability, Water Use and Losses on Major Project (2008-09) -

Water: Mcum

Circle	Design Live Storage	Actual Live Storage 15th Oct	Total Irrigation Use	NI Water Use	Evaporation Losses	Water Use On Reservoir	Unutilized Storage	Irrigated Area (ha)		Average ISP (ha/Mcum)
								PIP	Actual	
CADA Nagpur	2152.25	711.41	1458.64	341.94	160.46	3.89	5.02	0.00	97684.27	66.97
CIPC Chandrapur	251.34	73.14	164.23	0.00	27.23	0.00	0.00	27000.00	22367.00	136.19
AIC Akola	246.93	110.36	66.84	19.37	29.29	9.29	0.00	8960.00	5430.00	81.24
BIPC Buldhana	81.95	72.30	58.58	8.43	2.33	0.00	0.37	9700.00	4263.00	72.78
UWPC Amravati	548.14	288.39	72.44	28.74	80.24	11.91	117.24	7900.00	7118.20	98.26
YIC Yavatmal	169.92	23.87	2.72	2.36	20.52	2.72	0.00	0.00	279.00	102.57
CADA Pune	1621.92	1517.24	1320.97	13.43	222.69	54.69	17.18	163317.05	108086.89	81.82
CADA Solapur	1517.00	1688.91	1690.43	82.17	415.80	340.74	0.00	204390.00	208735.15	123.48
PIC Pune	2413.29	2279.77	1803.75	823.33	163.24	44.66	74.89	183561.00	222223.59	123.20
SIC Sangli	1770.35	1770.73	1237.33	122.18	77.20	0.00	197.53	140370.00	298351.00	241.12
TIC Thane	1756.54	1377.64	305.27	837.20	56.39	24.00	123.98	11267.00	9750.48	31.94
CADA Jalgaon	780.06	739.59	390.99	174.53	157.31	18.46	0.00	27470.00	29731.00	76.04
CADA Nashik	1979.07	1984.77	1577.59	402.77	176.67	25.37	54.48	113741.00	123181.87	78.08
AIC Abad	0.00	0.00	51.06	0.00	0.00	0.00	0.00	6600.00	1441.00	28.22
CADA Abad	2170.93	2170.93	1565.05	208.79	295.62	215.00	0.00	141006.00	110548.00	70.64
CADA Beed	580.18	580.18	405.65	52.10	190.15	25.21	8.12	36400.00	35061.33	86.43
NIC Nanded	2073.32	795.83	624.27	232.17	173.90	84.11	4.90	74800.00	56371.00	90.30
Grand Total:	**20113**	**16185**	**12796**	**3350**	**2249**	**860**	**604**	**1156482**	**1340623**	**105**

Table 5.3: Region wise Abstract of Water availability, Water use and Losses on Major Project (2008-09) -

Water: Mcum

Region	Design Live Storage	Actual Live Storage	Total Irrigation Use	NI Water Use	Evaporation Losses	Water Use On Reservior	Unutilized Storage	Irrigated Area (ha)		Average ISP (ha/MCum)
								PIP	Actual	
Nagpur	2403.59	784.55	1622.87	341.94	187.69	3.89	5.02	27000.00	120051.27	73.97
Amravati	1046.95	494.92	200.58	58.90	132.38	23.92	117.61	26560.00	17090.20	85.20
Pune	7322.56	7256.65	6052.49	1041.11	878.93	440.09	289.60	691638.05	837396.63	138.36
Konkan	1756.54	1377.64	305.27	837.20	56.39	24.00	123.98	11267.00	9750.48	31.94
Nashik	2759.13	2724.36	1968.58	577.31	333.99	43.83	54.48	141211.00	152912.87	77.68
Aurangabad	4824.44	3546.95	2646.03	493.06	659.67	324.32	13.02	258806.00	203421.33	76.88
Grand Total:	**20113**	**16185**	**12796**	**3350**	**2249**	**860**	**604**	**1156482**	**1340623**	**105**

Note: Actual live storage is of Oct 15 & utilisation is for the period July 1 to June 30

Table 5.4: Details Of Water Availability, Water Use And Losses On Medium Project (2008-09) -

Water: Mcum

Region	Circle	Design Live Storage	Actual Live Storage	Total Irrigation Use	NI Water Use	Evaporation	Water Use On Reservoir	Unutilized Storage	Irrigated Area		Average ISP (ha/Mcum)
									PIP	Actual	
Nagpur	CADA Nagpur	290.54	82.84	149.93	13.91	25.93	40.49	1.43	41027.00	39123.86	260.95
Nagpur	CIPC	239.64	136.68	124.31	9.78	45.08	9.57	3.60	10320.00	18882.00	151.89
Nagpur	GKLIC Bhandara	9.40	6.67	3.63	1.78	3.73	0.33	0.00	1967.00	500.00	137.85
Nagpur	NIC Nagpur	57.80	28.59	12.84	4.40	10.02	0.62	2.73	1809.00	1546.46	120.45
Amravati	AIC Akola	383.71	203.63	102.10	24.01	74.18	12.71	0.79	19477.00	9109.00	89.21
Amravati	BIPC Buldhana	124.50	72.59	51.47	4.38	19.93	15.74	4.14	8840.00	9668.00	187.83
Amravati	UWPC Amravati	76.62	74.30	11.47	0.93	10.74	0.03	47.44	0.00	347.60	30.30
Amravati	WIC Washim	28.89	9.29	2.82	2.31	4.99	1.37	0.89	0.00	461.00	163.48
Amravati	YIC Yavatmal	79.72	16.15	4.44	4.66	8.73	0.22	2.08	500.00	397.00	89.33
Pune	PIC Pune	227.17	204.72	153.41	11.64	42.02	50.87	23.54	27137.40	24966.87	162.75
Pune	SIC Sangli	399.92	518.37	451.53	17.68	50.47	31.13	64.34	43825.00	54499.00	120.70
Pune	CADA Pune	45.21	43.10	43.71	5.59	12.82	5.63	0.00	8020.00	7416.45	169.69
Pune	CADA Solapur	222.95	147.13	59.12	25.15	47.75	30.88	22.65	14553.00	12301.05	208.09
Konkan	KIC Ratnagiri	27.23	26.33	21.97	0.69	0.92	0.00	0.15	2050.00	72.12	3.28
Konkan	TIC Thane	359.81	259.37	45.04	0.00	21.35	0.00	48.71	3000.00	2635.38	58.52
Konkan	NKIPC Thane	144.98	124.67	4.45	37.10	9.59	0.00	66.29	500.00	125.08	28.12
Nashik	JIPC Jalgaon	30.70	16.58	5.29	0.00	5.19	2.24	6.65	125.00	496.59	93.87
Nashik	CADA Nashik	175.13	171.28	131.16	61.28	21.09	12.98	5.43	11690.25	12941.98	98.67
Nashik	CADA Jalgaon	364.49	306.41	230.39	25.24	76.01	11.67	18.37	20157.00	25712.78	111.60
Aurangabad	CADA Beed	379.58	303.61	152.02	40.12	114.84	89.27	3.90	15792.44	20782.68	136.71
Aurangabad	CADA Abad	279.91	168.82	84.16	19.18	74.40	47.74	5.53	12432.00	12194.67	144.91
Aurangabad	AIC Abad	47.85	38.32	8.22	1.50	9.00	0.20	6.72	2775.00	946.00	115.04
Aurangabad	NIC Nanded	63.36	43.28	24.72	6.07	11.81	5.43	2.08	3430.00	3133.00	126.74
	Grand Total:	**4059**	**3003**	**1878**	**317**	**701**	**369**	**337**	**249427**	**258259**	**138**

Table 5.4 A :
Details Of Water Availability, Water Use And Losses On Medium Project (2008-09)

Water: Mcum

Region	Design Live Storage	Actual Live Storage	Total Irrigation Use	NI Water Use	Evaporation	Water Use On Reservoir	Unutilized Storage	Irrigated Area		Average ISP (ha/Mcum)
								PIP	Actual	
Nagpur	597.38	254.78	290.70	29.87	84.76	51.01	7.76	55123	60052	207
Amravati	693.44	375.96	172.31	36.29	118.57	30.07	55.34	28817	19983	116
Pune	895.25	913.32	707.76	60.06	153.06	118.51	110.54	93535	99183	140
Konkan	532.02	410.37	71.46	37.79	31.86	0.00	115.15	5550	2833	40
Nashik	570.32	494.27	366.84	86.52	102.29	26.89	30.45	31972	39151	107
Aurangabad	770.70	554.03	269.11	66.87	210.05	142.64	18.24	34429	37056	138
Grand Total:	**4059**	**3003**	**1878**	**317**	**701**	**369**	**337**	**249427**	**258259**	**138**

Table 5.5: Statement Showing Water Availability, Water Uses And Losses Observed On Minor Projects (2008-09) - Page 1 of 1

Water: Mcum

Region	Circle	Design Live Storage	Actual Live Storage	Total Irrigation Use	Evaporation	Reservior Use Irrigation	Leakages	NI Water Use
Nagpur	CADA Nagpur	234.30	119.58	80.23	26.04	2.37	3.28	4.85
Nagpur	CIPC Chandrapur	124.53	106.36	67.52	29.04	1.51	5.11	0.00
Nagpur	GKLIC Bhandara	15.28	9.20	2.35	3.14	0.00	0.00	0.63
Nagpur	NIC Nagpur	30.15	17.11	6.44	8.92	0.00	0.00	2.28
Amravati	AIC Akola	394.84	166.20	71.63	64.39	17.38	29.66	5.33
Amravati	BIPC Buldhana	94.23	40.87	22.79	10.71	10.61	1.61	1.13
Amravati	UWPC Amravati	9.88	9.88	7.25	2.15	0.08	0.01	0.00
Amravati	WIC Washim	159.57	42.47	8.85	11.44	5.36	6.46	7.11
Amravati	YIC Yavatmal	87.81	53.24	20.04	15.48	1.89	11.22	2.39
Pune	CADA Pune	64.10	54.20	40.43	14.39	34.33	13.35	4.22
Pune	CADA Solapur	109.05	76.43	38.03	26.00	26.56	5.46	1.72
Pune	PIC Pune	227.20	180.37	87.86	33.94	66.09	24.12	6.52
Pune	SIC Sangli	309.39	238.21	136.59	39.48	89.64	15.02	5.55
Konkan	KIC Ratnagiri	100.90	93.88	15.61	7.98	0.21	58.69	2.06
Konkan	NKIPC Thane	97.69	69.16	8.02	7.44	1.10	26.71	4.69
Konkan	TIC Thane	184.92	182.25	66.62	21.94	1.87	37.03	13.23
Nashik	CADA Jalgaon	292.95	195.02	91.00	38.34	19.46	38.94	20.48
Nashik	CADA Nashik	184.21	161.59	102.96	28.77	82.89	21.31	5.92
Aurangabad	AIC Abad	87.03	33.17	12.22	16.46	7.14	0.00	3.91
Aurangabad	CADA Abad	167.66	98.82	57.48	36.15	41.98	31.79	4.69
Aurangabad	CADA Beed	747.12	554.33	253.60	159.06	215.57	104.88	14.24
Aurangabad	NIC Nanded	213.29	120.27	41.87	28.92	19.96	42.59	1.91
Grand Total:		**3936**	**2623**	**1239**	**630**	**646**	**477**	**113**

Table 5.5 A :
Details Of Water Availability, Water Use And Losses On Minor Project (2008-09)

Water: Mcum

Region	Design Live Storage	Actual Live Storage	Total Irrigation Use	Evaporation	Water use on Reservior	Leakages	NI Water Use
Nagpur	404.26	252.25	156.54	67.14	3.88	8.39	7.76
Amravati	746.33	312.66	130.56	104.18	35.32	48.96	15.96
Pune	709.74	549.21	302.91	113.80	216.62	57.95	18.01
Konkan	383.51	345.29	90.24	37.37	3.17	122.43	19.98
Nashik	477.16	356.61	193.96	67.11	102.35	60.25	26.40
Aurangabad	1215.10	806.59	365.17	240.58	284.65	179.26	24.74
Grand Total :	**3936**	**2623**	**1239**	**630**	**646**	**477**	**113**

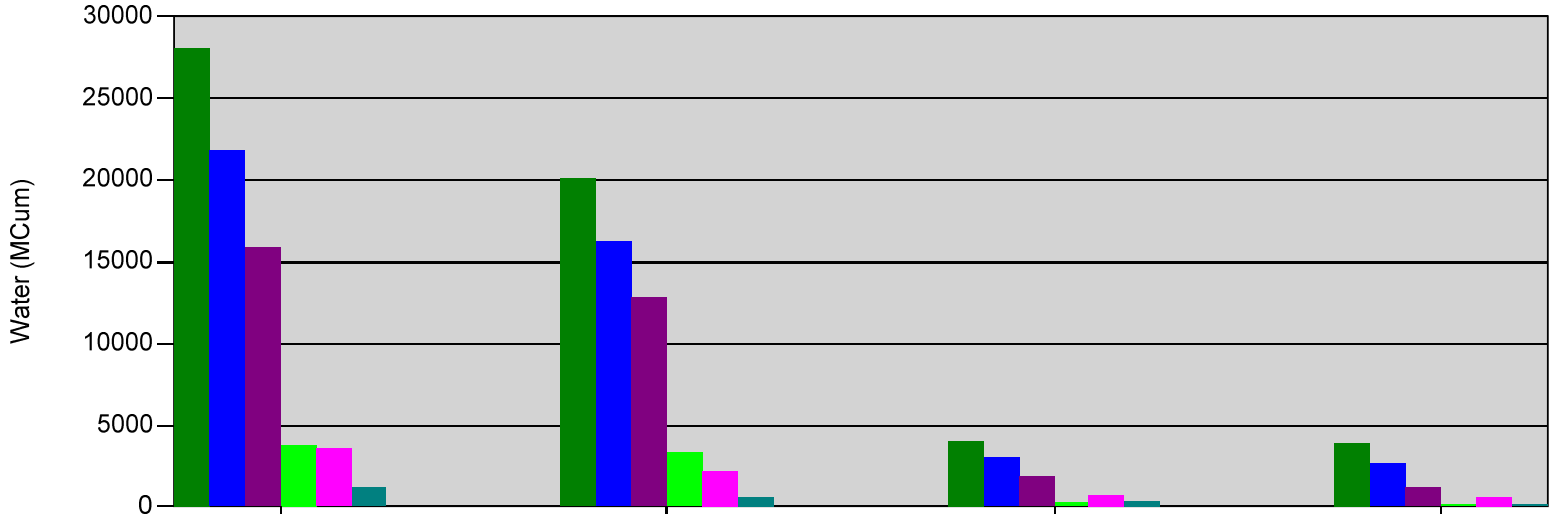
Table 5.6: Unutilised Storage Observed On Major Projects (2008-09) - Page 1 of 2

Region	Circle	Project	Actual Live Storage 15th Oct. (Mcum)	Unutilised Storage (Mcum)
Nagpur	CADA Nagpur	Bagh Complex	73.64	0.00
Nagpur	CADA Nagpur	Itiadoh	51.75	0.00
Nagpur	CADA Nagpur	Lower Wunna Complex	126.84	0.00
Nagpur	CADA Nagpur	Pench Complex	459.17	0.00
Nagpur	CIPC Chandrapur	Asolamendha	12.66	0.00
Nagpur	CIPC Chandrapur	Bor	57.44	0.00
Nagpur	CIPC Chandrapur	Dina	3.04	0.00
Amravati	AIC Akola	Katepurna	15.40	0.00
Amravati	AIC Akola	Nalganga	19.11	0.00
Amravati	AIC Akola	Pus	75.85	0.00
Amravati	BIPC Buldhana	Wan	72.30	0.37
Amravati	UWPC Amravati	Upper Wardha	288.39	117.24
Amravati	YIC Yavatmal	Arunawati	23.87	0.00
Pune	CADA Pune	Dhom	331.05	0.00
Pune	CADA Pune	Ghod	154.80	0.00
Pune	CADA Pune	Kanher	271.68	17.18
Pune	CADA Pune	Kukadi Complex	759.71	0.00
Pune	CADA Solapur	Bhima (Ujjani)	1688.91	0.00
Pune	PIC Pune	Bhama Askhed	91.47	13.45
Pune	PIC Pune	Chaskaman	214.50	3.70
Pune	PIC Pune	Khadakwasla Complex	800.57	0.00
Pune	PIC Pune	Neera Complex	932.01	0.00
Pune	PIC Pune	Pawana	241.22	43.57
Pune	SIC Sangli	Dudhaganga	679.11	19.60
Pune	SIC Sangli	Krishna LIS Complex	0.00	0.00
Pune	SIC Sangli	Radhanagari	217.64	0.01
Pune	SIC Sangli	Tulshi	91.92	28.40
Pune	SIC Sangli	Warana	782.06	149.52
Konkan	TIC Thane	Bhatsa	782.34	65.99
Konkan	TIC Thane	Kal-Amba	423.19	52.09
Konkan	TIC Thane	Surya	172.12	5.90
Nashik	CADA Jalgaon	Girna+Panzan	484.59	0.00
Nashik	CADA Jalgaon	Hatnur	255.00	0.00
Nashik	CADA Nashik	Bhandardara	328.10	10.36
Nashik	CADA Nashik	Chankapur	76.85	2.86
Nashik	CADA Nashik	Darna	202.43	0.19
Nashik	CADA Nashik	Gangapur	158.54	0.00
Nashik	CADA Nashik	Gautami	38.36	0.00
Nashik	CADA Nashik	NMWeir	7.27	0.00
Nashik	CADA Nashik	Upper Godavari Complex	333.64	0.00
Nashik	CADA Nashik	Kadwa	52.91	1.59
Nashik	CADA Nashik	Kashyapi	52.42	0.00
Nashik	CADA Nashik	Mukane	125.33	18.71
Nashik	CADA Nashik	Mula	608.92	0.00

Table 5.6: Unutilised Storage Observed On Major Projects (2008-09) - Page 2 of 2

Region	Circle	Project	Actual Live Storage 15th Oct. (Mcum)	Unutilised Storage (Mcum)
Aurangabad	AIC Abad	NMC Express Mukane	0.00	0.00
Aurangabad	CADA Abad	Jayakwadi Stage I	2170.94	0.00
Aurangabad	CADA Beed	Jayakwadi Stage II (Majalga	312.00	0.00
Aurangabad	CADA Beed	Lower Terna	91.22	8.12
Aurangabad	CADA Beed	Manjra	176.96	0.00
Aurangabad	NIC Nanded	Manar	39.22	4.90
Aurangabad	NIC Nanded	Vishnupuri	80.02	0.00
Aurangabad	NIC Nanded	Purna Complex	265.32	0.00
Aurangabad	NIC Nanded	Upper Penganga	411.27	0.00
		Grand Total:	**16185**	**564**

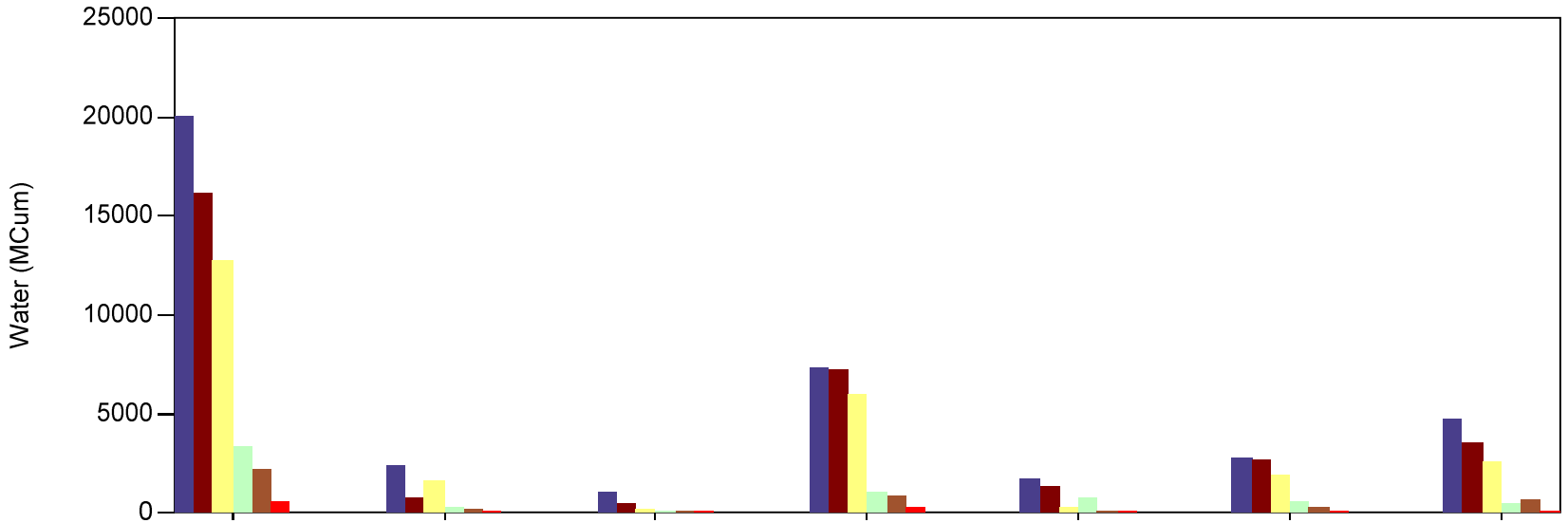
Chart 1 - Water Availability and Water use at State Level



	State	Major	Medium	Minor
Design LS	28108	20113	4059	3936
Actual Live Storage	21810	16185	3003	2623
Total Irrigation Use	15913	12796	1878	1239
NI Water Use	3780	3350	317	113
Evaporation Losses	3580	2249	701	630
Unutilised Storage	1145	604	337	204

Note: Actual live storage is of Oct 15 and utilisation is for the period July 1 to June 30

Chart II - Region Wise Water Availability, Water Use & Water Losses. (Major Project)



	State	Nagpur	Amravati	Pune	Konkan	Nashik	Aurangabad
Design LS	20113	2404	1047	7323	1757	2759	4824
Actual Live Storage	16185	785	495	7257	1378	2724	3547
Total Irrigation Use	12796	1623	201	6052	305	1969	2646
NI Water Use	3350	342	59	1041	837	577	493
Evaporation Losses	2249	188	132	879	56	334	660
Unutilised Storage	604	5	118	290	124	54	13

Chart III - Circle Wise Water Availability, Water Use (Major Project)

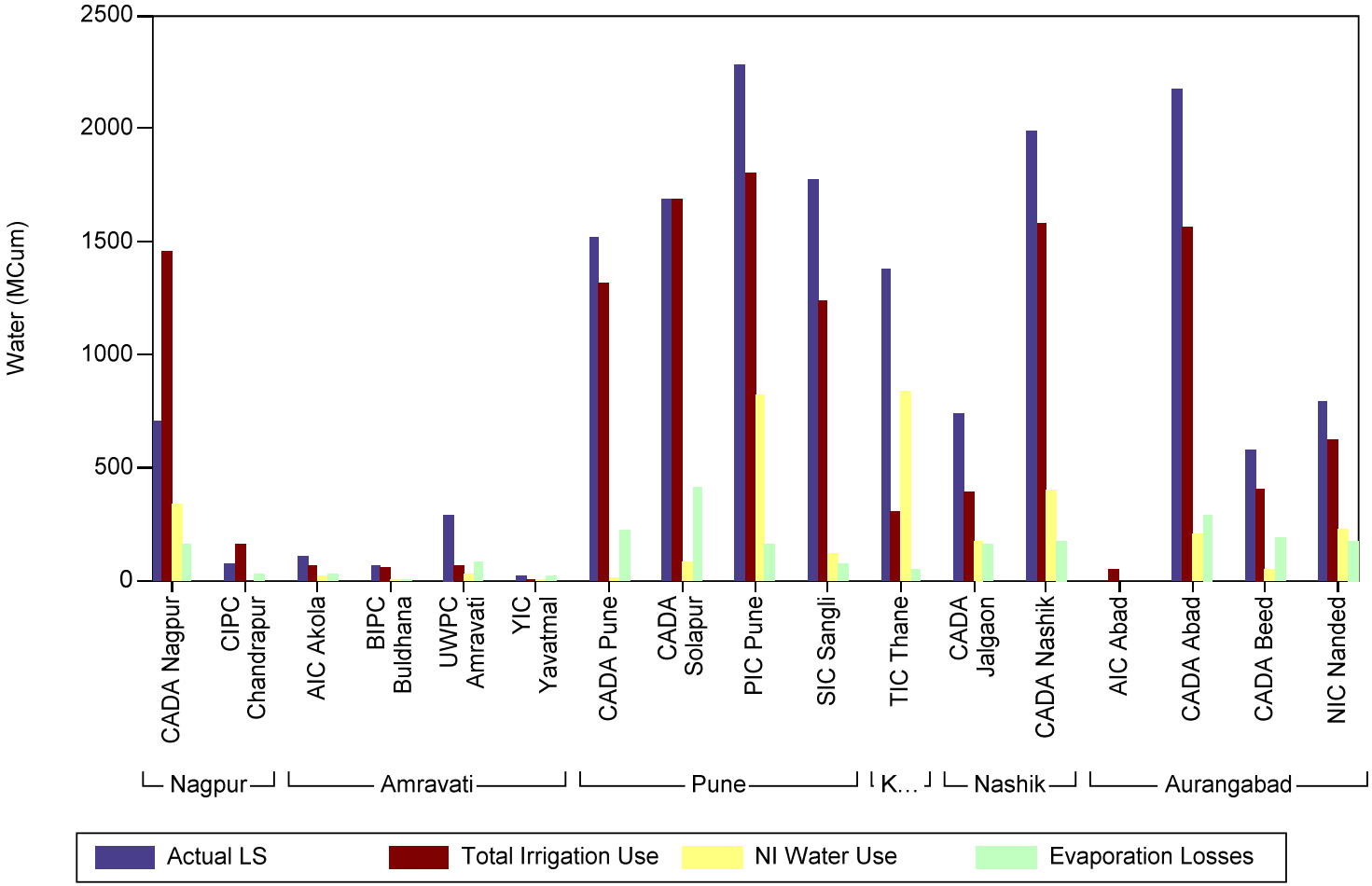
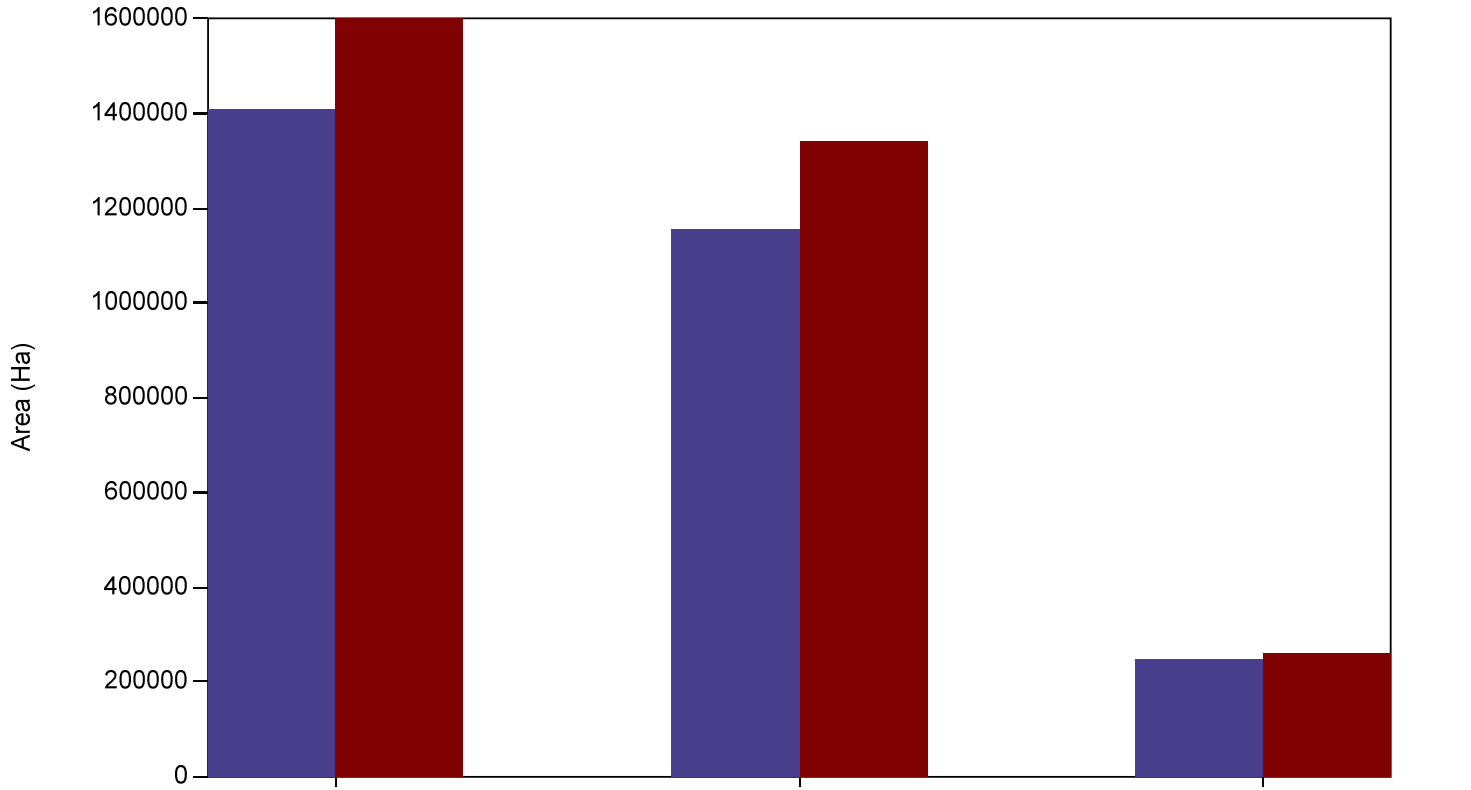
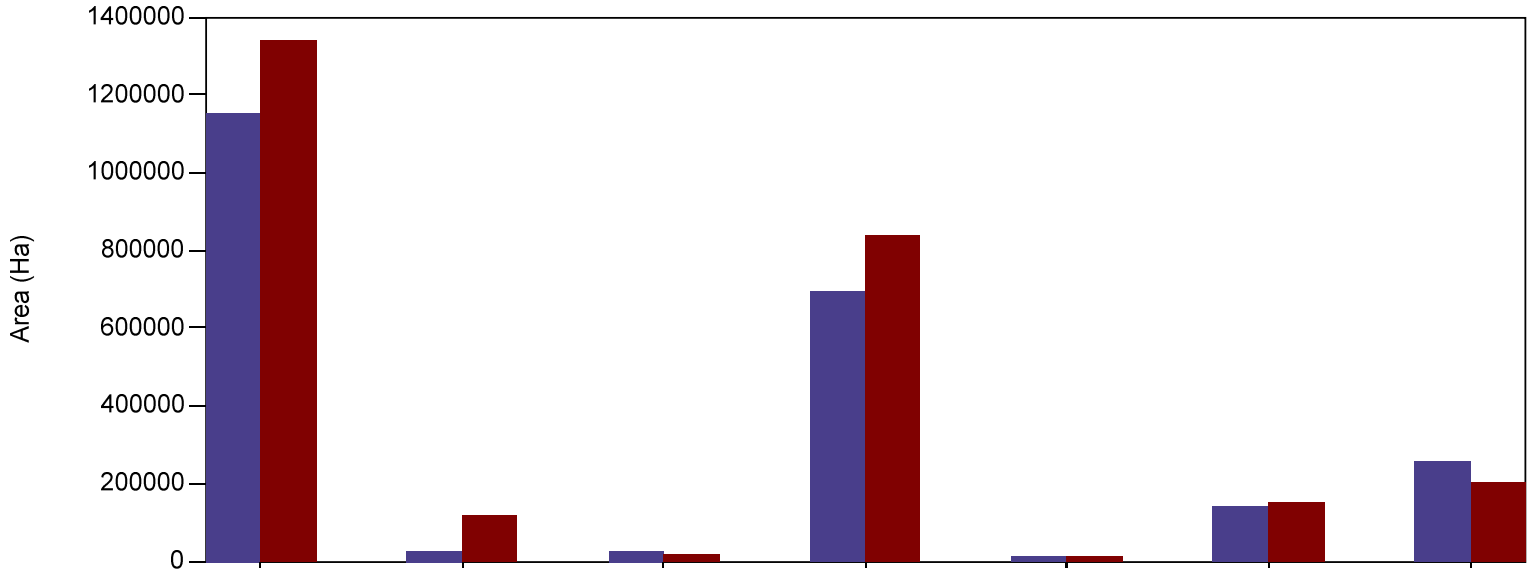


Chart IV - Details of Area Planned & Actual Irrigated (Major & Medium Projects)



	State	Major	Medium
Irrigated Area Actual	1598881	1340623	258259
Irrigated Area PIP	1405909	1156482	249427

Chart V - Region Wise Area Planned & Actual Irrigated (Major Project)



	State	Nagpur	Amravati	Pune	Konkan	Nashik	Aurangabad
Irrigation Area (ha) Actual	1340623	120051	17090	837397	9750	152913	203421
Irrigation Area (ha) PIP	1156482	27000	26560	691638	11267	141211	258806

Chart VI - Circle Wise Area Planned in PIP And Actual Area Irrigated (Major Project)

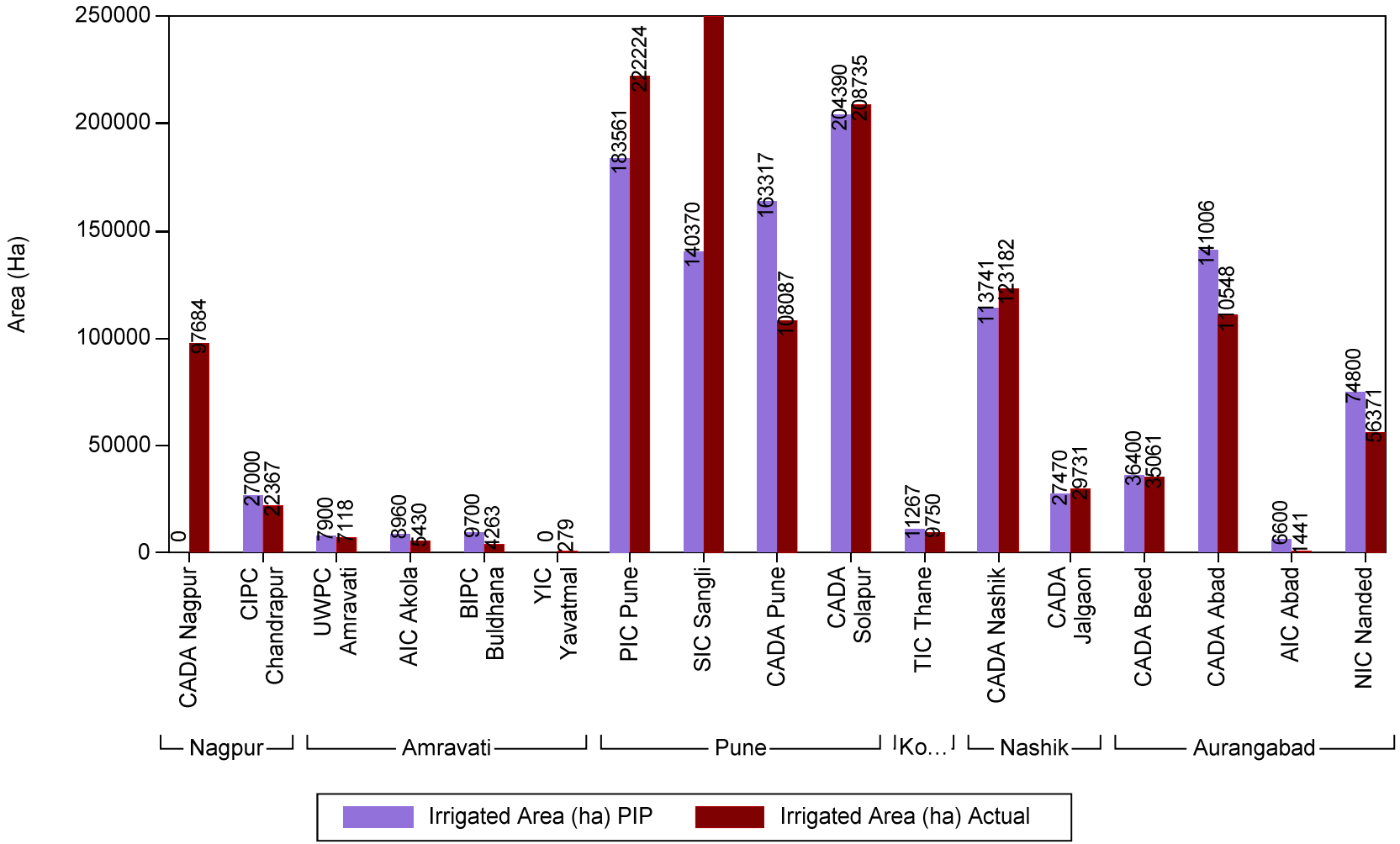


Chart VII - Region wise Annual Average Irrigation System Performance (ISP) Observed (Major Project)

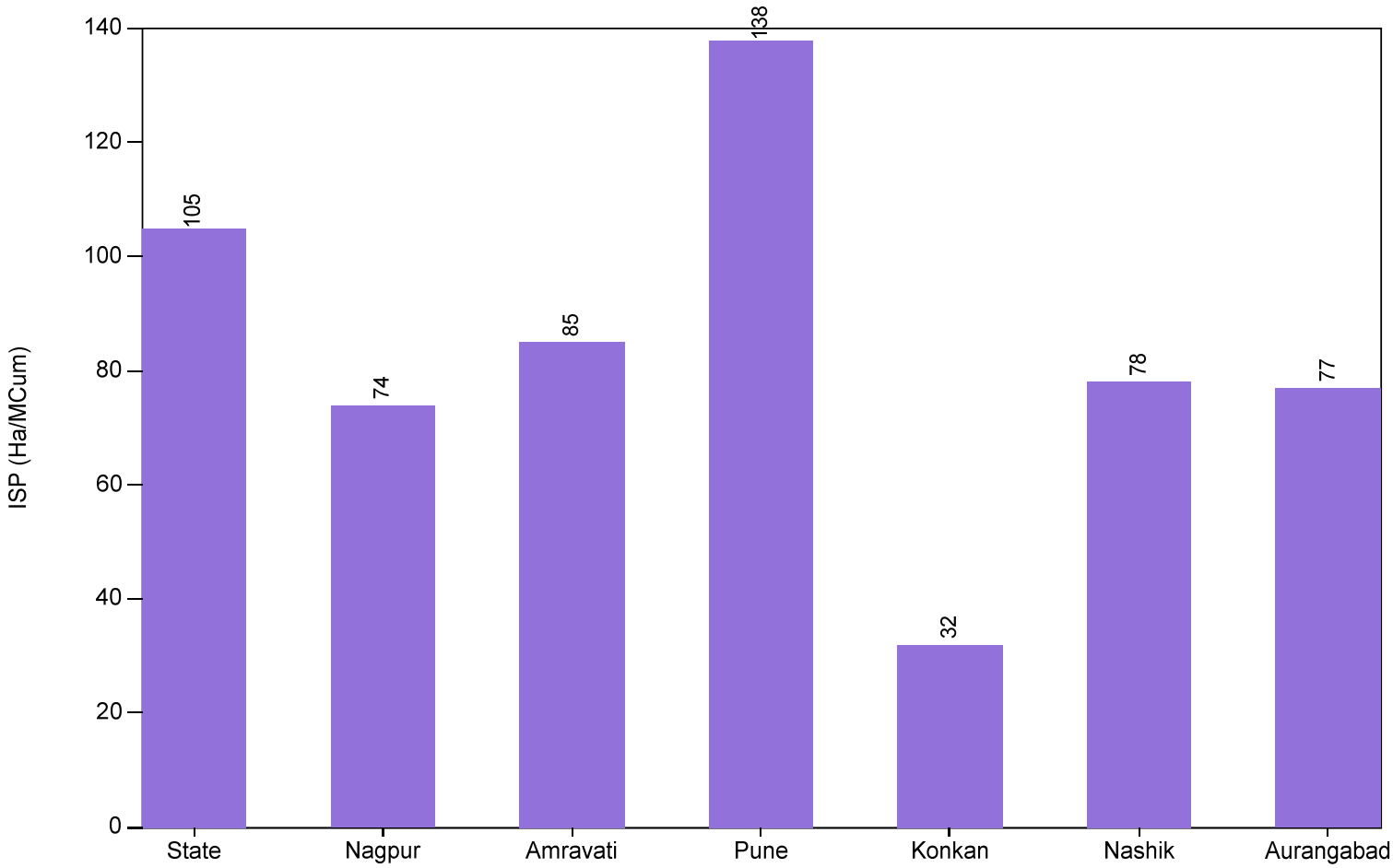


Chart VIII - Circle Wise Annual Average Irrigation System Performance (ISP) Observed (Major Project)

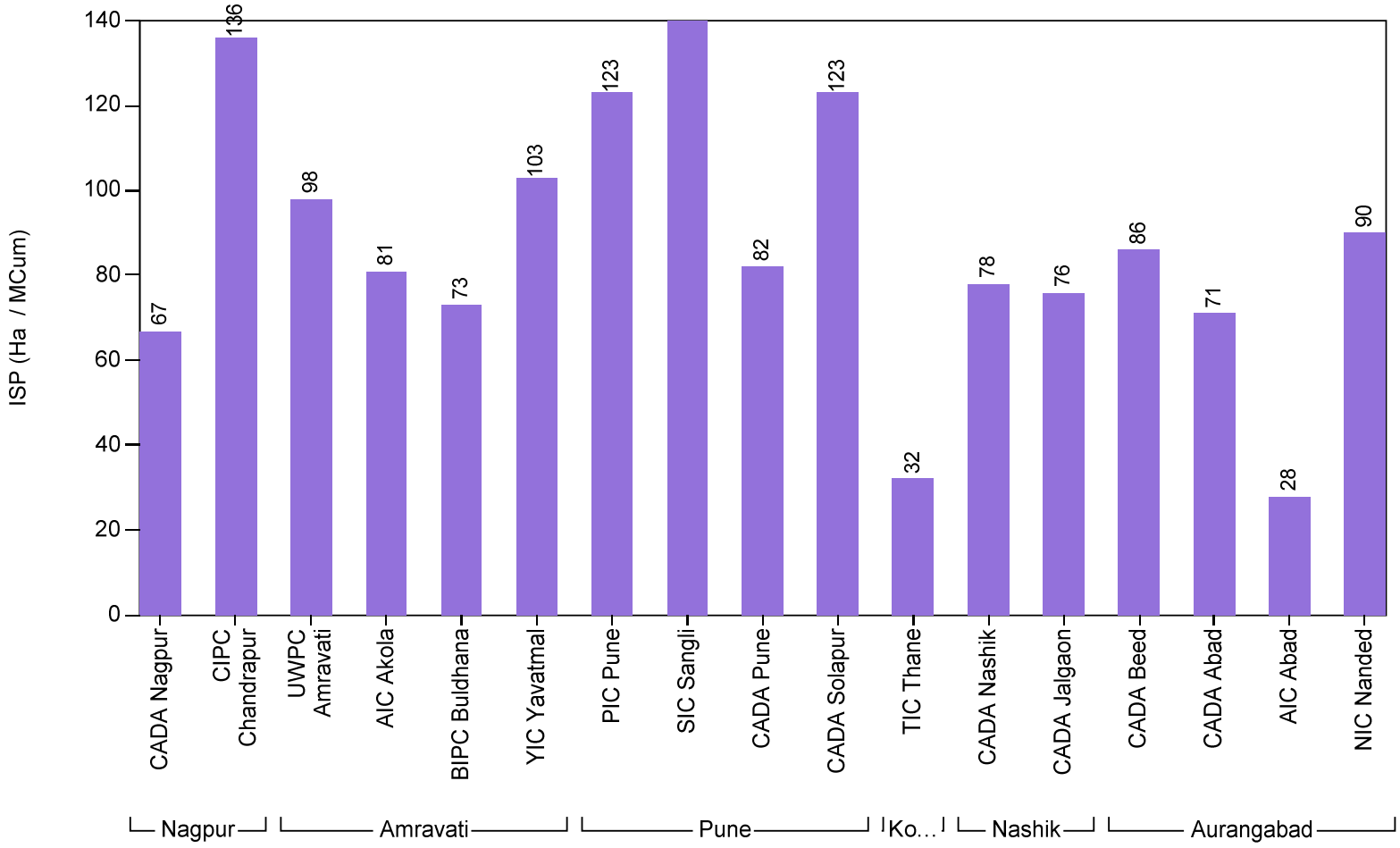


Chart IX - Water Use On Reservoir Lift (Major Project)

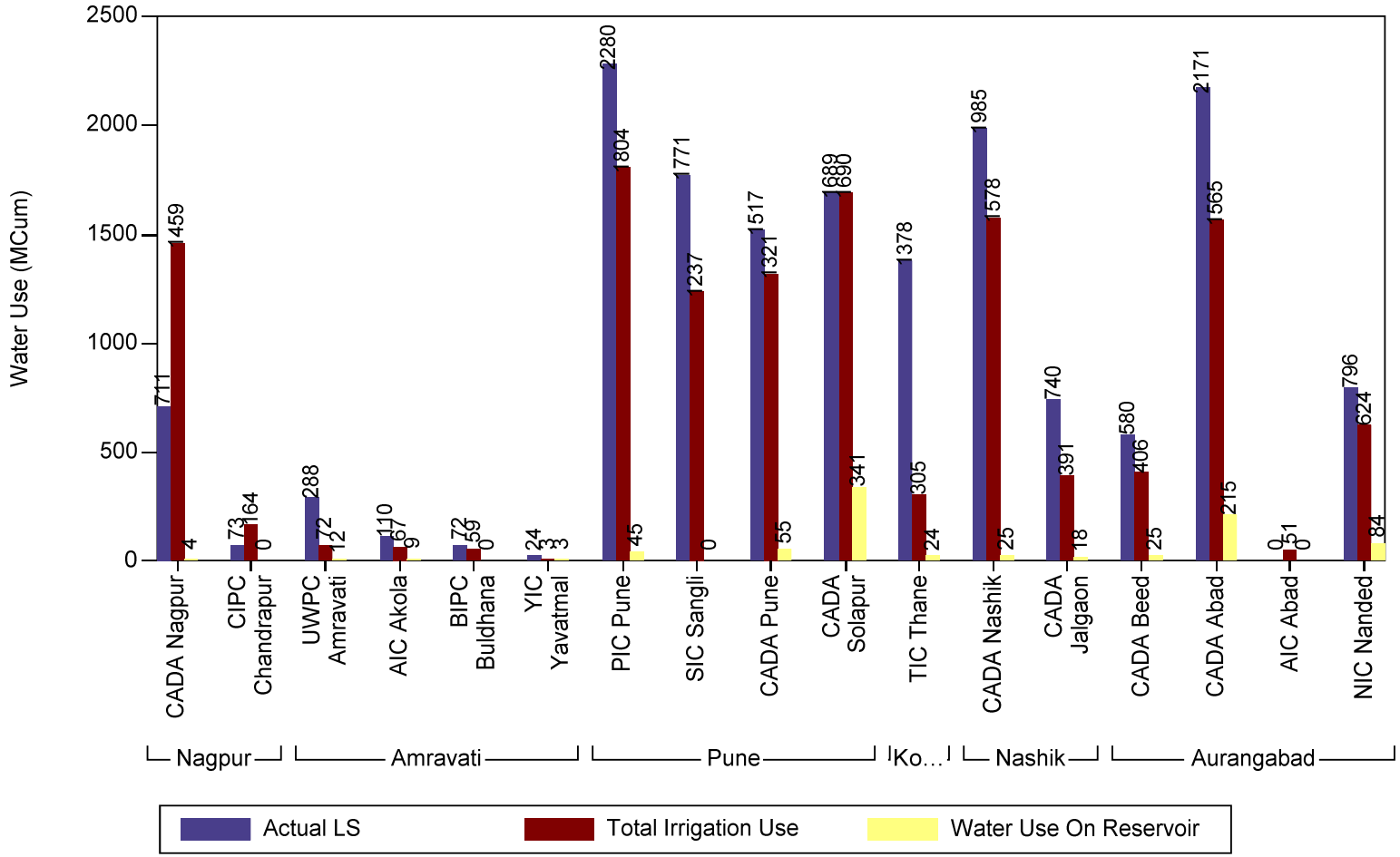


Chart X - Major Projects Having Unutilised Storage More Than 5 (%)

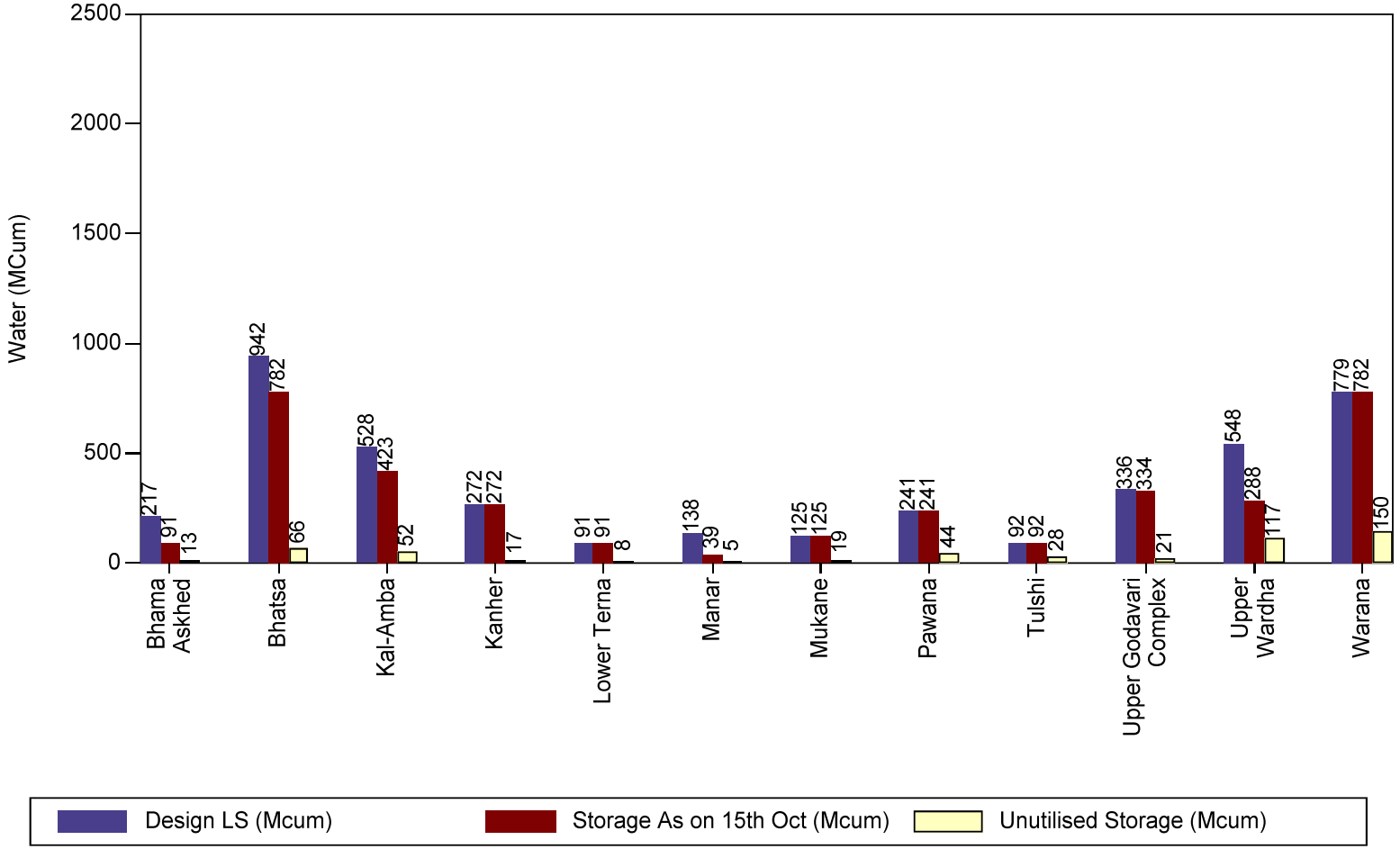
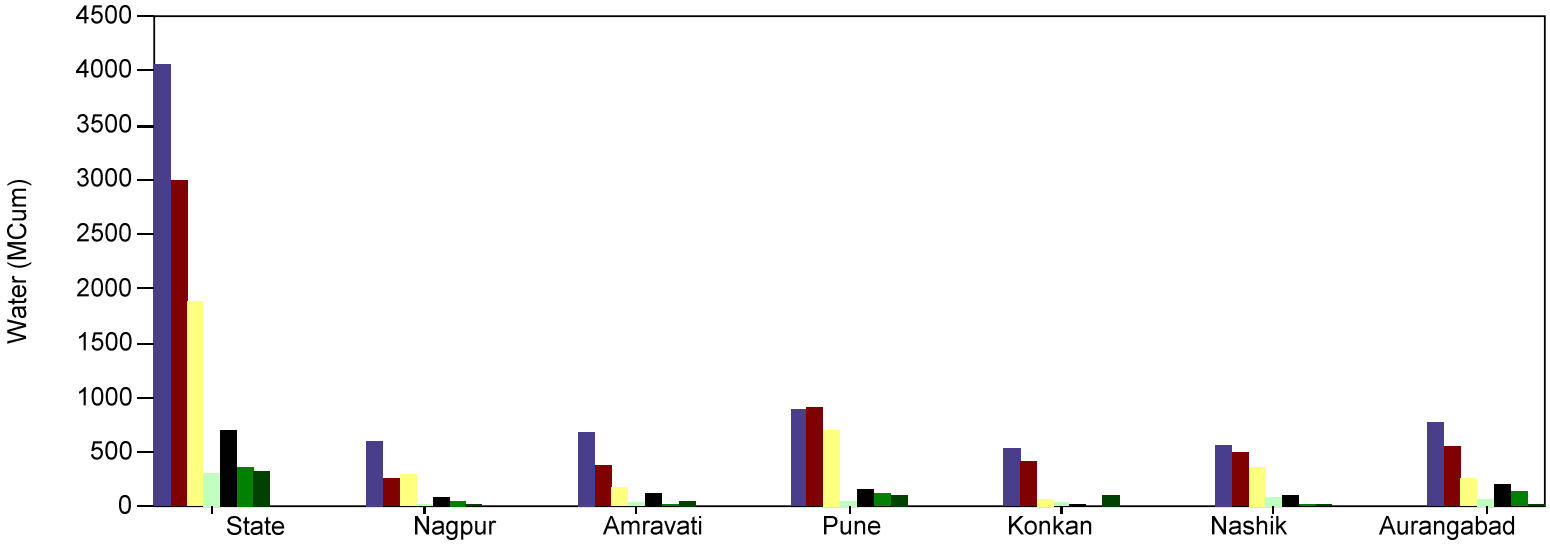


Chart XI - Region Wise Water Use (Medium Project)



	State	Nagpur	Amravati	Pune	Konkan	Nashik	Aurangabad
Design LS	4059	597	693	895	532	570	771
Actual Live Storage	3003	255	376	913	410	494	554
Total Irrigation Use	1878	291	172	708	71	367	269
NI Water Use	317	30	36	60	38	87	67
Evaporation	701	85	119	153	32	102	210
Water Use on Reservoir	369	51	30	119	0	27	143
Unutilized Storage	337	8	55	111	115	30	18

Note: Actual live storage is of Oct 15 and utilisation is for the period July 1 to June 30

Chart XII - Circle Wise Water Availability And Water Use (Medium Project)

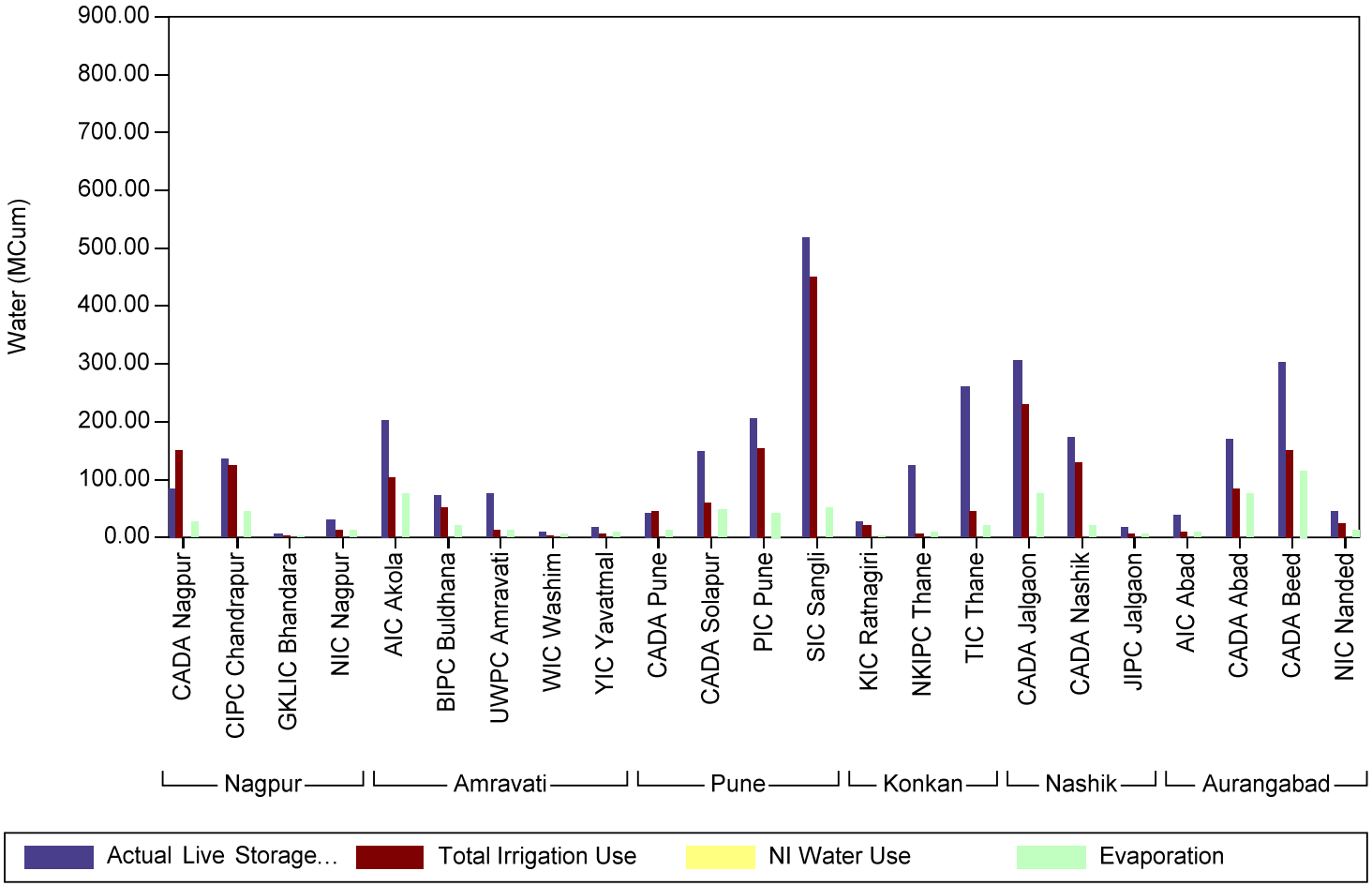


Chart XIII - Circle Wise Area Planned In PIP & Actual Area Irrigated (Medium Project)

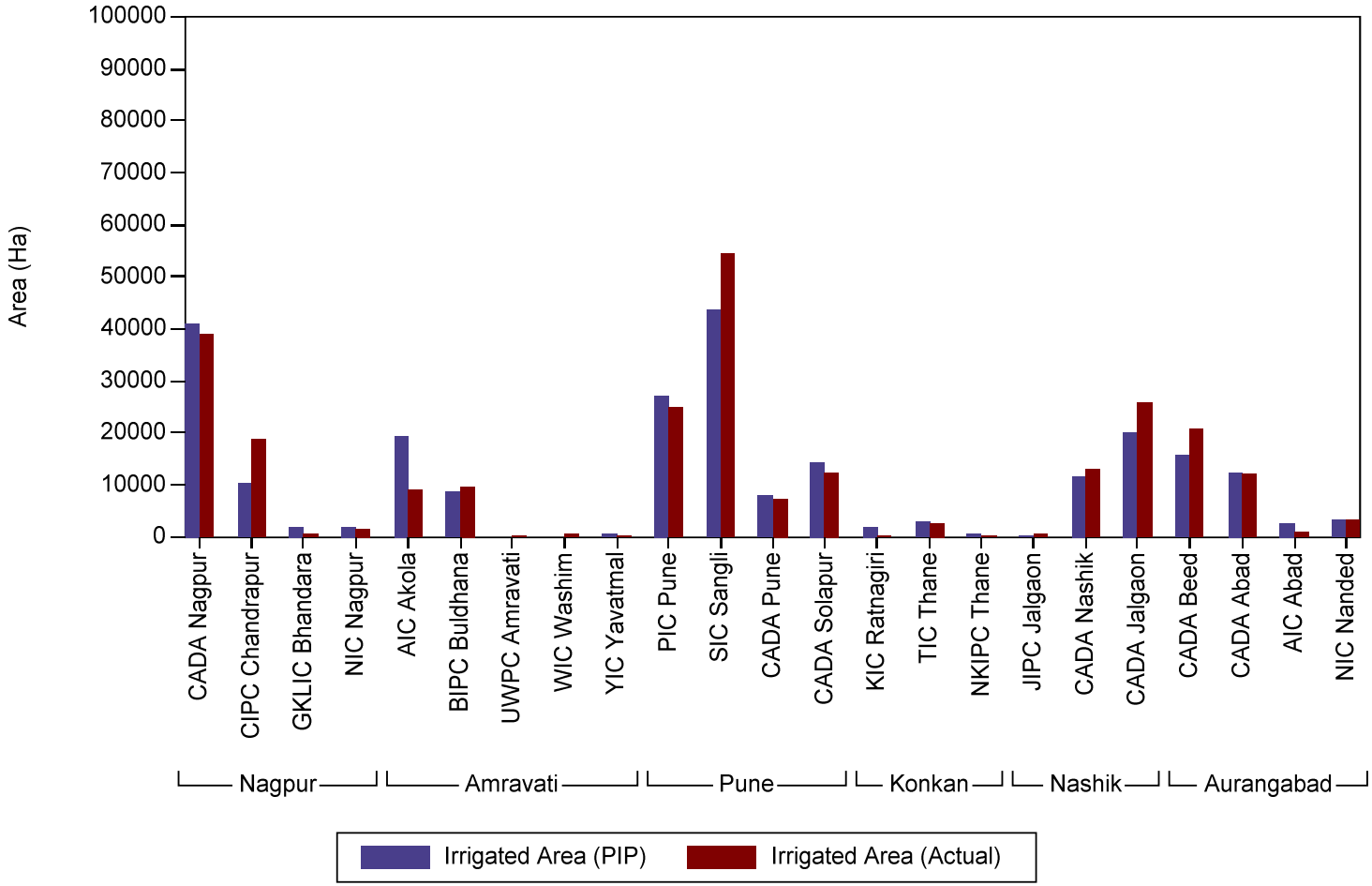


Chart XIV - Region Wise Annual Irrigation System Performance (ISP) Observed (Medium Project)

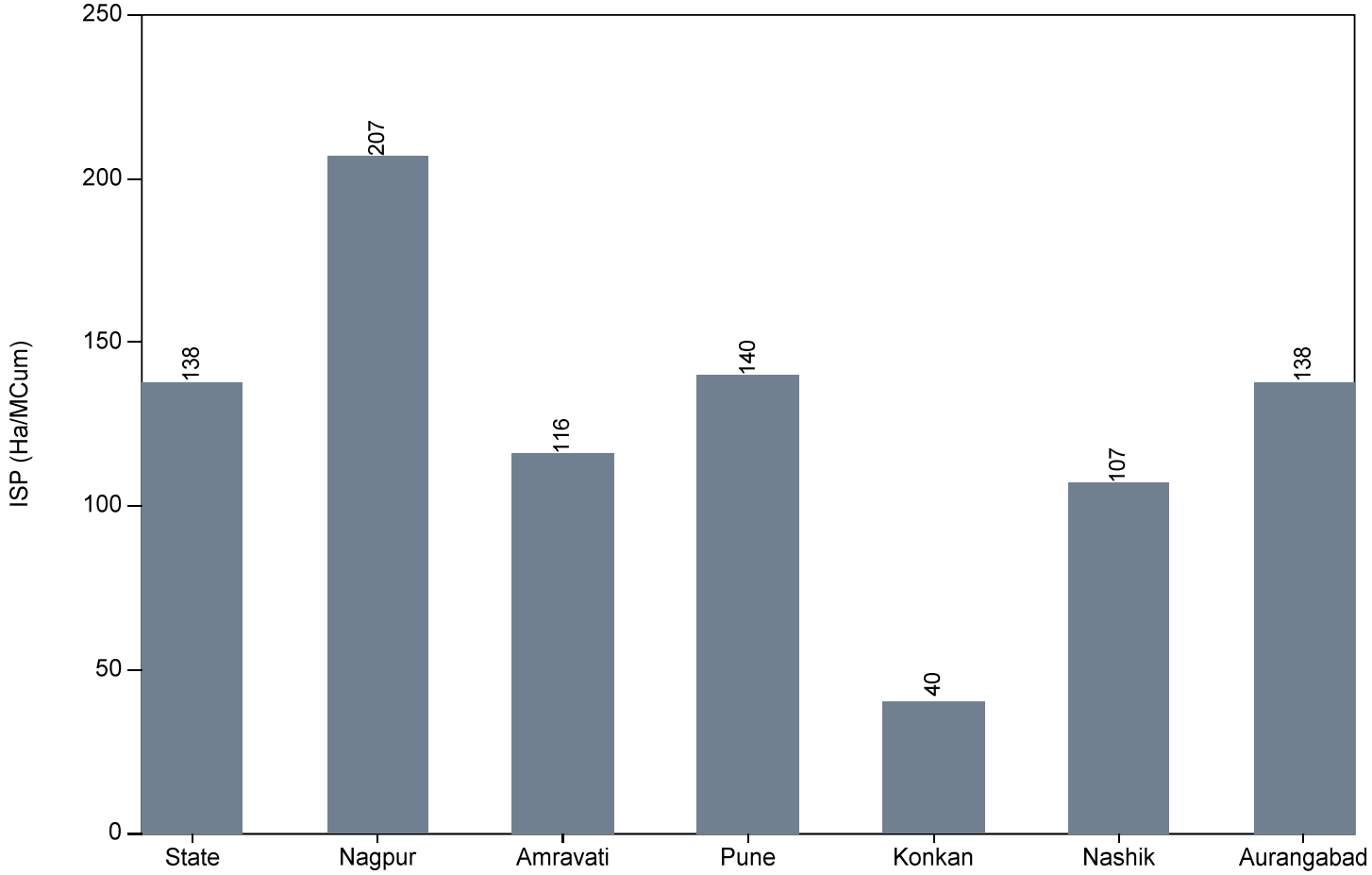


Chart XV - Circle Wise Annual Irrigation System Performance (ISP) Observed (Medium Project)

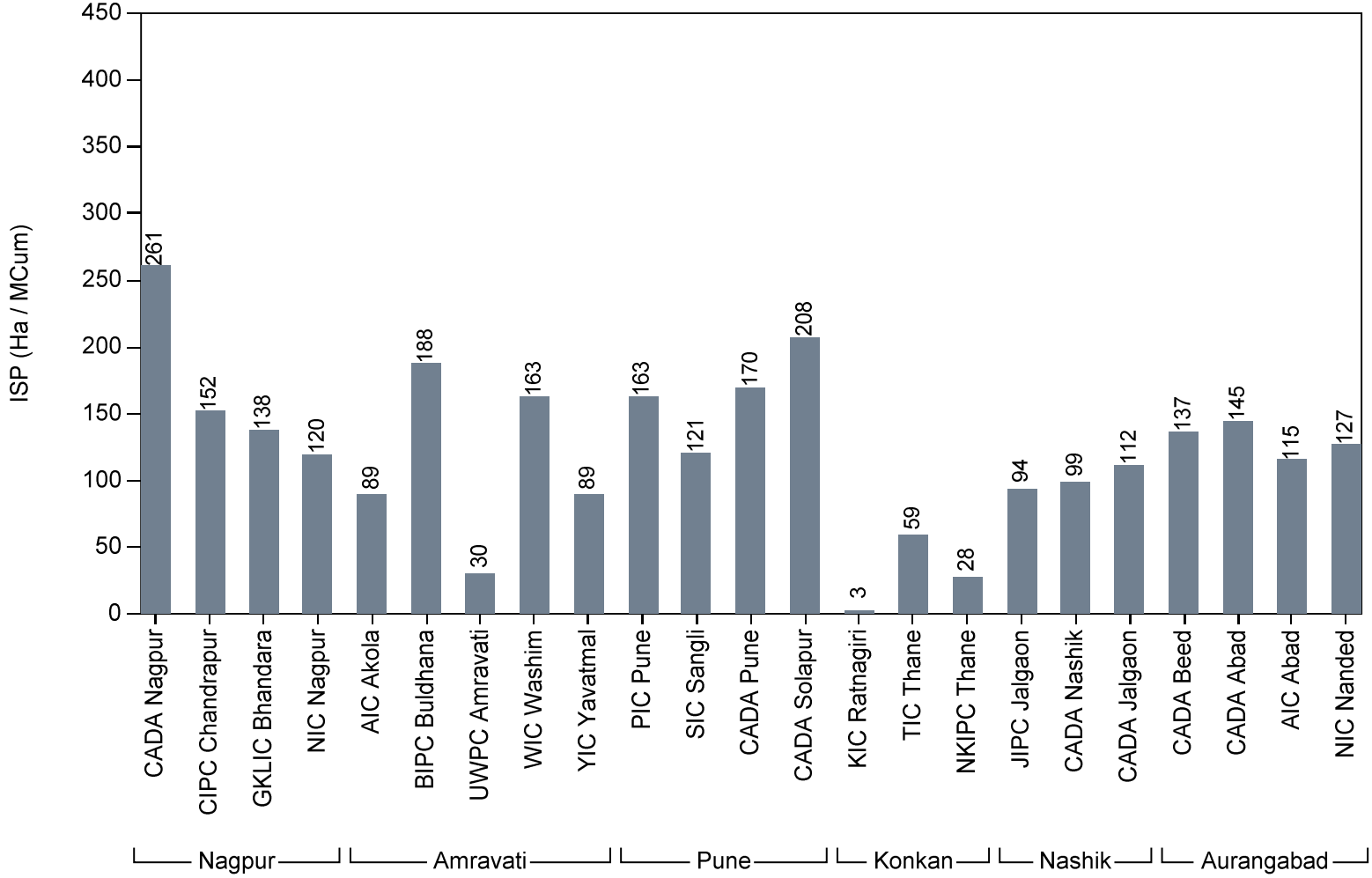
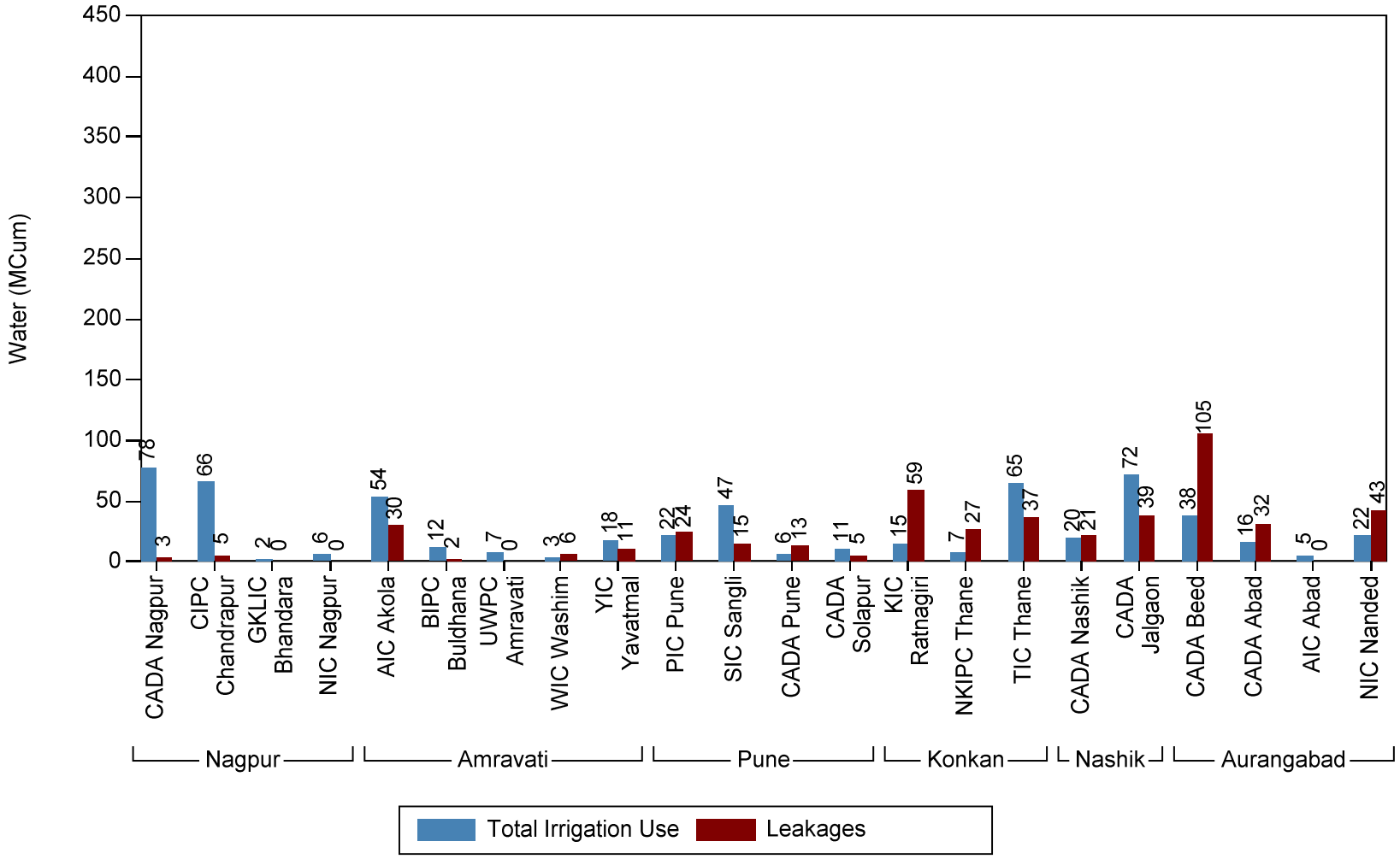
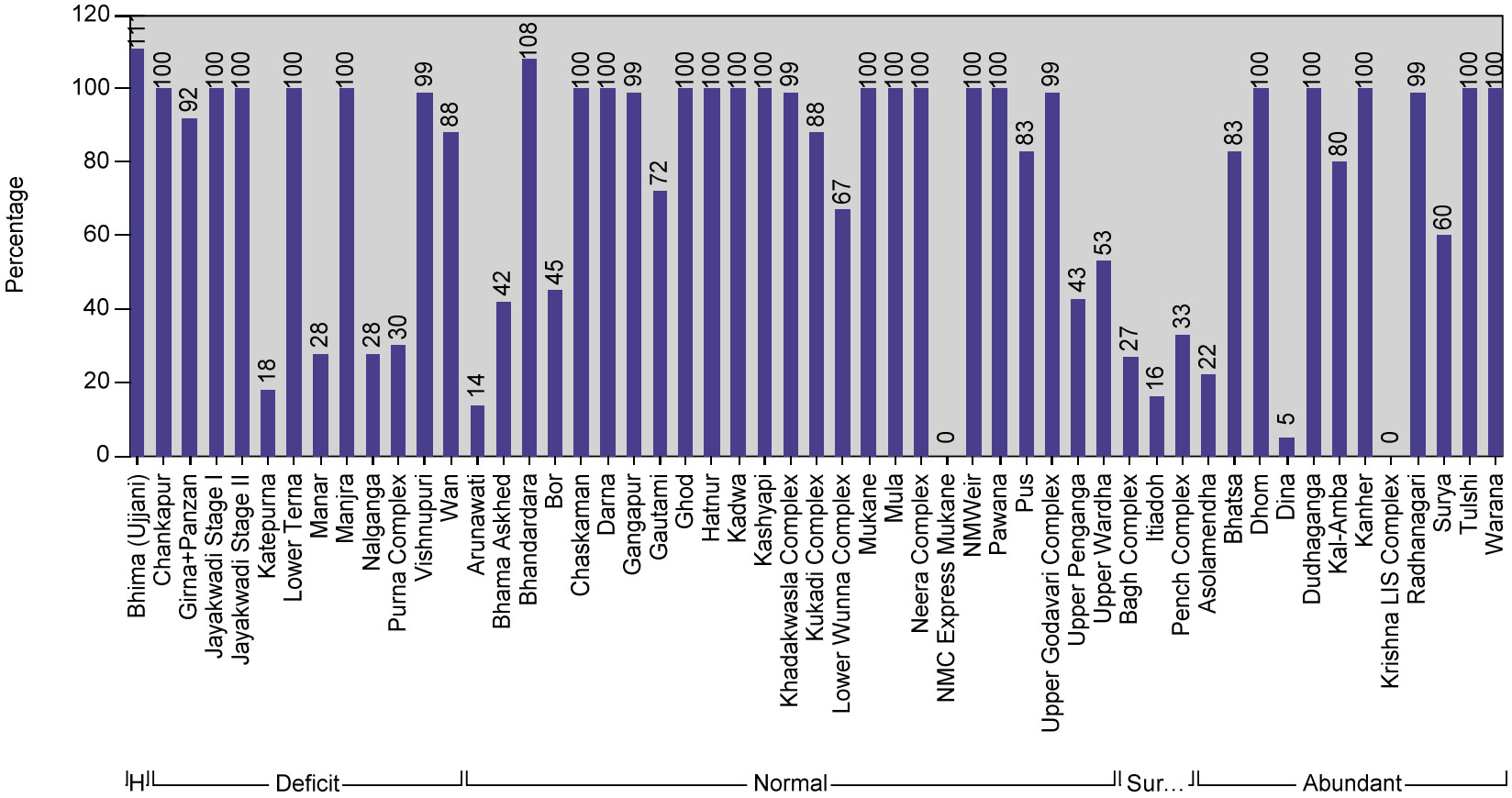


Chart XVI - Region & Circle wise Annual Irrigation Use And Leakages (Minor Project)



Indicator I: Major Projects - Water Availability in Reservoirs On 15th Oct



Indicator I: Water Availability in Reservoirs on 15th Oct - Page 1 of 2

(Major / 2008-09) Unit: MCum

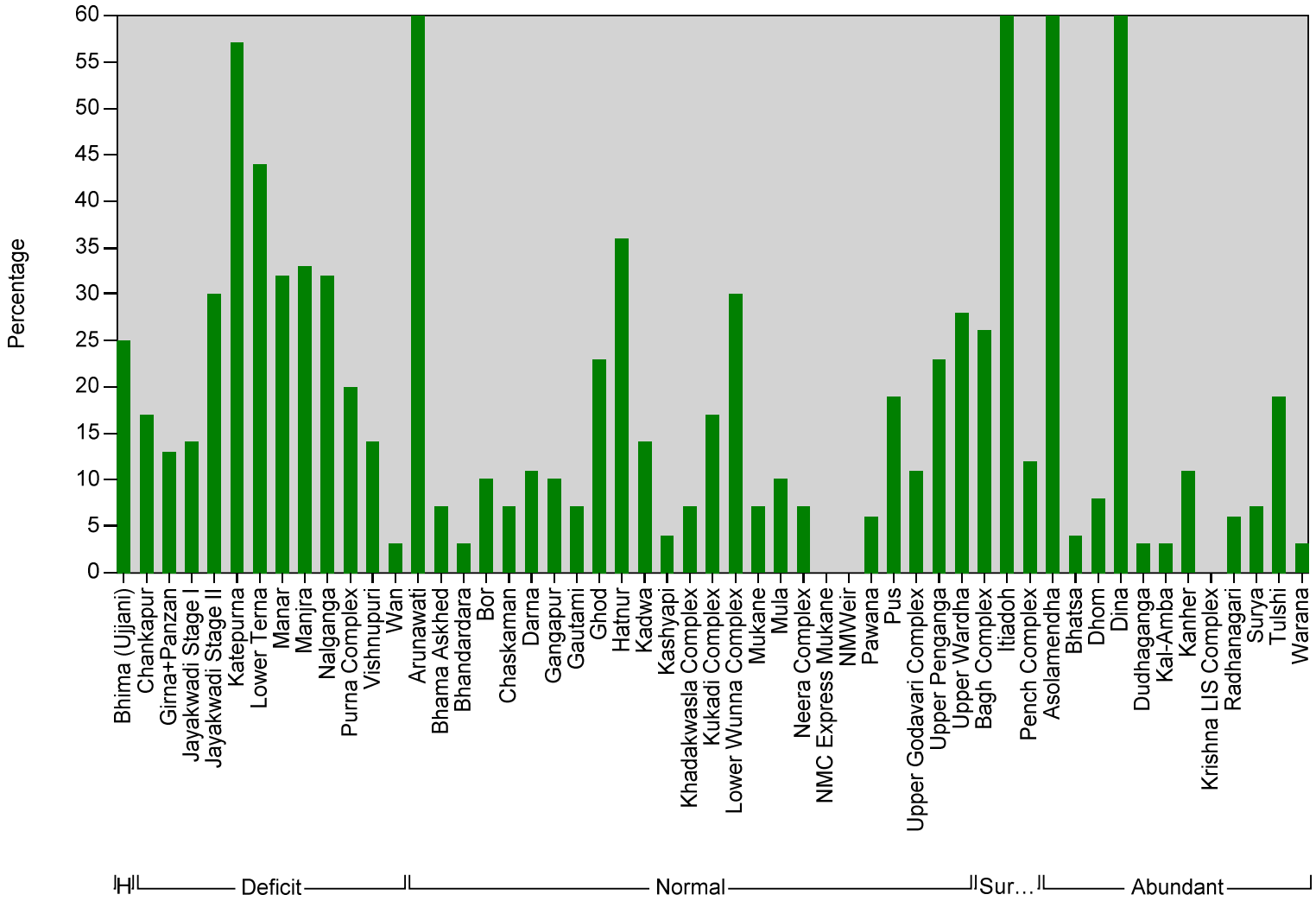
Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	1,688.91	1,517.00	111
	CADA Solapur	**1688.910**	**1517.000**	**111**
Highly Deficit		**1688.910**	**1517.000**	**111**
Deficit				
Purna (Tapi)	Katepurna	15.40	86.35	18
	Nalganga	19.11	69.32	28
	AIC Akola	**34.511**	**155.670**	**22**
Purna (Tapi)	Wan	72.30	81.96	88
	BIPC Buldhana	**72.300**	**81.955**	**88**
Girna	Chankapur	76.85	76.85	100
	CADA Nashik	**76.850**	**76.850**	**100**
Manjra	Manar	39.22	138.21	28
	Purna Complex	265.32	890.22	30
	Vishnupuri	80.02	80.79	99
	NIC Nanded	**384.560**	**1109.223**	**35**
Girna	Girna+Panzan	484.59	525.06	92
	CADA Jalgaon	**484.588**	**525.060**	**92**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	312.00	312.00	100
	Lower Terna	91.22	91.22	100
	Manjra	176.96	176.96	100
	CADA Beed	**580.184**	**580.184**	**100**
Lower Godavari	Jayakwadi Stage I	2,170.94	2,170.94	100
	CADA Abad	**2170.935**	**2170.935**	**100**
Deficit		**3803.928**	**4699.877**	**81**
Normal				
Upper Godavari	NMC Express Mukane	0.00	0.00	0
	AIC Abad	**0.000**	**0.000**	**0**
Painganga	Arunawati	23.87	169.92	14
	YIC Yavatmal	**23.866**	**169.920**	**14**
Wardha	Bor	57.44	127.42	45
	CIPC Chandrapur	**57.440**	**127.420**	**45**
Painganga	Pus	75.85	91.27	83
	AIC Akola	**75.850**	**91.265**	**83**
Wardha	Lower Wunna Complex	126.84	189.18	67
	CADA Nagpur	**126.844**	**189.182**	**67**
Middle Tapi (Satpuda)	Hatnur	255.00	255.00	100
	CADA Jalgaon	**255.000**	**255.000**	**100**
Wardha	Upper Wardha	288.39	548.14	53
	UWPC Amravati	**288.390**	**548.140**	**53**
Painganga	Upper Penganga	411.27	964.10	43
	NIC Nanded	**411.271**	**964.099**	**43**

Indicator I: Water Availability in Reservoirs on 15th Oct - Page 2 of 2

(Major / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	CADA Pune	**914.506**	**1019.190**	**90**
Upper Godavari	Bhandardara	328.10	304.10	108
	Darna	202.43	202.43	100
	Gangapur	158.54	159.42	99
	Gautami	38.36	53.34	72
	Kadwa	52.91	52.91	100
	Kashyapi	52.42	52.43	100
	Mukane	125.33	125.33	100
	Mula	608.92	608.80	100
	NMWeir	7.27	7.28	100
	Upper Godavari Complex	333.64	336.18	99
	CADA Nashik	**1907.922**	**1902.217**	**100**
Upper Bhima	Bhama Askhed	91.47	217.10	42
	Chaskaman	214.50	214.50	100
	Khadakwasla Complex	800.57	808.65	99
	Neera Complex	932.01	931.93	100
	Pawana	241.22	241.11	100
	PIC Pune	**2279.773**	**2413.290**	**94**
Normal		**6340.862**	**7679.723**	**83**
Surplus				
Middle Wainganga	Bagh Complex	73.64	268.96	27
	Itiadoh	51.75	318.85	16
	Pench Complex	459.17	1,375.26	33
	CADA Nagpur	**584.561**	**1963.070**	**30**
Surplus		**584.561**	**1963.070**	**30**
Abundant				
Lower Wainganga	Asolamendha	12.66	56.38	22
	Dina	3.04	67.54	5
	CIPC Chandrapur	**15.700**	**123.915**	**13**
Upper Krishna (W)	Dhom	331.05	331.05	100
	Kanher	271.68	271.68	100
	CADA Pune	**602.730**	**602.730**	**100**
North Konkan	Bhatsa	782.34	942.10	83
	Kal-Amba	423.19	528.13	80
	Surya	172.12	286.31	60
	TIC Thane	**1377.637**	**1756.540**	**78**
Upper Krishna (W)	Dudhaganga	679.11	679.11	100
	Krishna LIS Complex	0.00	0.00	0
	Radhanagari	217.64	219.97	99
	Tulshi	91.92	91.92	100
	Warana	782.06	779.35	100
	SIC Sangli	**1770.728**	**1770.348**	**100**
Abundant		**3766.795**	**4253.533**	**89**
Major		**16185.056**	**20113.203**	**80**

Indicator-II: Major Projects - Percentage of Actual Evaporation to Live Storage



(Major Project / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	415.80	1688.91	25.00
	CADA Solapur	**415.80**	**1,688.91**	**25.00**
Highly Deficit		**415.80**	**1688.91**	**25.00**
Deficit				
Purna (Tapi)	Katepurna	8.79	15.40	57.00
	Nalganga	6.18	19.11	32.00
	AIC Akola	**14.97**	**34.51**	**43.00**
Purna (Tapi)	Wan	2.33	72.30	3.00
	BIPC Buldhana	**2.33**	**72.30**	**3.00**
Lower Godavari	Jayakwadi Stage I	295.62	2170.94	14.00
	CADA Abad	**295.62**	**2,170.94**	**14.00**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	92.16	312.00	30.00
	Lower Terna	40.02	91.22	44.00
	Manjra	57.97	176.96	33.00
	CADA Beed	**190.15**	**580.18**	**33.00**
Girna	Girna+Panzan	64.73	484.59	13.00
	CADA Jalgaon	**64.73**	**484.59**	**13.00**
Girna	Chankapur	12.84	76.85	17.00
	CADA Nashik	**12.84**	**76.85**	**17.00**
Manjra	Manar	12.72	39.22	32.00
	Purna Complex	53.66	265.32	20.00
	Vishnupuri	10.95	80.02	14.00
	NIC Nanded	**77.33**	**384.56**	**20.00**
Deficit		**657.98**	**3803.93**	**17.00**
Normal				
Upper Godavari	NMC Express Mukane	0.00	0.00	0.00
	AIC Abad	**0.00**	**0.00**	**0.00**
Painganga	Pus	14.32	75.85	19.00
	AIC Akola	**14.32**	**75.85**	**19.00**
Middle Tapi (Satpuda)	Hatnur	92.58	255.00	36.00
	CADA Jalgaon	**92.58**	**255.00**	**36.00**
Wardha	Lower Wunna Complex	37.69	126.84	30.00
	CADA Nagpur	**37.69**	**126.84**	**30.00**
Upper Godavari	Bhandardara	8.82	328.10	3.00
	Darna	21.60	202.43	11.00
	Gangapur	15.36	158.54	10.00
	Gautami	2.54	38.36	7.00
	Kadwa	7.19	52.91	14.00
	Kashyapi	2.08	52.42	4.00
	Mukane	8.43	125.33	7.00

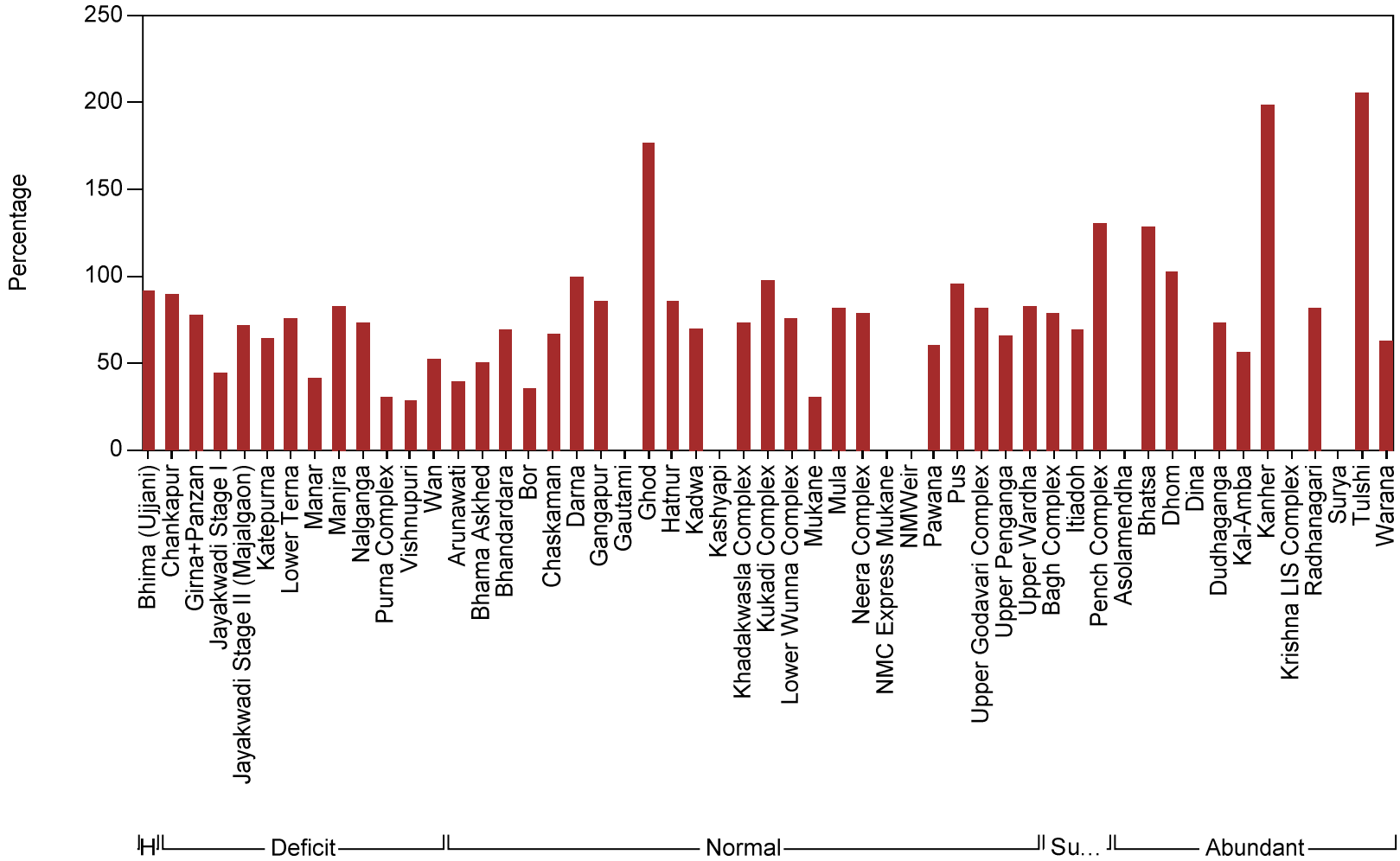
(Major Project / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Mula	62.57	608.92	10.00
	NMWeir	0.00	7.27	0.00
	Upper Godavari Complex	35.25	333.64	11.00
	CADA Nashik	**163.83**	**1,907.92**	**9.00**
Upper Bhima	Ghod	35.02	154.80	23.00
	Kukadi Complex	128.63	759.71	17.00
	CADA Pune	**163.64**	**914.51**	**18.00**
Wardha	Bor	5.80	57.44	10.00
	CIPC Chandrapur	**5.80**	**57.44**	**10.00**
Painganga	Upper Penganga	96.57	411.27	23.00
	NIC Nanded	**96.57**	**411.27**	**23.00**
Upper Bhima	Bhama Askhed	6.72	91.47	7.00
	Chaskaman	15.74	214.50	7.00
	Khadakwasla Complex	59.23	800.57	7.00
	Neera Complex	67.08	932.01	7.00
	Pawana	14.47	241.22	6.00
	PIC Pune	**163.24**	**2,279.77**	**7.00**
Wardha	Upper Wardha	80.24	288.39	28.00
	UWPC Amravati	**80.24**	**288.39**	**28.00**
Painganga	Arunawati	20.52	23.87	86.00
	YIC Yavatmal	**20.52**	**23.87**	**86.00**
Normal		**838.43**	**6340.86**	**13.00**
Surplus				
Middle Wainganga	Bagh Complex	19.08	73.64	26.00
	Itiadoh	46.57	51.75	90.00
	Pench Complex	57.12	459.17	12.00
	CADA Nagpur	**122.77**	**584.56**	**21.00**
Surplus		**122.77**	**584.56**	**21.00**
Abundant				
Upper Krishna (W)	Dhom	28.04	331.05	8.00
	Kanher	31.00	271.68	11.00
	CADA Pune	**59.04**	**602.73**	**10.00**
Lower Wainganga	Asolamendha	15.02	12.66	119.00
	Dina	6.42	3.04	211.00
	CIPC Chandrapur	**21.44**	**15.70**	**137.00**
Upper Krishna (W)	Dudhaganga	23.59	679.11	3.00
	Krishna LIS Complex	0.00	0.00	0.00
	Radhanagari	14.07	217.64	6.00
	Tulshi	17.13	91.92	19.00
	Warana	22.41	782.06	3.00
	SIC Sangli	**77.20**	**1,770.73**	**4.00**
North Konkan				

(Major Project / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Bhatsa	30.84	782.34	4.00
	Kal-Amba	13.51	423.19	3.00
	Surya	12.05	172.12	7.00
	TIC Thane	**56.39**	**1,377.64**	**4.00**
Abundant		**214.07**	**3766.80**	**6.00**
Major Project - Grand Total:		**2249.04**	**16185.06**	**14.00**

Indicator-II(A) - Percentage of Actual Evaporation to Projected Evaporation (Major Project)



Indicator No. II (A): Percentage of Actual Evaporation to Projected Evaporation
Major Projects (2008-09) -

Unit: Mcum

Subbasin/ PlanGroup	Circle/Project	Actual Evaporation	Projected Evaporation	Percentage of Evaporation
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	415.80	453.20	91.75
	CADA Solapur	**415.80**	**453.20**	**91.75**
Highly Deficit		**415.80**	**453.20**	**91.75**
Deficit				
Purna (Tapi)	Katepurna	8.79	13.78	63.80
	Nalganga	6.18	8.50	72.71
	AIC Akola	**14.97**	**22.28**	**67.20**
Purna (Tapi)	Wan	2.33	4.46	52.37
	BIPC Buldhana	**2.33**	**4.46**	**52.37**
Lower Godavari	Jayakwadi Stage I	295.62	664.83	44.46
	CADA Abad	**295.62**	**664.83**	**44.46**
Lower Godavari	Jayakwadi Stage II (Majalgao	92.16	128.76	71.58
Manjra	Lower Terna	40.02	52.66	76.00
	Manjra	57.97	69.94	82.88
	CADA Beed	**190.15**	**251.36**	**75.65**
Girna	Girna+Panzan	64.73	82.86	78.12
	CADA Jalgaon	**64.73**	**82.86**	**78.12**
Girna	Chankapur	12.84	14.30	89.79
	CADA Nashik	**12.84**	**14.30**	**89.79**
Lower Godavari	Vishnupuri	10.95	38.54	28.42
Manjra	Manar	12.72	31.14	40.85
Purna+Dudhana	Purna Complex	53.66	174.94	30.67
	NIC Nanded	**77.33**	**244.62**	**31.61**
Deficit		**657.98**	**1284.71**	**51.22**
Normal				
Upper Godavari	NMC Express Mukane	0.00	0.00	0.00
	AIC Abad	**0.00**	**0.00**	**0.00**
Painganga	Pus	14.32	15.00	95.47
	AIC Akola	**14.32**	**15.00**	**95.47**
Middle Tapi (Satpuda)	Hatnur	92.58	107.60	86.04
	CADA Jalgaon	**92.58**	**107.60**	**86.04**
Wardha	Lower Wunna Complex	37.69	49.63	75.94

Indicator No. II (A): Percentage of Actual Evaporation to Projected Evaporation
Major Projects (2008-09) -

Unit: Mcum

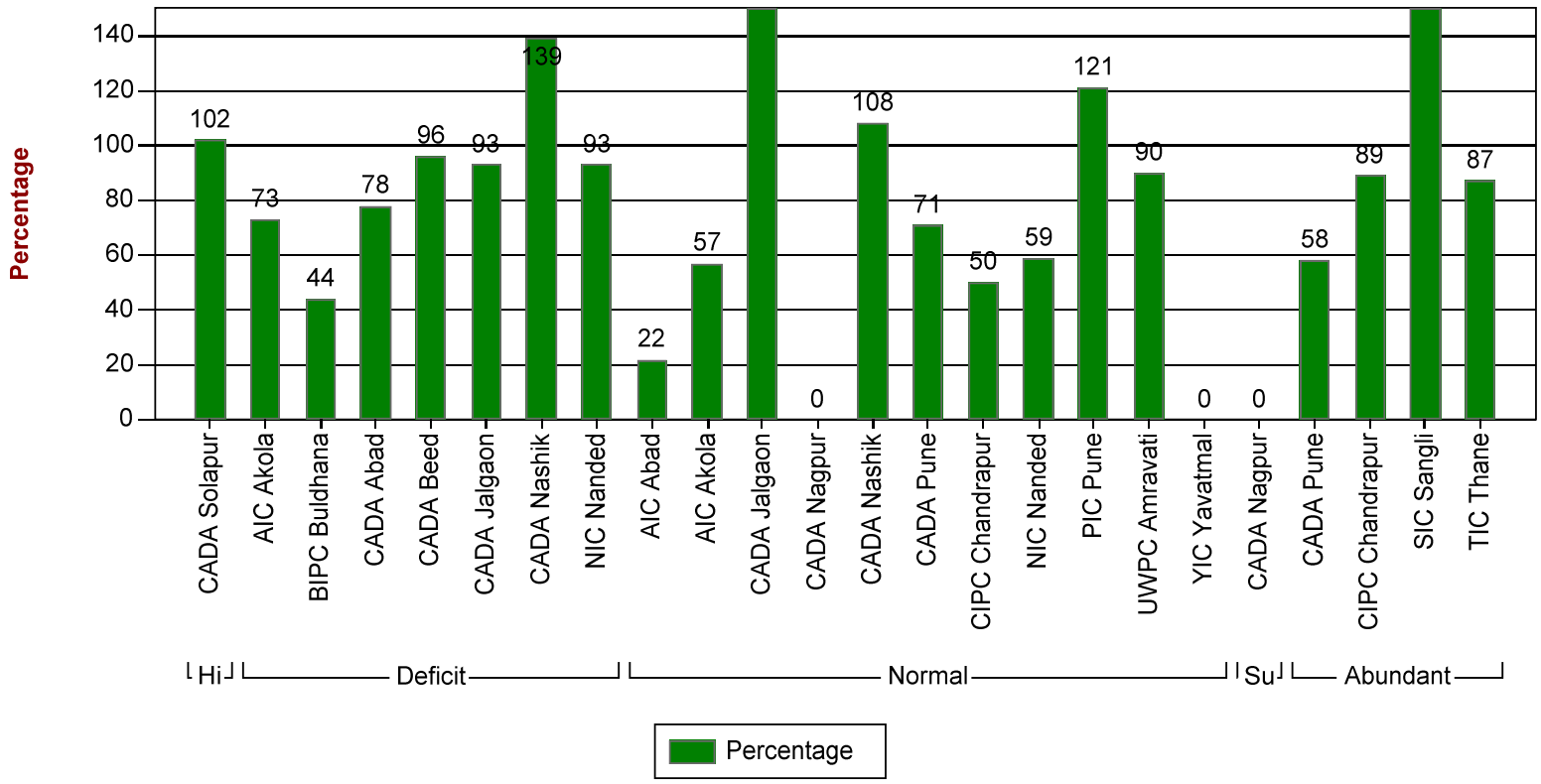
Subbasin/ PlanGroup	Circle/Project	Actual Evaporation	Projected Evaporation	Percentage of Evaporation
	CADA Nagpur	**37.69**	**49.63**	**75.94**
Upper Godavari	Bhandardara	8.82	12.74	69.25
	Darna	21.60	21.67	99.69
	Gangapur	15.36	17.81	86.22
	Gautami	2.54	0.00	0.00
	Kadwa	7.19	10.27	70.00
	Kashyapi	2.08	0.00	0.00
	Mukane	8.43	28.06	30.04
	Mula	62.57	76.45	81.84
	NMWeir	0.00	0.00	0.00
	Upper Godavari Complex	35.25	42.93	82.11
	CADA Nashik	**163.83**	**209.93**	**78.04**
Upper Bhima	Ghod	35.02	19.82	176.68
	Kukadi Complex	128.63	131.34	97.94
	CADA Pune	**163.64**	**151.16**	**108.26**
Wardha	Bor	5.80	16.48	35.17
	CIPC Chandrapur	**5.80**	**16.48**	**35.17**
Painganga	Upper Penganga	96.57	147.25	65.58
	NIC Nanded	**96.57**	**147.25**	**65.58**
Remaining Bhima (Neera)	Neera Complex	67.08	85.15	78.78
Upper Bhima	Bhama Askhed	6.72	13.31	50.50
	Chaskaman	15.74	23.47	67.05
	Khadakwasla Complex	59.23	81.74	72.46
	Pawana	14.47	24.01	60.26
	PIC Pune	**163.24**	**227.68**	**71.70**
Wardha	Upper Wardha	80.24	96.67	83.00
	UWPC Amravati	**80.24**	**96.67**	**83.00**
Painganga	Arunawati	20.52	52.80	38.86
	YIC Yavatmal	**20.52**	**52.80**	**38.86**
Normal		**838.43**	**1074.19**	**78.05**
Surplus				
Middle Wainganga	Bagh Complex	19.08	24.29	78.55
	Itiadoh	46.57	67.82	68.67
	Pench Complex	57.12	44.00	129.81
	CADA Nagpur	**122.77**	**136.11**	**90.19**
Surplus		**122.77**	**136.11**	**90.19**
Abundant				
Upper Krishna (W)	Dhom	28.04	27.42	102.26
	Kanher	31.00	15.63	198.36

Indicator No. II (A): Percentage of Actual Evaporation to Projected Evaporation
Major Projects (2008-09) -

Unit: Mcum

Subbasin/ PlanGroup	Circle/Project	Actual Evaporation	Projected Evaporation	Percentage of Evaporation
	CADA Pune	**59.04**	**43.05**	**137.15**
Lower Wainganga				
	Asolamendha	15.02	0.00	0.00
	Dina	6.42	0.00	0.00
	CIPC Chandrapur	**21.44**	**0.00**	**0.00**
Upper Krishna (W)				
	Dudhaganga	23.59	32.30	73.04
	Krishna LIS Complex	0.00	0.00	0.00
	Radhanagari	14.07	17.16	81.99
	Tulshi	17.13	8.35	205.17
	Warana	22.41	35.39	63.32
	SIC Sangli	**77.20**	**93.20**	**82.84**
Middle Konkan				
	Kal-Amba	13.50	24.00	56.27
North Konkan				
	Bhatsa	30.84	24.00	128.48
	Surya	12.05	0.00	0.00
	TIC Thane	**56.39**	**48.00**	**117.47**
Abundant		**214.07**	**184.25**	**116.18**
	Grand Total:	**2249**	**3132**	**72**

Indicator III : Major Projects - Target and Achievement of Irrigation Potential Utlisation



(Major / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	204390	208735	102
	CADA Solapur	**204390**	**208735**	**102**
Highly Deficit		**204390**	**208735**	**102**
Deficit				
Purna (Tapi)	Katepurna	0	0	0
	Nalganga	2070	1513	73
	AIC Akola	**2070**	**1513**	**73**
Purna (Tapi)	Wan	9700	4263	44
	BIPC Buldhana	**9700**	**4263**	**44**
Lower Godavari	Jayakwadi Stage I	141006	110548	78
	CADA Abad	**141006**	**110548**	**78**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	20100	15465	77
	Lower Terna	5500	5154	94
	Manjra	10800	14443	134
	CADA Beed	**36400**	**35061**	**96**
Girna	Girna+Panzan	24895	23063	93
	CADA Jalgaon	**24895**	**23063**	**93**
Girna	Chankapur	1770	2452	139
	CADA Nashik	**1770**	**2452**	**139**
Manjra	Manar	1000	918	92
	Purna Complex	24800	20276	82
	Vishnupuri	10000	12046	120
	NIC Nanded	**35800**	**33240**	**93**
Deficit		**251641**	**210140**	**84**
Normal				
Upper Godavari	NMC Express Mukane	6600	1441	22
	AIC Abad	**6600**	**1441**	**22**
Painganga	Pus	6890	3917	57
	AIC Akola	**6890**	**3917**	**57**
Middle Tapi (Satpuda)	Hatnur	2575	6668	259
	CADA Jalgaon	**2575**	**6668**	**259**
Wardha	Lower Wunna Complex	0	7185	0

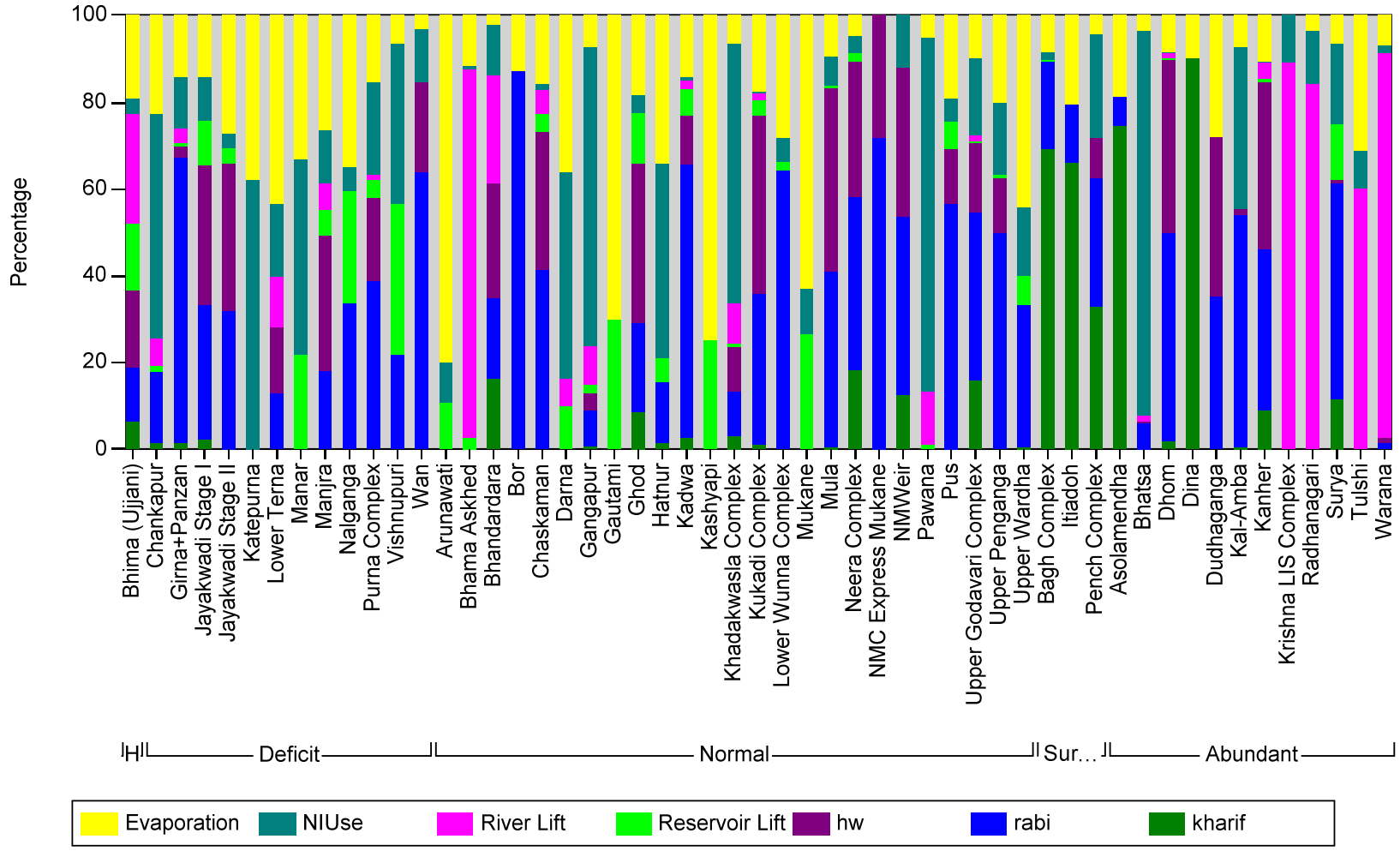
(Major / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	CADA Nagpur	**0**	**7185**	**0**
Upper Godavari				
	Bhandardara	30625	26744	87
	Darna	0	1722	0
	Gangapur	2229	7174	322
	Gautami	0	140	0
	Kadwa	1425	2125	149
	Kashyapi	0	95	0
	Mukane	0	1210	0
	Mula	36484	40942	112
	NMWeir	12549	16811	134
	Upper Godavari Complex	28659	23768	83
	CADA Nashik	**111971**	**120730**	**108**
Upper Bhima				
	Ghod	17767	17769	100
	Kukadi Complex	83350	54137	65
	CADA Pune	**101117**	**71906**	**71**
Wardha				
	Bor	4500	2256	50
	CIPC Chandrapur	**4500**	**2256**	**50**
Painganga				
	Upper Penganga	39000	23131	59
	NIC Nanded	**39000**	**23131**	**59**
Upper Bhima				
	Bhama Askhed	8700	8356	96
	Chaskaman	11440	12454	109
	Khadakwasla Complex	17622	45245	257
	Neera Complex	144709	154187	107
	Pawana	1090	1982	182
	PIC Pune	**183561**	**222224**	**121**
Wardha				
	Upper Wardha	7900	7118	90
	UWPC Amravati	**7900**	**7118**	**90**
Painganga				
	Arunawati	0	279	0
	YIC Yavatmal	**0**	**279**	**0**
Normal		**464114**	**466854**	**101**
Surplus				
Middle Wainganga				
	Bagh Complex	0	23209	0
	Itiadoh	0	17489	0
	Pench Complex	0	49801	0
	CADA Nagpur	**0**	**90499**	**0**
Surplus		**0**	**90499**	**0**
Abundant				

(Major / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
Upper Krishna (W)				
	Dhom	40800	20206	50
	Kanher	21400	15975	75
	CADA Pune	**62200**	**36181**	**58**
Lower Wainganga				
	Asolamendha	11500	9198	80
	Dina	11000	10913	99
	CIPC Chandrapur	**22500**	**20111**	**89**
Upper Krishna (W)				
	Dudhaganga	25050	17932	72
	Krishna LIS Complex	0	196187	0
	Radhanagari	52440	40943	78
	Tulshi	6070	4449	73
	Warana	56810	38840	68
	SIC Sangli	**140370**	**298351**	**213**
North Konkan				
	Bhatsa	2500	2667	107
	Kal-Amba	4167	3400	82
	Surya	4600	3683	80
	TIC Thane	**11267**	**9750**	**87**
Abundant		**236337**	**364393**	**154**
Major		**1156482**	**1340623**	**116**

Indicator IV: Major Projects - Water Use pattern



(Major / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Highly Deficit									
Remaining Bhima+ Man	Bhima (Ujjani)	140.050	270.010	389.190	340.740	550.440	82.171	415.800	2188.401
	CADA Solapur	**140.050**	**270.010**	**389.190**	**340.740**	**550.440**	**82.171**	**415.800**	**2188.401**
Highly Deficit		**140.050**	**270.010**	**389.190**	**340.740**	**550.440**	**82.171**	**415.800**	**2188.401**
Deficit									
Purna (Tapi)	Katepurna	0.000	0.000	0.000	0.000	0.000	14.331	8.792	23.123
	Nalganga	0.000	5.960	0.000	4.550	0.000	1.010	6.180	17.700
	AIC Akola	**0.000**	**5.960**	**0.000**	**4.550**	**0.000**	**15.341**	**14.972**	**40.823**
Purna (Tapi)	Wan	0.000	44.291	14.286	0.000	0.000	8.428	2.334	69.339
	BIPC	**0.000**	**44.291**	**14.286**	**0.000**	**0.000**	**8.428**	**2.334**	**69.339**
	Buldhana								
Lower Godavari	Jayakwadi Stage I	47.707	643.069	659.275	215.000	0.000	208.786	295.615	2069.452
	CADA Abad	**47.707**	**643.069**	**659.275**	**215.000**	**0.000**	**208.786**	**295.615**	**2069.452**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	0.000	107.189	115.885	12.419	0.000	10.633	92.164	338.290
	Lower Terna	0.000	11.745	14.181	0.000	10.833	15.043	40.020	91.822
	Manjra	0.000	39.714	67.401	12.789	13.490	26.428	57.968	217.790
	CADA Beed	**0.000**	**158.648**	**197.467**	**25.208**	**24.323**	**52.104**	**190.152**	**647.902**
Girna	Girna+Panzan	6.616	298.385	11.784	3.246	14.283	53.844	64.734	452.892
	CADA Jalgaon	**6.616**	**298.385**	**11.784**	**3.246**	**14.283**	**53.844**	**64.734**	**452.892**
Girna	Chankapur	0.910	9.110	0.000	0.810	3.390	29.060	12.840	56.120
	CADA Nashik	**0.910**	**9.110**	**0.000**	**0.810**	**3.390**	**29.060**	**12.840**	**56.120**
Manjra	Manar	0.000	0.000	0.000	8.417	0.000	17.232	12.722	38.371
	Purna Complex	0.000	134.481	67.301	13.906	3.996	73.851	53.657	347.192
	Vishnupuri	0.000	36.280	0.000	57.720	0.000	61.525	10.952	166.477
	NIC Nanded	**0.000**	**170.761**	**67.301**	**80.043**	**3.996**	**152.608**	**77.331**	**552.040**
Deficit		**55.233**	**1330.224**	**950.113**	**328.857**	**45.992**	**520.171**	**657.978**	**3888.568**
Normal									
Upper Godavari	NMC Express Mukane	0.000	36.590	14.470	0.000	0.000	0.000	0.000	51.060
	AIC Abad	**0.000**	**36.590**	**14.470**	**0.000**	**0.000**	**0.000**	**0.000**	**51.060**
Painganga									

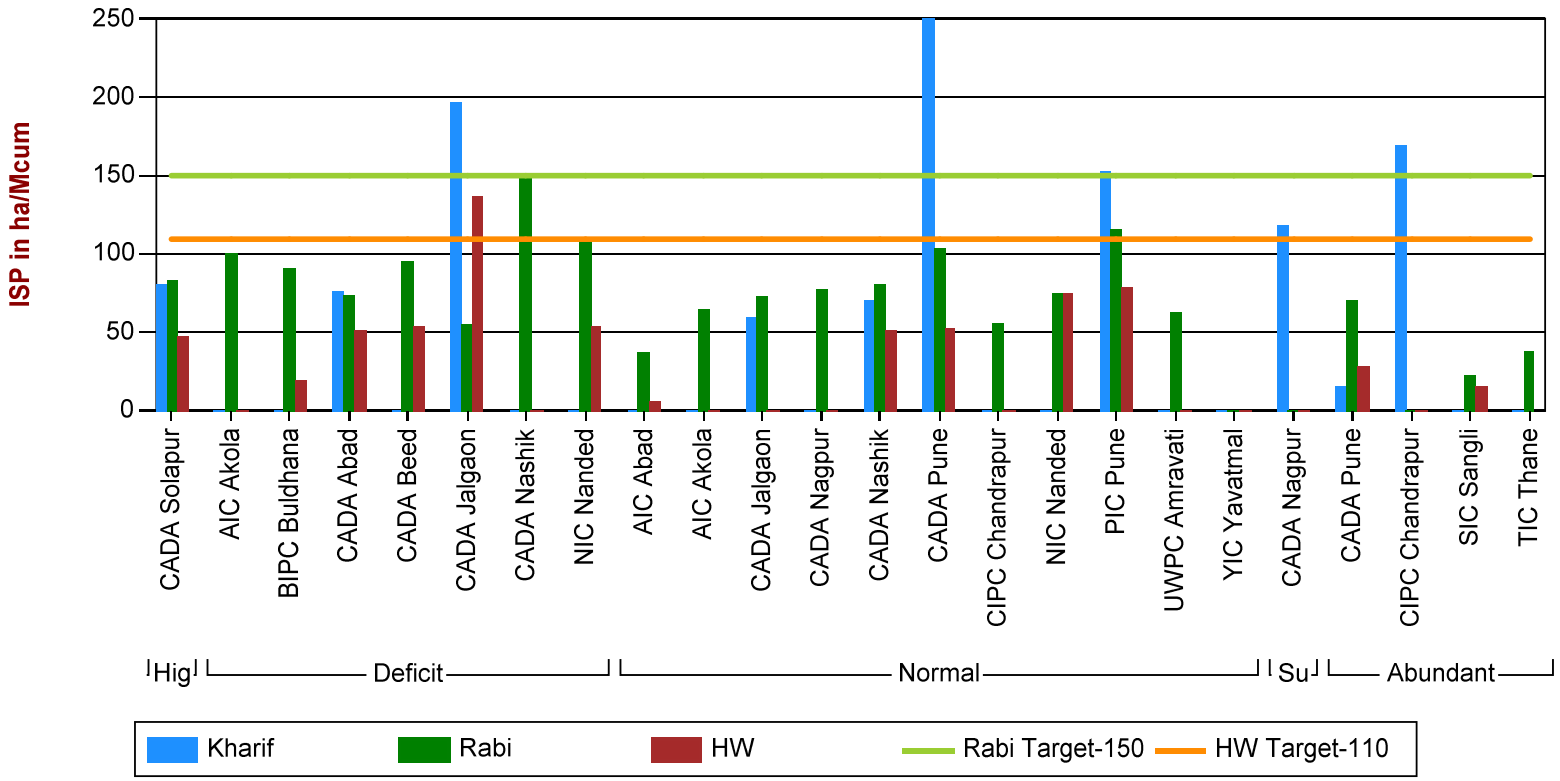
(Major / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Pus	0.000	42.209	9.380	4.739	0.000	4.029	14.320	74.678
	AIC Akola	**0.000**	**42.209**	**9.380**	**4.739**	**0.000**	**4.029**	**14.320**	**74.678**
Middle Tapi (Satpuda)	Hatnur	4.210	37.250	0.000	15.210	0.000	120.690	92.580	269.940
	CADA Jalgaon	**4.210**	**37.250**	**0.000**	**15.210**	**0.000**	**120.690**	**92.580**	**269.940**
Wardha	Lower Wunna Complex	0.000	86.104	0.000	2.458	0.000	7.707	37.689	133.958
	CADA Nagpur	**0.000**	**86.104**	**0.000**	**2.458**	**0.000**	**7.707**	**37.689**	**133.958**
Upper Godavari	Bhandardara	65.850	74.890	106.880	0.011	101.130	46.794	8.822	404.377
	Darna	0.000	0.000	0.000	6.032	3.678	28.325	21.603	59.638
	Gangapur	1.699	17.447	8.560	4.080	18.411	147.213	15.355	212.765
	Gautami	0.000	0.000	0.000	1.080	0.000	0.002	2.539	3.621
	Kadwa	1.240	32.280	5.685	3.198	1.072	0.380	7.189	51.044
	Kashyapi	0.000	0.000	0.000	0.704	0.000	0.000	2.077	2.781
	Mukane	0.000	0.000	0.000	3.570	0.000	1.380	8.430	13.380
	Mula	1.935	267.900	274.670	5.280	0.000	43.990	62.570	656.345
	NMWeir	41.624	135.768	114.126	0.000	0.000	40.386	0.000	331.904
	Upper Godavari Complex	58.086	141.104	59.555	0.607	5.219	65.242	35.249	365.062
	CADA Nashik	**170.434**	**669.389**	**569.476**	**24.562**	**129.510**	**373.712**	**163.834**	**2100.917**
Upper Bhima	Ghod	16.296	39.664	69.696	22.620	0.000	7.528	35.017	190.821
	Kukadi Complex	9.340	253.392	302.710	28.516	8.783	4.450	128.627	735.818
	CADA Pune	**25.636**	**293.056**	**372.406**	**51.136**	**8.783**	**11.978**	**163.644**	**926.639**
Wardha	Bor	0.000	40.210	0.000	0.000	0.000	0.000	5.796	46.006
	CIPC	**0.000**	**40.210**	**0.000**	**0.000**	**0.000**	**0.000**	**5.796**	**46.006**
	Chandrapur								
Painganga	Upper Penganga	0.000	238.586	59.518	4.068	0.000	79.562	96.571	478.305
	NIC Nanded	**0.000**	**238.586**	**59.518**	**4.068**	**0.000**	**79.562**	**96.571**	**478.305**
Upper Bhima	Bhama Askhed	0.000	0.000	0.000	1.540	48.783	0.517	6.721	57.561
	Chaskaman	0.000	41.570	31.860	4.236	5.696	1.510	15.737	100.609
	Khadakwasla Complex	25.340	95.290	91.820	5.403	84.000	535.879	59.230	896.962
	Neera Complex	263.652	579.102	458.209	30.290	0.000	58.024	67.080	1456.357
	Pawana	0.000	0.000	0.000	3.194	33.770	227.396	14.469	278.829
	PIC Pune	**288.992**	**715.962**	**581.889**	**44.663**	**172.249**	**823.326**	**163.237**	**2790.318**
Wardha	Upper Wardha	0.421	60.110	0.000	11.911	0.000	28.743	80.240	181.425

(Major / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	UWPC	**0.421**	**60.110**	**0.000**	**11.911**	**0.000**	**28.743**	**80.240**	**181.425**
	Amravati								
Painganga	Arunawati	0.000	0.000	0.000	2.720	0.000	2.356	20.519	25.595
	YIC Yavatmal	**0.000**	**0.000**	**0.000**	**2.720**	**0.000**	**2.356**	**20.519**	**25.595**
Normal		**489.693**	**2219.467**	**1607.139**	**161.467**	**310.542**	**452.102**	**838.431**	**7078.841**
Surplus									
Middle Wainganga	Bagh Complex	157.648	46.163	0.000	1.410	0.000	4.091	19.082	228.394
	Itiadoh	149.290	29.440	0.000	0.000	0.000	0.000	46.569	225.299
	Pench Complex	450.671	404.787	130.650	0.025	0.000	330.140	57.116	1373.389
	CADA Nagpur	**757.609**	**480.390**	**130.650**	**1.435**	**0.000**	**334.231**	**122.766**	**1827.082**
Surplus		**757.609**	**480.390**	**130.650**	**1.435**	**0.000**	**334.231**	**122.766**	**1827.082**
Abundant									
Upper Krishna (W)	Dhom	6.798	160.428	132.366	1.349	4.000	1.260	28.040	334.241
	Kanher	26.445	109.911	114.454	2.202	12.000	0.192	31.003	296.207
	CADA Pune	**33.243**	**270.339**	**246.820**	**3.551**	**16.000**	**1.452**	**59.043**	**630.448**
Lower Wainganga	Asolamendha	60.310	5.655	0.000	0.000	0.000	0.000	15.020	80.985
	Dina	58.055	0.000	0.000	0.000	0.000	0.000	6.416	64.471
	CIPC	**118.365**	**5.655**	**0.000**	**0.000**	**0.000**	**0.000**	**21.436**	**145.456**
	Chandrapur								
Upper Krishna (W)	Dudhaganga	0.000	29.808	31.547	0.000	0.000	0.000	23.592	84.947
	Krishna LIS Complex	0.000	0.000	0.000	0.000	506.046	62.789	0.000	568.835
	Radhanagari	0.000	0.000	0.000	0.000	340.539	49.352	14.070	403.961
	Tulshi	0.000	0.000	0.000	0.000	33.240	4.694	17.132	55.066
	Warana	0.000	4.946	3.404	0.000	287.801	5.350	22.409	323.910
	SIC Sangli	**0.000**	**34.754**	**34.951**	**0.000**	**1167.626**	**122.185**	**77.203**	**1436.719**
North Konkan	Bhatsa	0.000	48.439	3.590	0.000	10.807	733.985	30.835	827.656
	Kal-Amba	0.392	100.079	3.039	0.000	0.000	69.218	13.505	186.233
	Surya	21.354	92.156	1.414	24.000	0.000	34.000	12.046	184.970
	TIC Thane	**21.746**	**240.674**	**8.043**	**24.000**	**10.807**	**837.203**	**56.386**	**1198.859**
Abundant		**173.354**	**551.422**	**289.814**	**27.551**	**1194.433**	**960.839**	**214.068**	**3411.481**
Major		**1615.939**	**4851.513**	**3366.905**	**860.050**	**2101.407**	**3349.515**	**2249.043**	**8394.373**

Indicator V : Major Projects - Irrigation System Performance (Canals)



(Major / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	81	83	48
	CADA Solapur	**81**	**83**	**48**
Highly Deficit		**81**	**83**	**48**
Deficit				
Purna (Tapi)	Katepurna	0	0	0
	Nalganga	0	100	0
	AIC Akola	**0**	**100**	**0**
Purna (Tapi)	Wan	0	90	19
	BIPC Buldhana	**0**	**90**	**19**
Lower Godavari	Jayakwadi Stage I	77	75	52
	CADA Abad	**77**	**75**	**52**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	0	76	43
	Lower Terna	0	145	52
	Manjra	0	132	76
	CADA Beed	**0**	**95**	**55**
Girna	Girna+Panzan	198	56	138
	CADA Jalgaon	**198**	**56**	**138**
Girna	Chankapur	322	149	0
	CADA Nashik	**322**	**149**	**0**
Manjra	Manar	0	0	0
	Purna Complex	0	106	54
	Vishnupuri	0	120	0
	NIC Nanded	**0**	**109**	**54**
Deficit		**95**	**79**	**53**
Normal				
Upper Godavari	NMC Express Mukane	0	37	6
	AIC Abad	**0**	**37**	**6**
Painganga	Pus	0	65	0
	AIC Akola	**0**	**65**	**0**
Middle Tapi (Satpuda)	Hatnur	59	73	0
	CADA Jalgaon	**59**	**73**	**0**
Wardha	Lower Wunna Complex	0	78	0
	CADA Nagpur	**0**	**78**	**0**
Upper Godavari	Bhandardara	102	87	41
	Darna	0	0	0

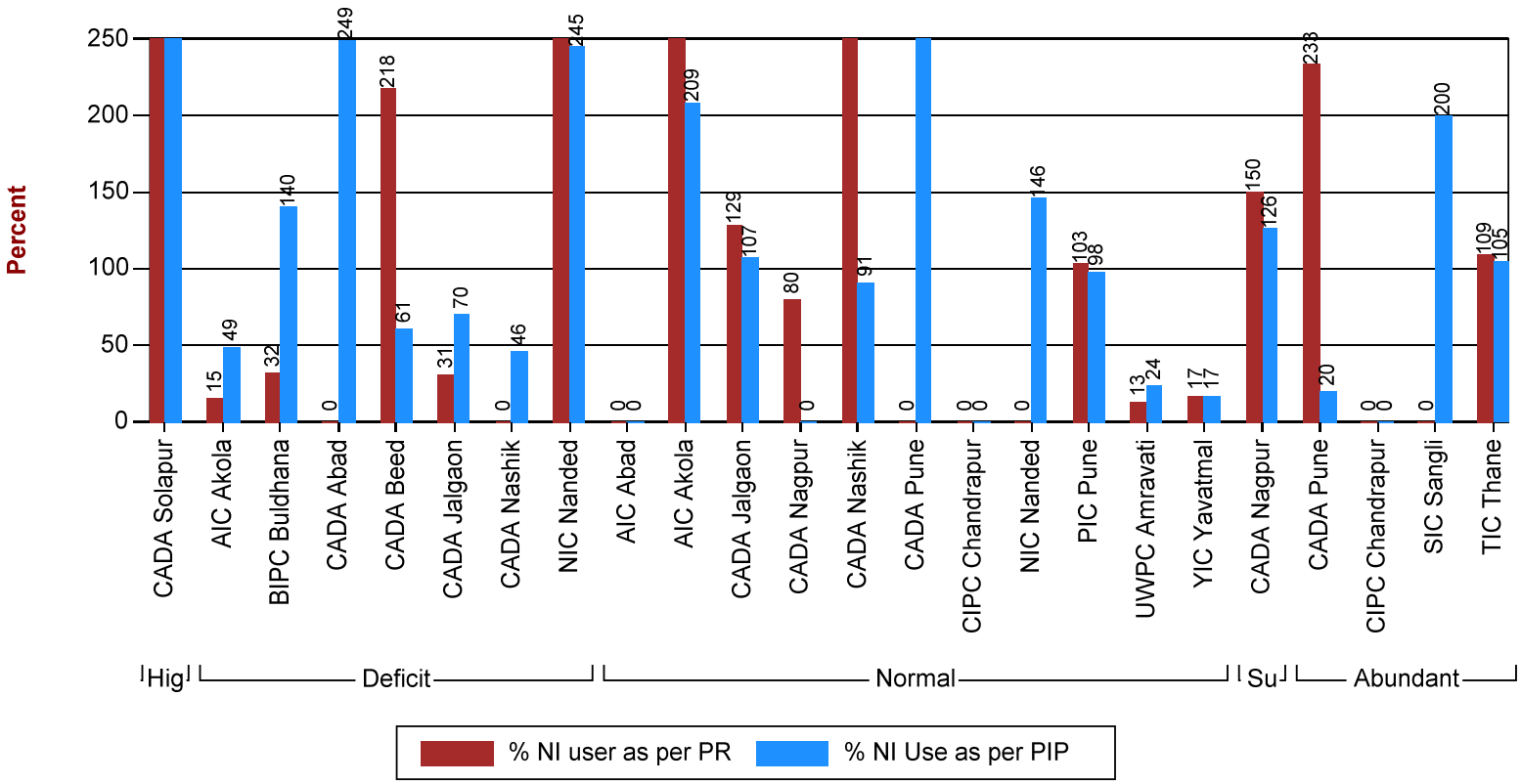
(Major / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Gangapur	0	71	79
	Gautami	0	0	0
	Kadwa	30	33	47
	Kashyapi	0	0	0
	Mukane	0	0	0
	Mula	221	90	57
	NMWeir	105	66	31
	Upper Godavari Complex	9	88	80
	CADA Nashik	**71**	**81**	**51**
Upper Bhima	Ghod	153	144	72
	Kukadi Complex	547	99	49
	CADA Pune	**296**	**105**	**53**
Wardha	Bor	0	56	0
	CIPC Chandrapur	**0**	**56**	**0**
Painganga	Upper Penganga	0	75	76
	NIC Nanded	**0**	**75**	**76**
Upper Bhima	Bhama Askhed	0	0	0
	Chaskaman	0	97	80
	Khadakwasla Complex	137	98	67
	Neera Complex	155	121	82
	Pawana	0	0	0
	PIC Pune	**153**	**116**	**79**
Wardha	Upper Wardha	0	63	0
	UWPC Amravati	**0**	**63**	**0**
Painganga	Arunawati	0	0	0
	YIC Yavatmal	**0**	**0**	**0**
Normal		**131**	**93**	**62**
Surplus				
Middle Wainganga	Bagh Complex	146	0	0
	Itiadoh	117	0	0
	Pench Complex	110	1	0
	CADA Nagpur	**119**	**1**	**0**
Surplus		**119**	**1**	**0**
Abundant				
Upper Krishna (W)	Dhom	26	79	33
	Kanher	13	58	26
	CADA Pune	**16**	**71**	**30**
Lower Wainganga	Asolamendha	153	0	0

(Major / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Upper Krishna (W)	Dina	188	0	0
	CIPC Chandrapur	**170**	**0**	**0**
	Dudhaganga	0	10	9
	Krishna LIS Complex	0	0	0
	Radhanagari	0	0	0
	Tulshi	0	0	0
	Warana	0	107	77
	SIC Sangli	**0**	**24**	**16**
North Konkan	Bhatsa	0	43	0
	Kal-Amba	0	34	0
	Surya	0	40	0
	TIC Thane	**0**	**38**	**0**
Abundant		**119**	**53**	**27**
		119	**75**	**52**

Indicator VI : Major Projects - Percentage of Planned & Actual Non-Irrigation Use



Indicator VI: Percentage of Planned & Actual Non Irrigation Use -

(Major / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Highly Deficit						
Remaining Bhima+ Man	Bhima (Ujjani)	82.17	150.95	76.00	54	108
	CADA Solapur	**82.170**	**150.950**	**76.000**	**54**	**108**
Highly Deficit		**82.170**	**150.950**	**76.000**	**54**	**108**
Deficit						
Purna (Tapi)	Katepurna	14.33	32.65	11.64	44	123
	Nalganga	1.01	6.51	1.00	16	101
	AIC Akola	**15.340**	**39.163**	**12.640**	**39**	**121**
Purna (Tapi)	Wan	8.43	25.70	6.00	33	140
	BIPC Buldhana	**8.430**	**25.699**	**6.000**	**33**	**140**
Lower Godavari	Jayakwadi Stage I	208.79	0.00	135.70	0	154
	CADA Abad	**208.790**	**0.000**	**135.700**	**0**	**154**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	10.63	0.00	10.85	0	98
	Lower Terna	15.04	14.36	2.86	105	526
	Manjra	26.43	0.00	37.70	0	70
	CADA Beed	**52.100**	**14.361**	**51.410**	**363**	**101**
Girna	Girna+Panzan	53.84	141.42	63.51	38	85
	CADA Jalgaon	**53.840**	**141.422**	**63.507**	**38**	**85**
Girna	Chankapur	29.06	0.00	64.06	0	45
	CADA Nashik	**29.060**	**0.000**	**64.060**	**0**	**45**
Manjra	Manar	17.23	2.62	21.00	658	82
	Purna Complex	73.85	0.00	25.93	0	285
	Vishnupuri	61.53	12.15	32.40	506	190
	NIC Nanded	**152.610**	**14.770**	**79.330**	**1033**	**192**
Deficit		**520.170**	**235.415**	**412.647**	**221**	**126**
Normal						
Upper Godavari	NMC Express Mukane	0.00	0.00	0.00	0	0
	AIC Abad	**0.000**	**0.000**	**0.000**	**0**	**0**
Painganga	Pus	4.03	1.36	2.27	296	177
	AIC Akola	**4.030**	**1.360**	**2.270**	**296**	**177**

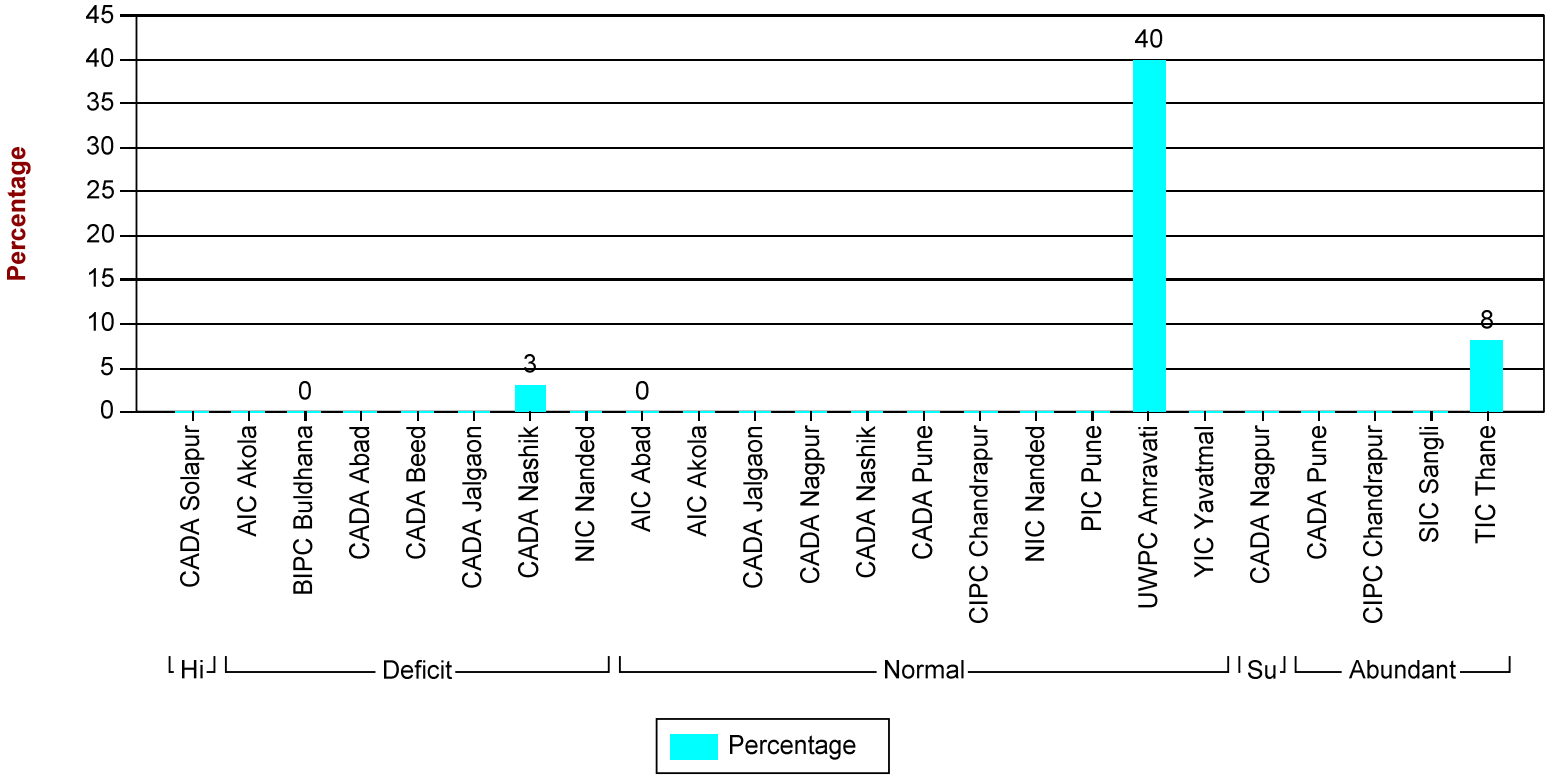
(Major / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Middle Tapi (Satpuda)	Hatnur	120.69	90.53	109.00	133	111
	CADA Jalgaon	**120.690**	**90.530**	**109.000**	**133**	**111**
Wardha	Lower Wunna Complex	7.71	12.00	0.00	64	0
	CADA Nagpur	**7.710**	**12.000**	**0.000**	**64**	**0**
Upper Godavari	Bhandardara	46.79	0.00	30.91	0	151
	Darna	28.32	1.53	0.00	1851	0
	Gangapur	147.21	2.73	115.64	5392	127
	Gautami	0.00	0.00	0.00	0	100
	Kadwa	0.38	0.60	0.20	63	190
	Kashyapi	0.00	0.00	0.00	0	0
	Mukane	1.38	0.00	0.00	0	0
	Mula	43.99	59.13	41.82	74	105
	NMWeir	40.39	0.00	0.00	0	0
	Upper Godavari Complex	65.24	23.46	55.98	278	117
	CADA Nashik	**373.710**	**87.448**	**244.545**	**427**	**153**
Upper Bhima	Ghod	7.53	0.00	8.16	0	92
	Kukadi Complex	4.45	0.00	8.37	0	53
	CADA Pune	**11.980**	**0.000**	**16.532**	**0**	**72**
Wardha	Bor	0.00	6.35	0.00	0	0
	CIPC Chandrapur	**0.000**	**6.350**	**0.000**	**0**	**0**
Painganga	Upper Penganga	79.56	0.00	55.64	0	143
	NIC Nanded	**79.560**	**0.000**	**55.640**	**0**	**143**
Upper Bhima	Bhama Askhed	0.52	4.53	0.00	11	0
	Chaskaman	1.51	0.00	3.55	0	43
	Khadakwasla Complex	535.88	407.62	376.31	131	142
	Neera Complex	58.02	0.00	91.00	0	64
	Pawana	227.40	168.32	142.00	135	160
	PIC Pune	**823.330**	**580.470**	**612.860**	**142**	**134**
Wardha	Upper Wardha	28.74	89.72	50.00	32	57
	UWPC Amravati	**28.740**	**89.719**	**50.000**	**32**	**57**

(Major / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Painganga						
	Arunawati	2.36	15.65	15.65	15	15
	YIC Yavatmal	**2.360**	**15.652**	**15.652**	**15**	**15**
Normal		**1452.100**	**883.529**	**1106.499**	**164**	**131**
Surplus						
Middle Wainganga						
	Bagh Complex	4.09	43.09	12.82	9	32
	Itiadoh	0.00	0.00	0.00	0	0
	Pench Complex	330.14	179.00	251.81	184	131
	CADA Nagpur	**334.230**	**222.087**	**264.630**	**150**	**126**
Surplus		**334.230**	**222.087**	**264.630**	**150**	**126**
Abundant						
Upper Krishna (W)						
	Dhom	1.26	0.42	13.25	303	10
	Kanher	0.19	1.63	10.35	12	2
	CADA Pune	**1.450**	**2.045**	**23.600**	**71**	**6**
Lower Wainganga						
	Asolamendha	0.00	0.00	0.00	0	0
	Dina	0.00	0.00	0.00	0	0
	CIPC Chandrapur	**0.000**	**0.000**	**0.000**	**0**	**0**
Upper Krishna (W)						
	Dudhaganga	0.00	0.00	4.60	0	0
	Krishna LIS Complex	62.79	0.00	0.00	0	0
	Radhanagari	49.35	0.00	51.50	0	96
	Tulshi	4.69	0.00	0.00	0	0
	Warana	5.35	0.00	6.19	0	86
	SIC Sangli	**122.180**	**0.000**	**62.290**	**0**	**196**
North Konkan						
	Bhatsa	733.99	426.80	699.44	172	105
	Kal-Amba	69.22	362.85	65.46	19	106
	Surya	34.00	0.00	47.69	0	71
	TIC Thane	**837.200**	**789.650**	**812.585**	**106**	**103**
Abundant		**960.840**	**791.695**	**898.475**	**121**	**107**
Major		**3349.520**	**2283.676**	**2758.251**	**147**	**121**

Indicator VII : Major Projects - Percentage of Unutilised Water to Live Storage



Indicator VII: Percentage of Unutilized water to Live Storage -

(Major / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Highly Deficit							
Remaining Bhima+ Man	Bhima (Ujjani)	0.00	84.90	20.26	0.00	1688.91	0.00
	CADA Solapur	**0.00**	**84.90**	**20.26**	**0.00**	**1,688.91**	**0.00**
Highly Deficit		**0.00**	**84.90**	**20.26**	**0.00**	**1688.91**	**0.00**
Deficit							
Purna (Tapi)	Katepurna	0.00	0.00	0.00	0.00	15.40	0.00
	Nalganga	3.05	18.40	0.26	0.00	19.11	0.00
	AIC Akola	**3.05**	**18.40**	**0.26**	**0.00**	**34.51**	**0.00**
Purna (Tapi)	Wan	7.02	6.61	0.04	0.37	72.30	0.51
	BIPC Buldhana	**7.02**	**6.61**	**0.04**	**0.37**	**72.30**	**0.51**
Lower Godavari	Jayakwadi Stage I	250.27	382.00	193.25	0.00	2170.94	0.00
	CADA Abad	**250.27**	**382.00**	**193.25**	**0.00**	**2,170.94**	**0.00**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	0.00	0.00	10.20	0.00	312.00	0.00
	Lower Terna	8.12	0.00	0.00	8.12	91.22	8.90
	Manjra	0.00	4.42	7.39	0.00	176.96	0.00
	CADA Beed	**8.12**	**4.42**	**17.59**	**8.12**	**580.18**	**1.40**
Girna	Girna+Panzan	62.57	155.65	66.66	0.00	484.59	0.00
	CADA Jalgaon	**62.57**	**155.65**	**66.66**	**0.00**	**484.59**	**0.00**
Girna	Chankapur	8.69	0.00	5.83	2.86	76.85	3.72
	CADA Nashik	**8.69**	**0.00**	**5.83**	**2.86**	**76.85**	**3.72**
Manjra	Manar	4.90	0.00	0.00	4.90	39.22	12.49
	Purna Complex	0.00	243.52	77.81	0.00	267.05	0.00
	Vishnupuri	0.00	0.18	25.96	0.00	80.02	0.00
	NIC Nanded	**4.90**	**243.70**	**103.77**	**4.90**	**386.29**	**1.27**
Deficit		**344.63**	**810.78**	**387.40**	**16.25**	**3805.65**	**0.43**
Normal							
Upper Godavari	NMC Express Mukane	0.00	0.00	14.47	0.00	0.00	0.00
	AIC Abad	**0.00**	**0.00**	**14.47**	**0.00**	**0.00**	**0.00**
Painganga	Pus	0.00	8.50	70.93	0.00	75.85	0.00
	AIC Akola	**0.00**	**8.50**	**70.93**	**0.00**	**75.85**	**0.00**
Middle Tapi (Satpuda)	Hatnur	35.20	0.00	50.39	0.00	255.00	0.00
	CADA Jalgaon	**35.20**	**0.00**	**50.39**	**0.00**	**255.00**	**0.00**
Wardha	Lower Wunna Complex	9.67	0.00	7.11	2.56	126.84	2.02
	CADA Nagpur	**9.67**	**0.00**	**7.11**	**2.56**	**126.84**	**2.02**
Upper Godavari	Bhandardara	10.36	0.00	0.00	10.36	328.10	3.16

(Major / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Darna	3.14	0.00	2.95	0.19	202.43	0.09
	Gangapur	30.49	11.32	52.23	0.00	158.54	0.00
	Gautami	0.00	0.00	0.11	0.00	38.36	0.00
	Kadwa	1.59	0.00	0.00	1.59	52.91	3.01
	Kashyapi	0.00	0.00	0.05	0.00	52.42	0.00
	Mukane	18.71	0.00	0.00	18.71	125.33	14.93
	Mula	6.03	28.30	22.65	0.00	608.92	0.00
	NMWeir	1.64	0.00	153.42	0.00	7.27	0.00
	Upper Godavari Complex	22.53	0.00	35.42	20.77	333.64	0.00
	CADA Nashik	**94.49**	**39.62**	**266.84**	**51.62**	**1,907.92**	**2.71**
Upper Bhima	Ghod	0.00	0.00	0.86	0.00	154.80	0.00
	Kukadi Complex	25.44	128.55	211.27	0.00	759.71	0.00
	CADA Pune	**25.44**	**128.55**	**212.13**	**0.00**	**914.51**	**0.00**
Wardha	Bor	19.62	15.80	8.19	0.00	57.44	0.00
	CIPC	**19.62**	**15.80**	**8.19**	**0.00**	**57.44**	**0.00**
	Chandrapur						
Painganga	Upper Penganga	0.00	0.00	0.17	0.00	411.27	0.00
	NIC Nanded	**0.00**	**0.00**	**0.17**	**0.00**	**411.27**	**0.00**
Upper Bhima	Bhama Askhed	16.79	1.52	1.82	13.45	91.47	14.71
	Chaskaman	23.45	18.55	1.20	3.70	214.50	1.73
	Khadakwasla Complex	25.25	7.80	394.50	13.24	800.57	0.00
	Neera Complex	28.52	39.48	430.99	0.92	932.01	0.00
	Pawana	62.28	2.27	16.44	43.57	241.22	18.06
	PIC Pune	**156.29**	**69.62**	**844.94**	**74.89**	**2,279.77**	**3.28**
Wardha	Upper Wardha	121.31	0.00	4.07	117.24	288.39	40.65
	UWPC Amravati	**121.31**	**0.00**	**4.07**	**117.24**	**288.39**	**40.65**
Painganga	Arunawati	6.04	72.00	2.77	0.00	23.87	0.00
	YIC Yavatmal	**6.04**	**72.00**	**2.77**	**0.00**	**23.87**	**0.00**
Normal		**468.07**	**334.09**	**1482.00**	**246.30**	**6340.86**	**3.88**
Surplus							
Middle Wainganga	Bagh Complex	7.85	16.99	1.32	0.00	74.85	0.00
	Itiadoh	6.75	0.00	9.07	0.00	51.75	0.00
	Pench Complex	14.53	0.87	157.18	2.46	459.17	0.00
	CADA Nagpur	**29.13**	**17.86**	**167.57**	**2.46**	**585.77**	**0.42**
Surplus		**29.13**	**17.86**	**167.57**	**2.46**	**585.77**	**0.42**
Abundant							
Upper Krishna (W)	Dhom	51.44	0.00	100.42	0.00	331.05	0.00
	Kanher	18.83	0.00	1.65	17.18	271.68	6.32

Indicator VII: Percentage of Unutilized water to Live Storage -

(Major / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	CADA Pune	**70.27**	**0.00**	**102.07**	**17.18**	**602.73**	**2.85**
Lower Wainganga	Asolamendha	0.00	10.64	0.59	0.00	12.66	0.00
	Dina	0.00	5.21	0.00	0.00	3.04	0.00
	CIPC	**0.00**	**15.85**	**0.59**	**0.00**	**15.70**	**0.00**
	Chandrapur						
Upper Krishna (W)	Dudhaganga	19.60	0.00	0.00	19.60	679.11	2.89
	Krishna LIS Complex	0.00	0.00	528.54	0.00	0.00	0.00
	Radhanagari	0.01	0.00	0.00	0.01	217.64	0.00
	Tulshi	28.40	0.00	0.00	28.40	91.92	30.90
	Warana	149.52	0.00	0.00	149.52	782.06	19.12
	SIC Sangli	**197.53**	**0.00**	**528.54**	**197.53**	**1,770.73**	**11.16**
North Konkan	Bhatsa	291.41	225.42	0.00	65.99	782.34	8.44
	Kal-Amba	112.29	0.00	60.20	52.09	423.19	12.31
	Surya	5.90	0.00	0.00	5.90	172.12	3.43
	TIC Thane	**409.60**	**225.42**	**60.20**	**123.98**	**1,377.64**	**9.00**
Abundant		**677.40**	**241.27**	**691.40**	**338.69**	**3766.80**	**8.99**
Major		**1519.21**	**1488.90**	**2748.62**	**603.71**	**16187.99**	**3.73**

Indicator VIII

Conveyance Efficiency of Main Canals

Major Projects 2008-09

Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Highly Deficit					
Remaining Bhima+ Man	Bhima (Ujjani)	71.00	55.00	55.00	45.00
	CADA Solapur				
Highly Deficit					
Deficit					
Purna (Tapi)	Katepurna	0.00	0.00	0.00	0.00
	Nalganga	0.00	69.00	0.00	0.00
	AIC Akola				
Purna (Tapi)	Wan	94.00	0.00	99.00	0.00
	BIPC Buldhana				
Lower Godavari	Jayakwadi Stage I	91.00	61.00	78.00	59.00
	CADA Abad				
Lower Godavari	Jayakwadi Stage II (Majalgaon)	0.00	0.00	0.00	0.00
	Lower Terna	0.00	0.00	0.00	0.00
	Manjra	44.00	51.00	49.00	50.00
	CADA Beed				
Girna	Girna+Panzan	59.00	77.00	51.00	70.00
	CADA Jalgaon				
Girna	Chankapur	73.00	77.00	77.00	0.00
	CADA Nashik				
Manjra	Manar	0.00	0.00	0.00	0.00
	Purna Complex	0.00	0.00	0.00	0.00
	Vishnupuri	0.00	0.00	0.00	0.00
	NIC Nanded				
Deficit					
Normal					
Upper Godavari	NMC Express Mukane	81.00	0.00	79.00	0.00
	AIC Abad				
Painganga	Pus	73.00	72.00	0.00	0.00
	AIC Akola				
Middle Tapi (Satpuda)	Hatnur	0.00	56.00	0.00	0.00
	CADA Jalgaon				

Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Wardha	Lower Wunna Complex	0.00	0.00	0.00	0.00
	CADA Nagpur				
Upper Godavari	Bhandardara	38.00	51.00	40.00	48.00
	Darna	0.00	0.00	0.00	0.00
	Gangapur	67.00	0.00	67.00	0.00
	Gautami	0.00	0.00	0.00	0.00
	Kadwa	0.00	0.00	0.00	0.00
	Kashyapi	0.00	0.00	0.00	0.00
	Mukane	0.00	0.00	0.00	0.00
	Mula	58.00	67.00	39.00	69.00
	NMWeir	31.00	12.00	23.00	7.00
	Upper Godavari Complex	50.00	46.00	35.00	72.00
	CADA Nashik				
Upper Bhima	Ghod	75.00	56.00	61.00	43.00
	Kukadi Complex	51.00	48.00	41.00	35.00
	CADA Pune				
Wardha	Bor	37.00	0.00	0.00	0.00
	CIPC Chandrapur				
Painganga	Upper Penganga	86.00	84.00	82.00	78.00
	NIC Nanded				
Upper Bhima	Bhama Askhed	0.00	0.00	0.00	0.00
	Chaskaman	42.00	0.00	30.00	0.00
	Khadakwasla Complex	0.00	33.00	0.00	26.00
	Neera Complex	51.00	53.00	44.00	45.00
	Pawana	0.00	0.00	0.00	0.00
	PIC Pune				
Wardha	Upper Wardha	0.00	0.00	0.00	0.00
	UWPC Amravati				
Painganga	Arunawati	0.00	0.00	0.00	0.00
	YIC Yavatmal				
Normal					
Surplus					
Middle Wainganga	Bagh Complex			0.00	0.00
	Itiadoh	0.00		0.00	0.00
	Pench Complex	0.00	0.00	0.00	0.00
	CADA Nagpur				
Surplus					

Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Abundant					
Upper Krishna (W)	Dhom	61.00	54.00	45.00	47.00
	Kanher	55.00	42.00	45.00	46.00
	CADA Pune				
Lower Wainganga	Asolamendha	0.00	0.00	0.00	0.00
	Dina	0.00	0.00	0.00	0.00
	CIPC Chandrapur				
Upper Krishna (W)	Dudhaganga	0.00	0.00	0.00	0.00
	Krishna LIS Complex	0.00	0.00	0.00	0.00
	Radhanagari	0.00	0.00	0.00	0.00
	Tulshi	0.00	0.00	0.00	0.00
	Warana	0.00	0.00	0.00	0.00
	SIC Sangli				
North Konkan	Bhatsa	0.00	0.00	0.00	0.00
	Kal-Amba			0.00	0.00
	Surya			0.00	0.00
	TIC Thane				
Abundant					

(Major / 2008-09) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Highly Deficit						
Remaining Bhima+ Man						
	Bhima (Ujjani)	14.51	0.01	28.10	17.56	39.82
	CADA Solapur	14.51	0.01	28.10	17.56	39.82
Highly Deficit						
Deficit						
Purna (Tapi)						
	Katepurna	0.00	0.00	0.00	0.00	0.00
	Nalganga	0.00	40.09	59.91	0.00	0.00
	AIC Akola	0.00	40.09	59.91	0.00	0.00
Purna (Tapi)						
	Wan	0.76	5.18	92.35	0.00	1.71
	BIPC Buldhana	0.76	5.18	92.35	0.00	1.71
Lower Godavari						
	Jayakwadi Stage I	5.14	28.86	38.39	12.61	15.00
	CADA Abad	5.14	28.86	38.39	12.61	15.00
Lower Godavari						
	Jayakwadi Stage II (Majalgaon)	0.00	41.48	13.58	9.45	35.49
	Lower Terna	0.00	7.56	48.92	17.74	25.79
	Manjra	0.00	0.01	29.52	2.62	67.85
	CADA Beed	0.00	22.12	24.44	8.39	45.06
Girna						
	Girna+Panzan	16.31	13.30	68.35	0.09	1.95
	CADA Jalgaon	16.31	13.30	68.35	0.09	1.95
Girna						
	Chankapur	39.22	0.00	60.51	0.00	0.27
	CADA Nashik	39.22	0.00	60.51	0.00	0.27
Manjra						
	Manar	0.00	2.65	71.20	0.00	26.14
	Purna Complex	0.00	10.86	71.33	7.76	10.06
	Vishnupuri	0.00	1.12	71.71	9.26	17.92
	NIC Nanded	0.00	7.54	71.44	7.93	13.09
Deficit						
Normal						
Upper Godavari						
	NMC Express Mukane	0.00	5.62	88.20	6.04	0.14
	AIC Abad	0.00	5.62	88.20	6.04	0.14
Painganga						
	Pus	0.00	7.98	82.54	5.30	4.17
	AIC Akola	0.00	7.98	82.54	5.30	4.17
Middle Tapi (Satpuda)						
	Hatnur	4.36	19.31	49.11	0.18	27.04
	CADA Jalgaon	4.36	19.31	49.11	0.18	27.04

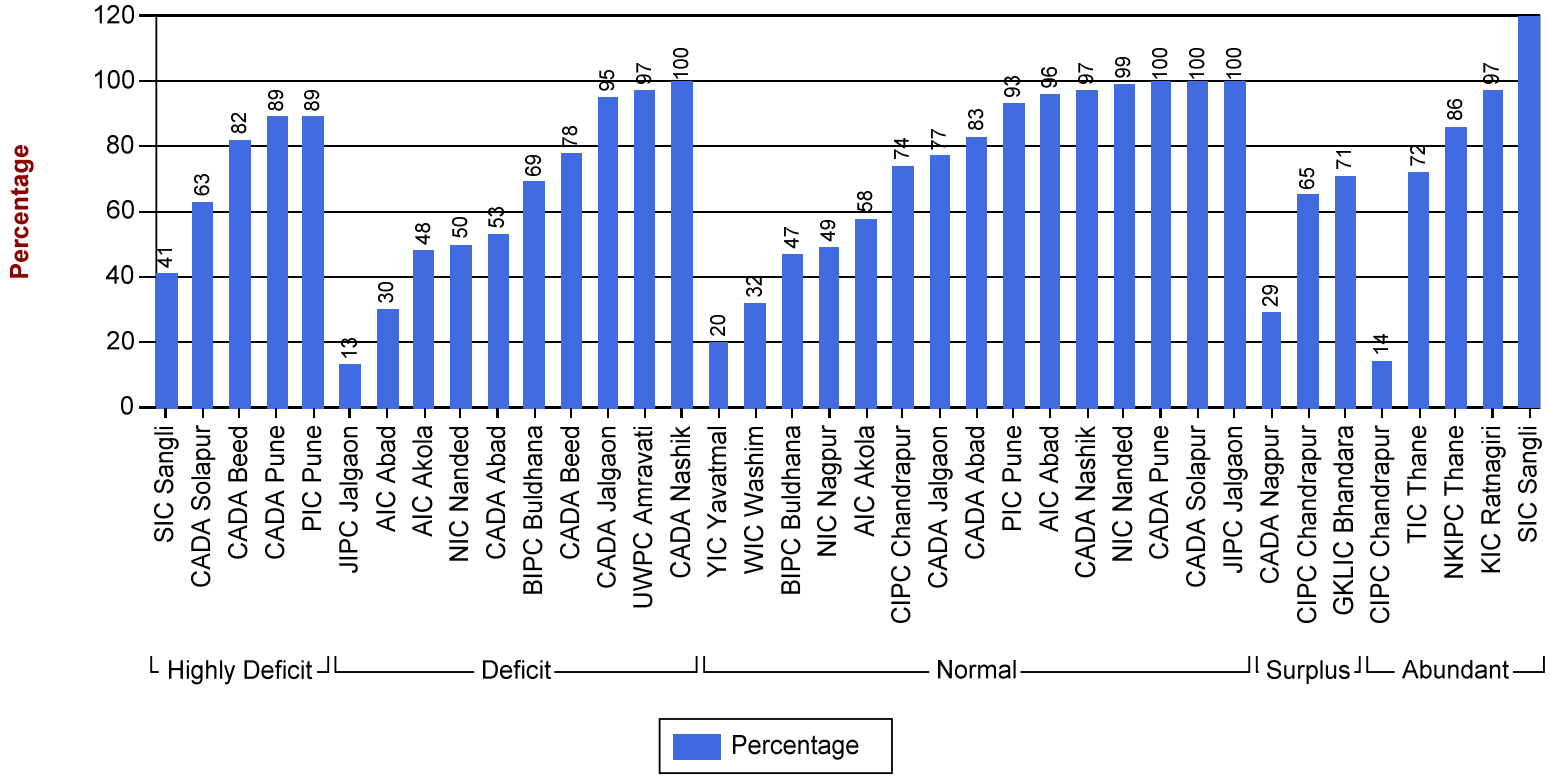
(Major / 2008-09) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Wardha						
	Lower Wunna Complex	0.00	1.34	98.53	0.00	0.12
	CADA Nagpur	0.00	1.34	98.53	0.00	0.12
Upper Godavari						
	Bhandardara	28.36	0.00	51.33	2.22	18.10
	Darna	23.21	0.00	52.72	12.58	11.50
	Gangapur	2.09	0.00	64.90	4.50	28.51
	Gautami	0.00	0.00	100.00	0.00	0.00
	Kadwa	21.01	0.00	62.65	7.41	8.93
	Kashyapi	0.00	0.00	100.00	0.00	0.00
	Mukane	25.44	0.00	53.75	17.77	3.03
	Mula	16.83	0.25	50.23	18.37	14.32
	NMWeir	33.80	0.00	49.86	0.00	16.35
	Upper Godavari Complex	20.36	0.89	47.99	0.52	30.25
	CADA Nashik	21.88	0.33	50.77	7.02	20.00
Upper Bhima						
	Ghod	19.90	0.02	39.56	25.91	14.61
	Kukadi Complex	19.90	0.11	53.84	22.12	4.02
	CADA Pune	19.90	0.08	48.99	23.41	7.62
Wardha						
	Bor	0.00	0.03	98.45	0.00	1.52
	CIPC Chandrapur	0.00	0.03	98.45	0.00	1.52
Painganga						
	Upper Penganga	0.00	8.42	66.72	13.23	11.63
	NIC Nanded	0.00	8.42	66.72	13.23	11.63
Upper Bhima						
	Bhama Askhed	12.39	0.00	36.60	43.34	7.67
	Chaskaman	2.84	0.00	63.11	26.51	7.54
	Khadakwasla Complex	30.35	0.00	35.06	17.26	17.33
	Neera Complex	24.89	0.00	41.26	21.86	11.99
	Pawana	32.82	0.00	50.80	6.74	9.64
	PIC Pune	25.05	0.00	40.70	21.54	12.72
Wardha						
	Upper Wardha	0.00	9.82	66.39	0.00	23.79
	UWPC Amravati	0.00	9.82	66.39	0.00	23.79
Painganga						
	Arunawati	0.00	1.43	77.06	19.35	2.15
	YIC Yavatmal	0.00	1.43	77.06	19.35	2.15
Normal						
Surplus						
Middle Wainganga						
	Bagh Complex	100.00	0.00	0.00	0.00	0.00
	Itiadoh	100.00	0.00	0.00	0.00	0.00

(Major / 2008-09) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Pench Complex	90.45	2.10	6.42	0.28	0.74
	CADA Nagpur	94.52	1.21	3.69	0.16	0.43
Surplus						
Abundant						
Upper Krishna (W)						
	Dhom	10.01	0.13	63.99	13.81	12.06
	Kanher	24.16	0.01	48.11	15.94	11.79
	CADA Pune	15.95	0.08	57.32	14.70	11.94
Lower Wainganga						
	Asolamendha	100.00	0.00	0.00	0.00	0.00
	Dina	100.00	0.00	0.00	0.00	0.00
	CIPC Chandrapur	100.00	0.00	0.00	0.00	0.00
Upper Krishna (W)						
	Dudhaganga	0.00	0.00	8.24	3.14	88.61
	Krishna LIS Complex	8.86	0.00	43.44	0.00	47.70
	Radhanagari	0.00	0.00	8.35	1.14	90.51
	Tulshi	0.00	0.00	66.37	9.79	23.85
	Warana	0.00	0.00	28.18	3.20	68.63
	SIC Sangli	5.07	0.00	32.15	1.07	61.71
North Konkan						
	Bhatsa	0.00	0.00	84.06	0.00	15.94
	Kal-Amba	0.00	0.00	100.00	0.00	0.00
	Surya	0.00	0.00	86.88	0.00	13.12
	TIC Thane	0.00	0.00	90.52	0.00	9.48
Abundant						

Indicator I : Medium Projects - Water Availability in Reservoirs



Indicator I: Water Availability in Reservoirs on 15th Oct -

(Medium / 2008) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Highly Deficit				
Upper Krishna (E)	Basappawadi	0.00	0.00	0
	Dodda Nalla			
	Sankh	2.92	14.87	20
	Siddhewadi	5.58	6.09	92
	SIC Sangli	**8.493**	**20.960**	**41**
Upper Krishna (E)	Yeralwadi	17.49	19.60	89
	CADA Pune	**17.489**	**19.600**	**89**
Remaining Bhima+ Man	Ashti	17.63	23.01	77
	Buddhihal	-0.40	27.95	1
	Ekrukh	18.72	61.15	31
	Hingani (Pangaon)	32.34	32.00	101
	Jawalgaon	29.19	29.19	100
	Mangi	30.40	30.40	100
	CADA Solapur	**127.891**	**203.701**	**63**
Remaining Bhima+ Man	Andhali	2.18	9.27	24
	Khairy	12.64	13.74	92
	Mhaswad	44.32	46.12	96
	Nher	3.46	11.79	29
	Ranand	6.42	6.42	100
	Sina	52.30	52.30	100
	Tisangi	24.46	24.46	100
	PIC Pune	**145.788**	**164.100**	**89**
Sina	Banganga	4.96	4.96	100
	Benitura	11.47	11.47	100
	Chandani	16.18	21.58	75
	Harni	11.17	11.17	100
	Jakapur			
	Kada	8.55	8.56	100
	Kadi	5.21	5.47	95
	Kambli	1.37	3.10	44
	Khandala	5.24	5.24	100
	Khandeshwar	4.49	8.78	51
	Khasapur	13.04	13.04	100
	Kurnoor	32.28	32.28	100
	Mehkari	8.60	12.98	66
	Ramganga	5.34	5.34	100
	Ruti	9.89	10.28	96
	Sakat	3.93	13.48	29
	Talwar	3.24	3.24	100
	Turori	1.00	6.20	16
	CADA Beed	**145.973**	**177.170**	**82**
Highly Deficit		**445.634**	**585.531**	**76**
Deficit				
Middle Tapi (Satpuda)	Bahula	2.19	16.33	13
	JIPC Jalgaon	**2.191**	**16.330**	**13**
Purna+Dudhana	Wakod	3.46	11.40	30

Indicator I: Water Availability in Reservoirs on 15th Oct - Page 2 of 6

(Medium / 2008) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	AIC Abad	**3.464**	**11.400**	**30**
Manjra	Karadkhed	7.78	11.01	71
	Kudala	4.29	4.35	99
	Kundrala	3.65	10.42	35
	Mahalingi	1.29	4.79	27
	Pethwadaj	2.86	9.04	32
	NIC Nanded	**19.868**	**39.608**	**50**
Purna (Tapi)	Mun	17.50	36.83	48
	Torna	6.91	7.90	87
	Utawali	19.79	19.79	100
	BIPC Buldhana	**44.200**	**64.520**	**69**
Girna	Haranbari	33.02	33.02	100
	Kelzar	16.22	16.22	100
	Nagya Sakya	11.24	11.24	100
	CADA Nashik	**60.480**	**60.480**	**100**
Purna (Tapi)	Chandrabhaga (Amravati)	41.25	41.25	100
	Purna (Achalpur)	33.05	35.37	93
	UWPC Amravati	**74.295**	**76.618**	**97**
Purna (Tapi)	Dnyanganga	20.10	33.93	59
	Mas	7.85	22.04	36
	Morna (Akola)	8.65	41.46	21
	Nirguna	14.48	28.85	50
	Paldhag	7.56	7.51	101
	Shahnoor	32.93	46.04	72
	Uma	0.24	11.68	2
	AIC Akola	**91.810**	**191.510**	**48**
Middle Tapi (South)	Ajanta Andhari	1.09	7.65	14
	Anjana Palashi	7.40	13.74	54
	Dhamna	-1.32	8.51	16
	Gadadgad	4.64	4.64	100
	Galhati	7.90	13.84	57
	Girja	15.60	21.23	73
	Jivrekha	5.14	6.13	84
	Jui	2.60	6.03	43
	Kalyan Girija	8.30	8.47	98
	Karpara	8.38	24.90	34
	Khelna	3.31	11.07	30
	Lahuki	4.32	5.32	81
	Masoli	8.99	27.14	33
	Pir Kalyan	12.22	12.22	100
	Purna Nevpur	9.34	9.34	100
	Sukhana	9.80	18.50	53
	Upper Dudhana	4.83	13.02	37
	CADA Abad	**112.539**	**211.747**	**53**
Girna	Agnavati	2.76	2.76	100
	Bhokarbari	3.14	6.54	48

(Medium / 2008) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	Bori	25.15	25.15	100
	Burai	14.21	14.21	100
	Hiwara	9.60	9.60	100
	Jamkhedi	12.34	12.34	100
	Kanoli	8.45	8.45	100
	Manyad	40.55	40.27	101
	Rangawali	12.89	12.89	100
	Tondapur	0.99	4.64	21
	CADA Jalgaon	**130.075**	**136.849**	**95**
Manjra	Belpara	1.53	5.37	28
	Bindusara	7.11	7.11	100
	Bodhegaon			
	Borna			
	Devarjan	2.47	10.68	23
	Gharni	22.46	22.46	100
	Kundalika			
	Mahasangvi	5.88	5.88	100
	Masalga	3.18	13.59	23
	Raigavan	11.26	11.26	100
	Renapur	9.55	20.55	46
	Rui	8.61	8.61	100
	Sakol	8.34	10.95	76
	Sangameshwar	15.04	15.04	100
	(Dokewadi) Saraswati			
	Sindphana	4.87	7.36	66
	Tawarja	18.42	20.35	91
	Terna	19.66	19.66	100
	Tiru	11.00	15.29	72
	Wan (Beed)			
	Whati	8.27	8.27	100
	CADA Beed	**157.636**	**202.411**	**78**
Deficit		**696.558**	**1011.473**	**69**
Normal				
Painganga	Ekbhuji	9.29	11.97	78
	Sonal	0.00	16.92	0
	WIC Washim	**9.290**	**28.890**	**32**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	6.50	6.41	101
	Mor	7.89	7.96	99
	JIPC Jalgaon	**14.389**	**14.367**	**100**
Painganga	Adan	3.81	67.25	6
	Nawargaon	12.34	12.47	99
	YIC Yavatmal	**16.152**	**79.720**	**20**
Sina	Bori	19.24	19.25	100
	CADA Solapur	**19.244**	**19.250**	**100**
Painganga	Dongargaon (Nanded)	8.76	8.81	99
	Loni	8.29	8.38	99

Indicator I: Water Availability in Reservoirs on 15th Oct -

(Medium / 2008) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	Nagzari	6.37	6.57	97
	NIC Nanded	**23.415**	**23.751**	**99**
Upper Bhima	Visapur	25.61	25.61	100
	CADA Pune	**25.610**	**25.610**	**100**
Painganga	Pen Takli	28.39	59.98	47
	BIPC Buldhana	**28.387**	**59.976**	**47**
Lower Wainganga	Dongargaon (Chandrapur)	9.68	12.44	78
	Jam	6.95	24.30	29
	Kar	11.96	21.06	57
	NIC Nagpur	**28.592**	**57.804**	**49**
Upper Godavari	Shivna Takali	34.86	36.45	96
	AIC Abad	**34.859**	**36.450**	**96**
Upper Godavari	Ambadi	11.43	11.53	99
	Bor Dahegaon	5.70	11.47	50
	Dheku	9.99	11.53	87
	Kolhi	2.92	3.24	90
	Narangi	11.39	11.39	100
	Tembhapuri	14.85	19.01	78
	CADA Abad	**56.281**	**68.168**	**83**
Upper Bhima	Kasarsai	16.06	16.06	100
	Nazare	12.49	16.62	75
	Wadiwale	30.39	30.39	100
	PIC Pune	**58.935**	**63.070**	**93**
Wardha	Amalnalla	16.24	24.48	66
	Dham	50.03	62.51	80
	Pothra1	23.38	34.72	67
	CIPC Chandrapur	**89.653**	**121.710**	**74**
Upper Godavari	Adhala	27.60	27.60	100
	Alandi	27.46	27.46	100
	Bhojapur	10.11	10.22	99
	Ghatshil Pargaon	4.76	8.50	56
	Mandohol	8.78	8.78	100
	Waldevi	32.09	32.09	100
	CADA Nashik	**110.796**	**114.650**	**97**
Painganga	Borgaon	1.69	6.61	26
	Goki	10.39	42.71	24
	Koradi	1.90	20.70	9
	Lower Pus	54.34	59.63	91
	Saikheda	27.18	27.18	100
	Waghadi	16.32	35.37	46
	AIC Akola	**111.820**	**192.202**	**58**
Middle Tapi (Satpuda)	Abhora	6.02	6.02	100
	Aner	59.21	59.21	100
	Karwand	20.73	21.39	97
	Malangaon	11.33	11.33	100

(Medium / 2008) Unit: MCum

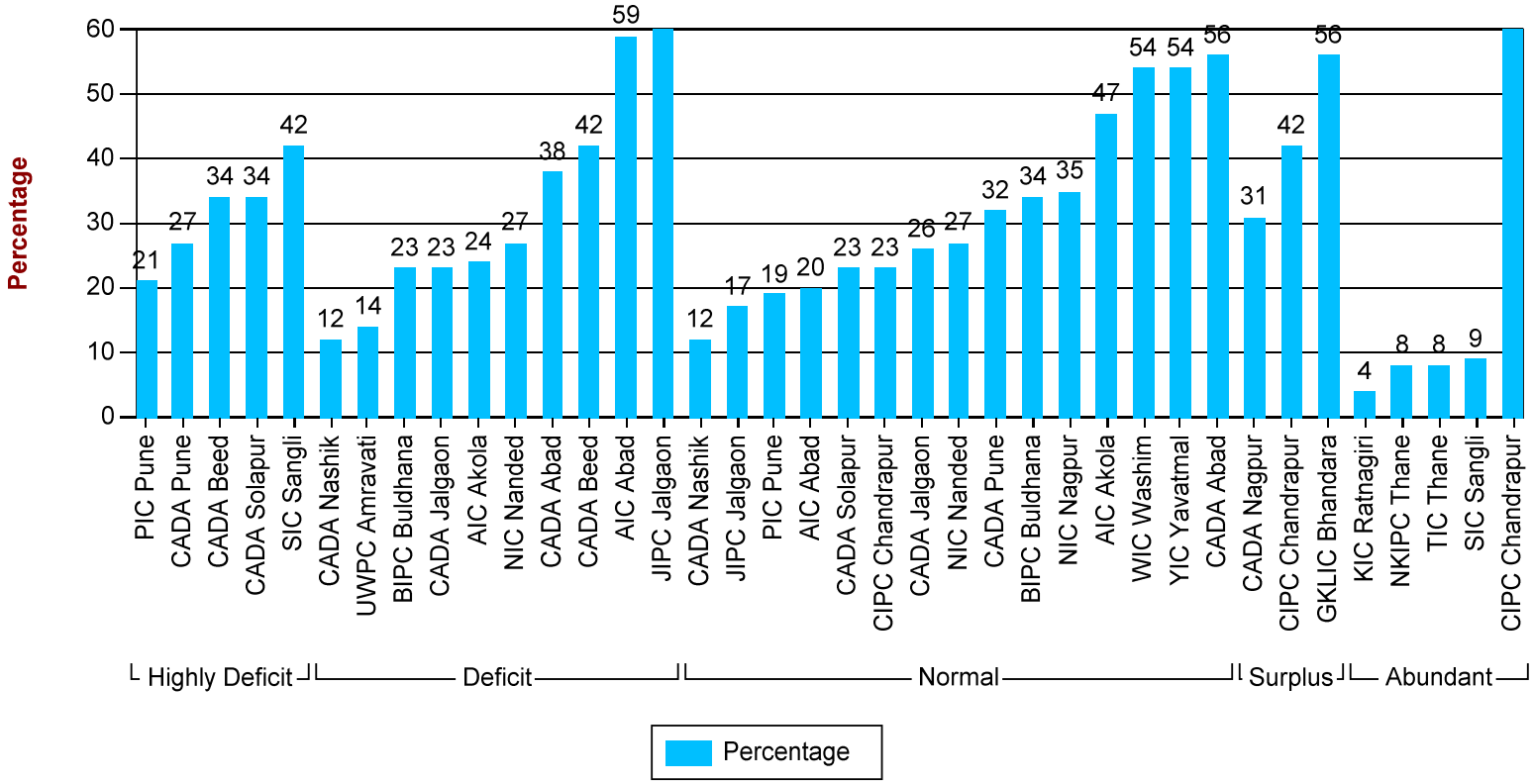
Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	Panzara	35.63	35.63	100
	Sonwad	13.88	14.36	97
	Suki	39.85	39.85	100
	Suki Pickup Wier	-10.31	39.85	26
	CADA Jalgaon	**176.337**	**227.637**	**77**
Normal		**803.759**	**1133.255**	**71**
Surplus				
Middle Wainganga	Katangi	6.67	9.40	71
	GKLIC Bhandara	**6.666**	**9.400**	**71**
Middle Wainganga	Chandai	1.12	10.69	10
	Chargaon	8.80	19.87	44
	Labhansarad	7.35	7.35	100
	Pakadigundam	11.80	11.80	100
	Panchadhara Complex	9.82	10.39	95
	CIPC Chandrapur	**38.887**	**60.094**	**65**
Middle Wainganga	Bagheda	0.13	4.54	3
	Betekar Bothli	0.00	3.67	0
	Bodalkasa	1.75	16.45	11
	Chandpur	0.10	28.88	0
	Chandrabhaga (Nagpur)	0.73	8.26	9
	Chorakhmara	0.98	20.80	5
	Chulband	2.63	21.46	12
	Kanolibara	18.00	20.49	88
	Kesarnala	0.63	3.93	16
	Khairbanda	1.23	15.95	8
	Khekara Nalla	8.68	23.81	36
	Kolar	17.65	31.32	56
	Makardhokada-Saiki	4.08	25.90	16
	Managadh	4.04	7.05	57
	Mordham	0.93	4.95	19
	Pandharbodi	3.33	13.14	25
	Rengepar	0.65	3.57	18
	Sangrampur	0.16	3.87	4
	Sorna	0.00	5.73	0
	Tekepar LIS	0.00	0.00	0
	Umri	4.76	5.14	93
	Wunna	12.39	21.64	57
	CADA Nagpur	**82.841**	**290.539**	**29**
Surplus		**128.394**	**360.033**	**36**
Abundant				
Wardha	Dongargaon (Wardha)	4.39	4.44	99
	Ghorazari	2.77	43.16	6
	Naleshwar	0.97	10.23	10
	CIPC Chandrapur	**8.138**	**57.833**	**14**
Vashishthi	Natuwadi	26.33	27.23	97
	KIC Ratnagiri	**26.334**	**27.230**	**97**
North Konkan	Hetwane	124.67	144.98	86

Indicator I: Water Availability in Reservoirs on 15th Oct -

(Medium / 2008) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	NKIPC Thane	**124.670**	**144.980**	**86**
North Konkan	Rajanalla Complex	260.55	323.87	80
	Wandri	-1.18	35.94	3
	TIC Thane	**259.374**	**359.808**	**72**
Upper Krishna (W)	Chikotra	43.82	0.00	0
	Chitri	52.73	52.73	100
	Ghataprbha	17.41	43.69	40
	Jangamhatti	33.83	33.83	100
	Kadvi	70.56	70.56	100
	Kasari	77.97	77.96	100
	Krishna Canal &	7.81	0.00	0
	Khodshi Backwater Kumbhi	76.50	76.50	100
	Morna (Sangli)	16.63	16.64	100
	Patgaon	105.57	0.00	0
	Yeoti Masoli	7.05	7.05	100
	SIC Sangli	**509.872**	**378.956**	**135**
Abundant		**928.388**	**968.807**	**96**
Medium		**3002.733**	**4059.099**	**74**

Indicator II : Medium Projects Percentage of Actual Evaporation to Live Storage



(Medium Project / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Highly Deficit				
Sina	Banganga	1.10	4.96	22.00
	Benitura	3.63	11.47	32.00
	Chandani	4.73	16.18	29.00
	Harni	3.04	11.17	27.00
	Jakapur	0.00	0.00	0.00
	Kada	2.67	8.55	31.00
	Kadi	1.93	5.21	37.00
	Kambli	1.16	1.37	85.00
	Khandala	1.97	5.24	38.00
	Khandeshwar	3.26	4.49	73.00
	Khasapur	3.56	13.04	27.00
	Kurnoor	7.65	32.28	24.00
	Mehkari	3.61	8.60	42.00
	Ramganga	1.43	5.34	27.00
	Ruti	3.56	9.89	36.00
	Sakat	3.18	3.93	81.00
	Talwar	1.61	3.24	50.00
	Turori	1.01	1.00	101.00
	CADA Beed	**49.08**	**145.97**	**34.00**
Upper Krishna (E)	Yeralwadi	4.70	17.49	27.00
	CADA Pune	**4.70**	**17.49**	**27.00**
Remaining Bhima+ Man	Ashti	7.91	17.63	45.00
	Buddhihal	1.70	-0.40	0.00
	Ekrukh	7.74	18.72	41.00
	Hingani (Pangaon)	9.94	32.35	31.00
	Jawalgaon	10.18	29.19	35.00
	Mangi	5.81	30.40	19.00
	CADA Solapur	**43.28**	**127.89**	**34.00**
Remaining Bhima+ Man	Andhali	0.36	2.18	17.00
	Khairy	2.80	12.64	22.00
	Mhaswad	10.84	44.32	24.00
	Nher	3.57	3.46	103.00
	Ranand	0.85	6.42	13.00
	Sina	4.26	52.30	8.00
	Tisangi	8.27	24.46	34.00
	PIC Pune	**30.96**	**145.79**	**21.00**
Upper Krishna (E)	Basappawadi	0.00	0.00	0.00
	Dodda Nalla	0.00	0.00	0.00
	Sankh	1.71	2.92	58.00
	Siddhewadi	1.82	5.58	33.00
	SIC Sangli	**3.53**	**8.49**	**42.00**
Highly Deficit		**131.55**	**445.63**	**30.00**
Deficit				

(Medium Project / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Purna+Dudhana	Wakod	2.03	3.46	59.00
	AIC Abad	**2.03**	**3.46**	**59.00**
Purna (Tapi)	Dnyanganga	2.89	20.10	14.00
	Mas	2.99	7.85	38.00
	Morna (Akola)	4.10	8.65	47.00
	Nirguna	5.84	14.48	40.00
	Paldhag	1.26	7.56	17.00
	Shahnoor	4.90	32.93	15.00
	Uma	0.05	0.24	23.00
	AIC Akola	**22.03**	**91.81**	**24.00**
Purna (Tapi)	Mun	4.84	17.50	28.00
	Torna	2.46	6.91	36.00
	Utawali	2.87	19.79	15.00
	BIPC Buldhana	**10.17**	**44.20**	**23.00**
Middle Tapi (South)	Ajanta Andhari	0.40	1.09	37.00
	Anjana Palashi	2.13	7.40	29.00
	Dhamna	0.21	-1.32	0.00
	Gadadgad	1.55	4.64	33.00
	Galhati	4.63	7.90	59.00
	Girja	3.20	15.60	21.00
	Jivrekha	1.58	5.14	31.00
	Jui	0.72	2.60	28.00
	Kalyan Girija	1.69	8.30	20.00
	Karpara	8.52	8.38	102.00
	Khelna	1.10	3.31	33.00
	Lahuki	1.63	4.32	38.00
	Masoli	4.86	8.99	54.00
	Pir Kalyan	2.92	12.22	24.00
	Purna Nevpur	0.27	9.34	3.00
	Sukhana	4.01	9.80	41.00
	Upper Dudhana	3.48	4.83	72.00
	CADA Abad	**42.90**	**112.54**	**38.00**
Manjra	Belpara	0.75	1.53	49.00
	Bindusara	1.54	7.11	22.00
	Bodhegaon	0.00	0.00	0.00
	Borna	0.00	0.00	0.00
	Devarjan	1.83	2.47	74.00
	Gharni	8.07	22.46	36.00
	Kundalika	0.00	0.00	0.00
	Mahasangvi	1.35	5.88	23.00
	Masalga	1.25	3.18	39.00
	Raigavan	5.20	11.26	46.00
	Renapur	4.59	9.55	48.00
	Rui	4.14	8.61	48.00

(Medium Project / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Sakol	3.35	8.34	40.00
	Sangameshwar (Dokewadi)	7.01	15.04	47.00
	Saraswati	0.00	0.00	0.00
	Sindphana	1.47	4.87	30.00
	Tawarja	8.56	18.42	46.00
	Terna	8.73	19.66	44.00
	Tiru	5.44	11.00	49.00
	Wan (Beed)	0.00	0.00	0.00
	Whati	2.49	8.27	30.00
	CADA Beed	**65.76**	**157.64**	**42.00**
Girna	Agnavati	0.66	2.76	24.00
	Bhokarbari	1.01	3.14	32.00
	Bori	8.01	25.15	32.00
	Burai	4.03	14.21	28.00
	Hiwara	3.71	9.60	39.00
	Jamkhedi	2.73	12.34	22.00
	Kanoli	1.12	8.45	13.00
	Manyad	5.67	40.55	14.00
	Rangawali	2.26	12.89	18.00
	Tondapur	0.76	0.99	76.00
	CADA Jalgaon	**29.95**	**130.08**	**23.00**
Girna	Haranbari	4.06	33.02	12.00
	Kelzar	1.88	16.22	12.00
	Nagya Sakya	1.53	11.24	14.00
	CADA Nashik	**7.47**	**60.48**	**12.00**
Middle Tapi (Satpuda)	Bahula	2.68	2.19	122.00
	JIPC Jalgaon	**2.68**	**2.19**	**122.00**
Manjra	Karadkhed	2.24	7.78	29.00
	Kudala	1.48	4.29	35.00
	Kundrala	0.65	3.65	18.00
	Mahalingi	0.38	1.29	29.00
	Pethwadaj	0.72	2.86	25.00
	NIC Nanded	**5.46**	**19.87**	**27.00**
Purna (Tapi)	Chandrabhaga (Amravati)	2.74	41.25	7.00
	Purna (Achalpur)	7.99	33.05	24.00
	UWPC Amravati	**10.74**	**74.30**	**14.00**
Deficit		**199.17**	**696.56**	**29.00**
Normal				
Upper Godavari	Shivna Takali	6.97	34.86	20.00
	AIC Abad	**6.97**	**34.86**	**20.00**
Painganga	Borgaon	1.35	1.69	80.00
	Goki	7.37	10.39	71.00
	Koradi	4.39	1.90	231.00

(Medium Project / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Lower Pus	22.30	54.34	41.00
	Saikheda	10.75	27.18	40.00
	Waghadi	6.00	16.32	37.00
	AIC Akola	**52.16**	**111.82**	**47.00**
Painganga	Pen Takli	9.76	28.39	34.00
	BIPC Buldhana	**9.76**	**28.39**	**34.00**
Upper Godavari	Ambadi	3.87	11.43	34.00
	Bor Dahegaon	3.40	5.70	60.00
	Dheku	7.10	9.99	71.00
	Kolhi	1.25	2.92	43.00
	Narangi	6.60	11.39	58.00
	Tembhapuri	9.29	14.85	63.00
	CADA Abad	**31.51**	**56.28**	**56.00**
Middle Tapi (Satpuda)	Abhora	1.53	6.02	25.00
	Aner	14.54	59.21	25.00
	Karwand	4.62	20.73	22.00
	Malangaon	2.91	11.33	26.00
	Panzara	8.63	35.63	24.00
	Sonwad	5.53	13.88	40.00
	Suki	8.31	39.85	21.00
	Suki Pickup Wier	0.00	-10.31	0.00
	CADA Jalgaon	**46.06**	**176.34**	**26.00**
Upper Godavari	Adhala	2.67	27.60	10.00
	Alandi	4.32	27.46	16.00
	Bhojapur	0.23	10.11	2.00
	Ghatshil Pargaon	1.19	4.76	25.00
	Mandohol	2.16	8.78	25.00
	Waldevi	3.05	32.09	10.00
	CADA Nashik	**13.62**	**110.80**	**12.00**
Upper Bhima	Visapur	8.12	25.61	32.00
	CADA Pune	**8.12**	**25.61**	**32.00**
Sina	Bori	4.48	19.24	23.00
	CADA Solapur	**4.48**	**19.24**	**23.00**
Wardha	Amalnalla	4.90	16.24	30.00
	Dham	8.20	50.03	16.00
	Pothra1	7.27	23.38	31.00
	CIPC Chandrapur	**20.37**	**89.65**	**23.00**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	1.37	6.50	21.00
	Mor	1.15	7.89	15.00
	JIPC Jalgaon	**2.52**	**14.39**	**17.00**
Lower Wainganga	Dongargaon (Chandrapur)	3.39	9.68	35.00
	Jam	3.07	6.95	44.00
	Kar	3.56	11.96	30.00

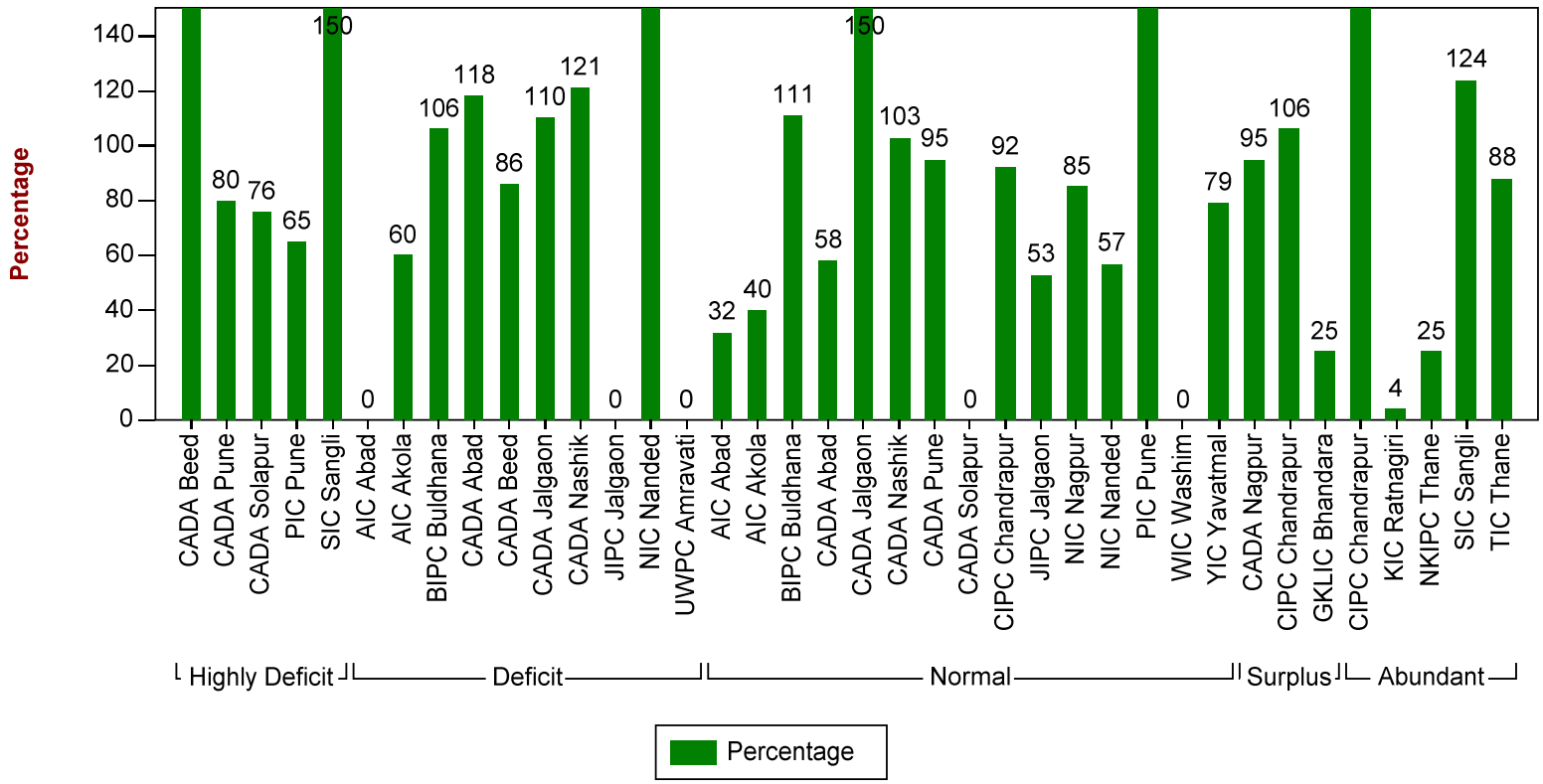
(Medium Project / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	NIC Nagpur	**10.02**	**28.59**	**35.00**
Painganga	Dongargaon (Nanded)	2.78	8.76	32.00
	Loni	1.50	8.29	18.00
	Nagzari	2.08	6.37	33.00
	NIC Nanded	**6.36**	**23.42**	**27.00**
Upper Bhima	Kasarsai	2.50	16.06	16.00
	Nazare	3.98	12.49	32.00
	Wadiwale	4.58	30.39	15.00
	PIC Pune	**11.06**	**58.94**	**19.00**
Painganga	Ekbhuji	3.53	9.29	38.00
	Sonal	1.46	0.00	0.00
	WIC Washim	**4.99**	**9.29**	**54.00**
Painganga	Adan	5.79	3.81	152.00
	Nawargaon	2.95	12.34	24.00
	YIC Yavatmal	**8.73**	**16.15**	**54.00**
Normal		**236.70**	**803.76**	**29.00**
Surplus				
Middle Wainganga	Bagheda	0.91	0.13	699.00
	Betekar Bothli	0.26	0.00	0.00
	Bodalkasa	0.38	1.75	22.00
	Chandpur	1.46	0.10	1517.00
	Chandrabhaga (Nagpur)	0.16	0.73	21.00
	Chorakhmara	1.21	0.98	123.00
	Chulband	1.56	2.63	59.00
	Kanolibara	4.54	18.00	25.00
	Kesarnala	0.13	0.63	21.00
	Khairbanda	1.96	1.23	159.00
	Khekara Nalla	1.29	8.68	15.00
	Kolar	1.16	17.65	7.00
	Makardhokada-Saiki	1.81	4.08	44.00
	Managadh	0.88	4.04	22.00
	Mordham	0.23	0.93	25.00
	Pandharbodi	1.83	3.33	55.00
	Rengepar	0.43	0.65	66.00
	Sangrampur	0.23	0.16	140.00
	Sorna	0.30	0.00	10067.00
	Tekepar LIS	0.00	0.00	0.00
	Umri	0.78	4.76	16.00
	Wunna	4.44	12.39	36.00
	CADA Nagpur	**25.93**	**82.84**	**31.00**
Middle Wainganga	Chandai	4.51	1.12	403.00
	Chargaon	4.43	8.80	50.00
	Labhansarad	3.21	7.35	44.00

(Medium Project / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Pakadigundam	2.90	11.80	25.00
	Panchadhara Complex	1.33	9.82	14.00
	CIPC Chandrapur	**16.38**	**38.89**	**42.00**
Middle Wainganga	Katangi	3.73	6.67	56.00
	GKLIC Bhandara	**3.73**	**6.67**	**56.00**
Surplus		**46.03**	**128.39**	**36.00**
Abundant				
Wardha	Dongargaon (Wardha)	1.45	4.39	33.00
	Ghorazari	5.19	2.77	187.00
	Naleshwar	1.69	0.97	173.00
	CIPC Chandrapur	**8.33**	**8.14**	**102.00**
Vashishthi	Natuwadi	0.92	26.33	4.00
	KIC Ratnagiri	**0.92**	**26.33**	**4.00**
North Konkan	Hetwane	9.59	124.67	8.00
	NKIPC Thane	**9.59**	**124.67**	**8.00**
Upper Krishna (W)	Chikotra	6.46	43.82	15.00
	Chitri	2.93	52.73	6.00
	Ghataprbha	1.30	17.41	7.00
	Jangamhatti	4.27	33.83	13.00
	Kadvi	6.58	70.56	9.00
	Kasari	6.07	77.97	8.00
	Krishna Canal & Khodshi Backwater	2.69	7.81	34.00
	Kumbhi	5.07	76.50	7.00
	Morna (Sangli)	2.86	16.63	17.00
	Patgaon	8.03	105.57	8.00
	Yeoti Masoli	0.68	7.05	10.00
	SIC Sangli	**46.95**	**509.87**	**9.00**
North Konkan	Rajanalla Complex	21.35	260.55	8.00
	Wandri	0.00	-1.18	0.00
	TIC Thane	**21.35**	**259.37**	**8.00**
Abundant		**87.13**	**928.39**	**9.00**
Medium Project - Grand Total:		**700.59**	**3002.74**	**23.00**

Indicator III : Medium Projects - Target and Achievement of Irrigation Potential Utilisation



(Medium / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
Highly Deficit				
Sina				
	Banganga	0	362	0
	Benitura	0	583	0
	Chandani	0	1079	0
	Harni	0	705	0
	Jakapur			
	Kada	524	249	48
	Kadi	400	277	69
	Kambli	161	128	80
	Khandala	0	535	0
	Khandeshwar	0	705	0
	Khasapur	0	1506	0
	Kurnoor	0	1797	0
	Mehkari	880	215	24
	Ramganga	100	439	439
	Ruti	491	187	38
	Sakat	100	665	665
	Talwar	276	140	51
	Turori	0	110	0
	CADA Beed	**2932**	**9683**	**330**
Upper Krishna (E)				
	Yeralwadi	1215	968	80
	CADA Pune	**1215**	**968**	**80**
Remaining Bhima+ Man				
	Ashti	2050	2906	142
	Buddhihal	996	1061	107
	Ekrukh	0	1018	0
	Hingani (Pangaon)	3941	1429	36
	Jawalgaon	3778	1656	44
	Mangi	3788	2997	79
	CADA Solapur	**14553**	**11068**	**76**
Remaining Bhima+ Man				
	Andhali	0	0	0
	Khairy	1510	948	63
	Mhaswad	6673	5603	84
	Nher	0	0	0
	Ranand	1511	427	28
	Sina	6010	3173	53
	Tisangi	3632	2460	68
	PIC Pune	**19336**	**12611**	**65**
Upper Krishna (E)				
	Basappawadi	0	0	0
	Dodda Nalla			
	Sankh	0	278	0
	Siddhewadi	502	475	95

(Medium / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	SIC Sangli	**502**	**753**	**150**
Highly Deficit		**38538**	**35083**	**91**
Deficit				
Purna+Dudhana				
	Wakod	0	50	0
	AIC Abad	**0**	**50**	**0**
Purna (Tapi)				
	Dnyanganga	440	926	210
	Mas	460	373	81
	Morna (Akola)	831	747	90
	Nirguna	1546	740	48
	Paldhag	560	441	79
	Shahnoor	2690	693	26
	Uma	0	0	0
	AIC Akola	**6527**	**3920**	**60**
Purna (Tapi)				
	Mun	2010	1507	75
	Torna	830	611	74
	Utawali	320	1220	381
	BIPC Buldhana	**3160**	**3338**	**106**
Middle Tapi (South)				
	Ajanta Andhari	0	60	0
	Anjana Palashi	120	364	303
	Dhamna	0	146	0
	Gadadgad	265	405	153
	Galhati	1100	411	37
	Girja	1207	1765	146
	Jivrekha	601	543	90
	Jui	0	0	0
	Kalyan Girija	892	844	95
	Karpara	0	581	0
	Khelna	0	0	0
	Lahuki	383	479	125
	Masoli	300	1297	432
	Pir Kalyan	964	703	73
	Purna Nevpur	978	605	62
	Sukhana	770	1198	156
	Upper Dudhana	706	395	56
	CADA Abad	**8286**	**9796**	**118**
Manjra				
	Belpara	110	115	105
	Bindusara	93	216	232
	Bodhegaon			
	Borna			
	Devarjan	567	448	79
	Gharni	3432	1235	36

(Medium / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	Kundalika			
	Mahasangvi	413	630	153
	Masalga	0	64	0
	Raigavan	0	566	0
	Renapur	500	375	75
	Rui	606	583	96
	Sakol	1100	984	89
	Sangameshwar (Dokewadi)	0	1217	0
	Saraswati			
	Sindphana	234	584	250
	Tawarja	2547	1259	49
	Terna	1127	1147	102
	Tiru	931	1036	111
	Wan (Beed)			
	Whati	1200	641	53
	CADA Beed	**12860**	**11100**	**86**
Girna				
	Agnavati	76	158	208
	Bhokarbari	252	192	76
	Bori	1275	1662	130
	Burai	1309	1841	141
	Hiwara	825	844	102
	Jamkhedi	941	477	51
	Kanoli	570	1282	225
	Manyad	4050	3502	86
	Rangawali	2020	2513	124
	Tondapur	0	0	0
	CADA Jalgaon	**11318**	**12471**	**110**
Girna				
	Haranbari	2533	2554	101
	Kelzar	1035	1897	183
	Nagya Sakya	1236	1372	111
	CADA Nashik	**4804**	**5823**	**121**
Middle Tapi (Satpuda)				
	Bahula	0	430	0
	JIPC Jalgaon	**0**	**430**	**0**
Manjra				
	Karadkhed	0	543	0
	Kudala	580	640	110
	Kundrala	100	301	301
	Mahalingi	150	176	117
	Pethwadaj	100	46	46
	NIC Nanded	**930**	**1706**	**183**
Purna (Tapi)				
	Chandrabhaga (Amravati)	0	167	0

(Medium / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	Purna (Achalpur)	0	181	0
	UWPC Amravati	**0**	**348**	**0**
Deficit		**47885**	**48982**	**102**
Normal				
Upper Godavari				
	Shivna Takali	2775	896	32
	AIC Abad	**2775**	**896**	**32**
Painganga				
	Borgaon	390	111	28
	Goki	1270	614	48
	Koradi	0	98	0
	Lower Pus	6340	2883	45
	Saikheda	2760	1139	41
	Waghadi	2190	344	16
	AIC Akola	**12950**	**5189**	**40**
Painganga				
	Pen Takli	5680	6330	111
	BIPC Buldhana	**5680**	**6330**	**111**
Upper Godavari				
	Ambadi	585	471	81
	Bor Dahegaon	564	204	36
	Dheku	585	768	131
	Kolhi	158	222	141
	Narangi	870	183	21
	Tembhapuri	1384	550	40
	CADA Abad	**4146**	**2398**	**58**
Middle Tapi (Satpuda)				
	Abhora	0	355	0
	Aner	0	5254	0
	Karwand	1900	1545	81
	Malangaon	1565	920	59
	Panzara	2511	3538	141
	Sonwad	805	704	87
	Suki	1125	0	0
	Suki Pickup Wier	933	926	99
	CADA Jalgaon	**8839**	**13242**	**150**
Upper Godavari				
	Adhala	2468	1752	71
	Alandi	2100	2173	103
	Bhojapur	932	982	105
	Ghatshil Pargaon	785	943	120
	Mandohol	601	651	108
	Waldevi	0	618	0
	CADA Nashik	**6886**	**7119**	**103**
Upper Bhima				
	Visapur	6805	6448	95

(Medium / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
Sina	**CADA Pune**	**6805**	**6448**	**95**
	Bori	0	1233	0
	CADA Solapur	**0**	**1233**	**0**
Wardha	Amalnalla	0	1186	0
	Dham	2500	1501	60
	Pothra1	2345	1759	75
	CIPC Chandrapur	**4845**	**4446**	**92**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0	0	0
	Mor	125	67	53
	JIPC Jalgaon	**125**	**67**	**53**
Lower Wainganga	Dongargaon (Chandrapur)	650	628	97
	Jam	0	0	0
	Kar	1159	918	79
	NIC Nagpur	**1809**	**1546**	**85**
Painganga	Dongargaon (Nanded)	900	610	68
	Loni	900	414	46
	Nagzari	700	403	58
	NIC Nanded	**2500**	**1427**	**57**
Upper Bhima	Kasarsai	3361	3492	104
	Nazare	1506	1632	108
	Wadiwale	2934	7232	246
	PIC Pune	**7801**	**12356**	**158**
Painganga	Ekbhuji	0	461	0
	Sonal	0	0	0
	WIC Washim	**0**	**461**	**0**
Painganga	Adan	0	29	0
	Nawargaon	500	368	74
	YIC Yavatmal	**500**	**397**	**79**
Normal		**65661**	**63556**	**97**
Surplus				
Middle Wainganga	Bagheda	1261	1149	91
	Betekar Bothli	800	767	96
	Bodalkasa	4300	4023	94
	Chandpur	6750	6448	96
	Chandrabhaga (Nagpur)	786	70	9
	Chorakhmara	5066	3749	74

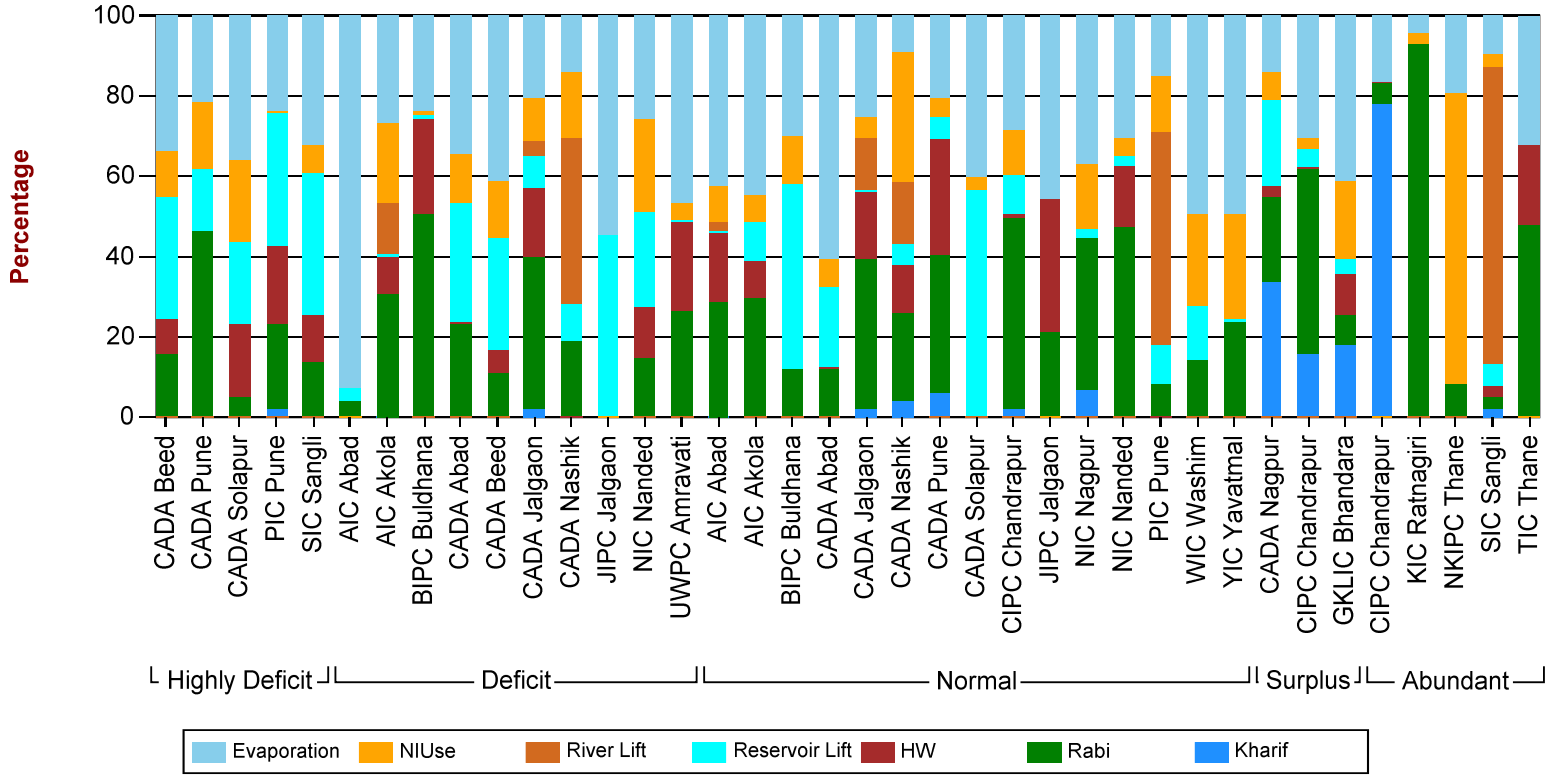
(Medium / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	Chulband	3010	3334	111
	Kanolibara	0	1781	0
	Kesarnala	0	52	0
	Khairbanda	5186	5045	97
	Khekara Nalla	2010	522	26
	Kolar	2544	2148	84
	Makardhokada-Saiki	250	311	124
	Managadh	1042	2070	199
	Mordham	479	101	21
	Pandharbodi	0	0	0
	Rengepar	952	1305	137
	Sangrampur	1094	792	72
	Sorna	990	875	88
	Tekepar LIS	4200	4088	97
	Umri	307	450	147
	Wunna	0	44	0
	CADA Nagpur	**41027**	**39124**	**95**
Middle Wainganga				
	Chandai	950	1178	124
	Chargaon	950	1704	179
	Labhansarad	1200	949	79
	Pakadigundam	1500	1165	78
	Panchadhara Complex	565	500	88
	CIPC Chandrapur	**5165**	**5496**	**106**
Middle Wainganga				
	Katangi	1967	500	25
	GKLIC Bhandara	**1967**	**500**	**25**
Surplus		**48159**	**45120**	**94**
Abundant				
Wardha				
	Dongargaon (Wardha)	310	220	71
	Ghorazari	0	5844	0
	Naleshwar	0	2876	0
	CIPC Chandrapur	**310**	**8940**	**2884**
Vashishthi				
	Natuwadi	2050	72	4
	KIC Ratnagiri	**2050**	**72**	**4**
North Konkan				
	Hetwane	500	125	25
	NKIPC Thane	**500**	**125**	**25**
Upper Krishna (W)				
	Chikotra	2765	4221	153
	Chitri	11518	10339	90
	Ghataprbha	2260	2371	105
	Jangamhatti	5950	4935	83
	Kadvi	10620	2437	23

(Medium / 2008-09) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
North Konkan	Kasari	0	7963	0
	Krishna Canal & Khodshi Backwater	0	7768	0
	Kumbhi	0	5659	0
	Morna (Sangli)	1100	2200	200
	Patgaon	8820	5146	58
	Yeoti Masoli	290	707	244
	SIC Sangli	**43323**	**53746**	**124**
	Rajanalla Complex	1800	1955	109
	Wandri	1200	680	57
	TIC Thane	**3000**	**2635**	**88**
Abundant		**49183**	**65519**	**133**
Medium		**249427**	**258259**	**104**

Indicator IV : Medium Projects - Water Use Pattern



(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Highly Deficit									
Sina	Banganga	0.000	0.880	0.000	2.335	0.000	0.611	1.098	4.924
	Benitura	0.000	2.100	0.200	4.174	0.000	0.836	3.630	10.940
	Chandani	0.000	1.000	0.000	11.470	0.000	1.760	4.730	18.960
	Harni	0.000	1.420	2.142	1.647	0.000	0.000	3.040	8.249
	Jakapur								
	Kada	0.000	0.406	0.570	0.000	0.000	1.917	2.667	5.560
	Kadi	0.000	2.000	0.000	0.000	0.000	1.600	1.930	5.530
	Kambli	0.000	1.040	0.000	0.000	0.000	0.000	1.160	2.200
	Khandala	0.000	0.639	0.940	1.254	0.000	0.000	1.970	4.803
	Khandeshwar	0.000	0.510	0.000	3.880	0.000	0.000	3.260	7.650
	Khasapur	0.000	2.210	0.050	5.728	0.000	1.379	3.560	12.927
	Kurnoor	0.000	6.991	8.026	5.564	0.000	5.816	7.648	34.045
	Mehkari	0.000	0.814	0.420	0.985	0.000	0.000	3.605	5.824
	Ramganga	0.000	0.800	0.145	2.444	0.000	0.000	1.434	4.823
	Ruti	0.000	0.324	0.296	0.673	0.000	0.000	3.556	4.849
	Sakat	0.000	1.600	0.090	2.390	0.000	0.360	3.180	7.620
	Talwar	0.000	0.333	0.000	0.968	0.000	0.150	1.610	3.061
	Turori	0.000	0.000	0.000	0.880	0.000	2.510	1.006	4.396
	CADA Beed	**0.000**	**23.067**	**12.879**	**44.392**	**0.000**	**16.939**	**49.084**	**146.361**
Upper Krishna (E)	Yeralwadi	0.000	10.402	0.000	3.400	0.000	3.748	4.700	22.250
	CADA Pune	**0.000**	**10.402**	**0.000**	**3.400**	**0.000**	**3.748**	**4.700**	**22.250**
Remaining Bhima+ Man	Ashti	0.000	0.000	0.000	0.000	0.000	19.220	7.910	27.130
	Buddhihal	0.000	1.824	0.000	0.000	0.000	0.302	1.697	3.823
	Ekrukh	0.000	0.425	0.000	6.284	0.000	3.289	7.741	17.739
	Hingani (Pangaon)	0.000	0.300	5.428	5.200	0.000	1.733	9.936	22.597
	Jawalgaon	0.000	0.000	5.128	6.677	0.000	0.000	10.182	21.987
	Mangi	0.000	3.699	11.431	6.340	0.000	0.242	5.814	27.526
	CADA Solapur	**0.000**	**6.248**	**21.987**	**24.501**	**0.000**	**24.786**	**43.280**	**120.802**
Remaining Bhima+ Man	Andhali	0.000	0.000	0.000	0.000	0.000	0.429	0.364	0.793
	Khairy	0.000	2.200	0.000	3.500	0.000	0.031	2.800	8.531
	Mhaswad	2.980	7.230	10.490	10.210	0.000	0.000	10.840	41.750
	Nher	0.000	0.000	0.000	0.000	0.000	0.027	3.570	3.597
	Ranand	0.000	0.490	0.560	1.320	0.000	0.000	0.850	3.220
	Sina	0.000	11.100	9.592	25.014	0.000	0.387	4.258	50.351
	Tisangi	0.000	6.983	4.907	3.300	0.000	0.150	8.274	23.614
	PIC Pune	**2.980**	**28.003**	**25.549**	**43.344**	**0.000**	**1.024**	**30.956**	**131.856**

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Upper Krishna (E)									
	Basappawadi	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Dodda Nalla								
	Sankh	0.000	1.297	0.000	2.219	0.000	0.000	1.705	5.221
	Siddhewadi	0.000	0.280	1.260	1.730	0.000	0.780	1.820	5.870
	SIC Sangli	**0.000**	**1.577**	**1.260**	**3.949**	**0.000**	**0.780**	**3.525**	**11.091**
Highly Deficit		**2.980**	**69.297**	**61.675**	**119.586**	**0.000**	**47.278**	**131.545**	**432.360**
Deficit									
Purna+Dudhana									
	Wakod	0.000	0.100	0.000	0.070	0.000	0.000	2.029	2.199
	AIC Abad	**0.000**	**0.100**	**0.000**	**0.070**	**0.000**	**0.000**	**2.029**	**2.199**
Purna (Tapi)									
	Dnyanganga	0.000	0.000	0.000	0.000	7.470	3.251	2.890	13.611
	Mas	0.000	1.590	0.340	0.790	0.000	2.640	2.990	8.350
	Morna (Akola)	0.000	2.588	0.000	0.000	2.723	0.660	4.095	10.066
	Nirguna	0.000	8.398	1.250	0.042	0.000	0.184	5.836	15.710
	Paldhag	0.000	4.040	0.000	0.050	0.000	1.785	1.260	7.135
	Shahnoor	0.000	9.000	5.990	0.180	0.000	7.540	4.900	27.610
	Uma	0.000	0.000	0.000	0.000	0.000	0.475	0.054	0.529
	AIC Akola	**0.000**	**25.616**	**7.580**	**1.062**	**10.193**	**16.535**	**22.025**	**83.011**
Purna (Tapi)									
	Mun	0.000	13.701	2.480	0.100	0.000	0.330	4.840	21.451
	Torna	0.000	3.840	1.090	0.300	0.000	0.000	2.460	7.690
	Utawali	0.000	4.050	6.580	0.030	0.000	0.000	2.870	13.530
	BIPC	**0.000**	**21.591**	**10.150**	**0.430**	**0.000**	**0.330**	**10.170**	**42.671**
	Buldhana								
Middle Tapi (South)									
	Ajanta Andhari	0.000	0.000	0.000	0.142	0.000	1.200	0.400	1.742
	Anjana Palashi	0.000	0.000	0.000	2.090	0.000	0.810	2.130	5.030
	Dhamna	0.000	0.000	0.000	0.480	0.000	0.200	0.210	0.890
	Gadadgad	0.000	0.480	0.540	0.682	0.000	0.056	1.548	3.306
	Galhati	0.000	0.863	0.000	5.067	0.000	0.000	4.626	10.556
	Girja	0.000	6.260	0.000	5.800	0.000	1.590	3.200	16.850
	Jivrekha	0.000	3.040	0.000	0.940	0.000	0.150	1.580	5.710
	Jui	0.000	0.000	0.000	0.000	0.000	2.080	0.720	2.800
	Kalyan Girija	0.000	3.660	0.000	2.110	0.000	0.000	1.690	7.460
	Karpara	0.000	0.000	0.000	5.099	0.000	0.520	8.522	14.141
	Khelna	0.000	0.000	0.000	0.000	0.000	2.000	1.100	3.100
	Lahuki	0.000	1.097	0.149	0.000	0.000	0.000	1.630	2.876
	Masoli	0.000	0.000	0.000	6.869	0.000	2.046	4.859	13.774
	Pir Kalyan	0.000	0.640	0.000	2.860	0.000	3.028	2.916	9.444
	Purna Nevpur	0.000	2.600	0.000	2.790	0.000	1.080	0.270	6.740
	Sukhana	0.000	6.830	0.000	2.030	0.000	0.623	4.014	13.497

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Upper Dudhana	0.000	3.720	0.000	0.370	0.000	0.100	3.480	7.670
	CADA Abad	**0.000**	**29.190**	**0.689**	**37.329**	**0.000**	**15.483**	**42.895**	**125.586**
Manjra									
	Belpara	0.000	0.530	0.000	0.340	0.000	0.000	0.750	1.620
	Bindusara	0.000	2.307	0.000	0.000	0.000	3.240	1.542	7.089
	Bodhegaon								
	Borna								
	Devarjan	0.000	0.000	0.000	2.287	0.000	0.000	1.830	4.117
	Gharni	0.000	3.614	1.578	4.359	0.000	1.955	8.074	19.580
	Kundalika								
	Mahasangvi	0.000	1.508	0.000	2.980	0.000	0.550	1.350	6.388
	Masalga	0.000	0.000	0.000	0.399	0.000	0.714	1.246	2.359
	Raigavan	0.000	0.000	1.250	2.830	0.000	1.976	5.203	11.259
	Renapur	0.000	0.000	0.000	3.565	0.000	2.616	4.587	10.768
	Rui	0.000	0.000	0.000	3.558	0.000	1.493	4.141	9.192
	Sakol	0.000	0.000	0.000	4.853	0.000	0.550	3.344	8.747
	Sangameshwar (Dokewadi)	0.000	0.000	2.610	4.335	0.000	0.000	7.008	13.953
	Saraswati								
	Sindphana	0.000	2.560	0.000	0.030	0.000	0.900	1.472	4.962
	Tawarja	0.000	4.250	1.120	3.500	0.000	1.787	8.558	19.215
	Terna	0.000	1.651	1.744	4.246	0.000	4.503	8.730	20.874
	Tiru	0.000	1.140	0.000	4.451	0.000	2.390	5.436	13.417
	Wan (Beed)								
	Whati	0.000	0.938	0.000	3.146	0.000	0.510	2.488	7.082
	CADA Beed	**0.000**	**18.498**	**8.302**	**44.879**	**0.000**	**23.183**	**65.759**	**160.622**
Girna									
	Agnavati	0.000	1.139	0.000	0.218	0.000	0.580	0.660	2.597
	Bhokarbari	0.000	1.982	0.000	0.066	0.000	0.314	1.012	3.373
	Bori	0.000	11.103	3.228	0.600	0.150	3.795	8.011	26.887
	Burai	0.000	12.570	0.000	0.000	0.000	2.110	4.030	18.710
	Hiwara	0.000	4.441	0.000	2.153	0.000	2.507	3.706	12.807
	Jamkhedi	0.000	0.000	0.000	0.000	4.878	0.079	2.734	7.691
	Kanoli	0.000	5.769	2.140	0.000	0.000	2.939	1.116	11.965
	Manyad	0.000	15.529	11.649	8.483	0.000	1.202	5.668	42.532
	Rangawali	3.840	2.540	8.170	0.000	0.000	0.000	2.260	16.810
	Tondapur	0.000	0.000	0.000	0.000	0.000	2.234	0.755	2.989
	CADA Jalgaon	**3.840**	**55.073**	**25.187**	**11.520**	**5.028**	**15.761**	**29.952**	**146.361**
Girna									
	Haranbari	0.000	0.470	0.000	1.070	14.260	6.620	4.060	26.480
	Kelzar	0.000	1.410	0.000	1.000	8.310	2.350	1.880	14.950
	Nagya Sakya	0.000	8.600	0.000	2.950	0.000	0.000	1.530	13.080
	CADA Nashik	**0.000**	**10.480**	**0.000**	**5.020**	**22.570**	**8.970**	**7.470**	**54.510**

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Middle Tapi (Satpuda)									
	Bahula	0.000	0.000	0.000	2.243	0.000	0.000	2.677	4.920
	JIPC Jalgaon	**0.000**	**0.000**	**0.000**	**2.243**	**0.000**	**0.000**	**2.677**	**4.920**
Manjra									
	Karadkhed	0.000	1.740	1.720	0.710	0.000	2.310	2.240	8.720
	Kudala	0.000	1.440	0.940	1.369	0.000	0.581	1.481	5.811
	Kundrala	0.000	0.062	0.000	1.448	0.000	0.908	0.645	3.063
	Mahalingi	0.000	0.000	0.000	1.184	0.000	0.000	0.375	1.559
	Pethwadaj	0.000	0.000	0.000	0.289	0.000	1.190	0.717	2.196
	NIC Nanded	**0.000**	**3.242**	**2.660**	**5.000**	**0.000**	**4.989**	**5.458**	**21.349**
Purna (Tapi)									
	Chandrabhaga (Amravati)	0.000	4.612	4.716	0.030	0.000	0.000	2.744	12.103
	Purna (Achalpur)	0.000	1.597	0.515	0.000	0.000	0.930	7.993	11.035
	UWPC Amravati	**0.000**	**6.209**	**5.231**	**0.030**	**0.000**	**0.930**	**10.737**	**23.138**
Deficit		**3.840**	**169.999**	**59.800**	**107.583**	**37.791**	**86.181**	**199.173**	**664.367**
Normal									
Upper Godavari									
	Shivna Takali	0.000	4.815	2.782	0.130	0.326	1.500	6.967	16.520
	AIC Abad	**0.000**	**4.815**	**2.782**	**0.130**	**0.326**	**1.500**	**6.967**	**16.520**
Painganga									
	Borgaon	0.000	0.410	0.000	0.000	0.000	0.000	1.347	1.757
	Goki	0.000	0.464	1.090	0.494	0.000	1.590	7.370	11.008
	Koradi	0.000	0.000	0.000	0.430	0.000	2.210	4.391	7.031
	Lower Pus	0.000	20.930	6.890	6.900	0.000	0.075	22.300	57.095
	Saikheda	0.000	8.840	2.960	3.700	0.000	0.480	10.750	26.730
	Waghadi	0.000	4.419	0.000	0.126	0.000	3.120	5.997	13.662
	AIC Akola	**0.000**	**35.063**	**10.940**	**11.650**	**0.000**	**7.475**	**52.155**	**117.283**
Painganga									
	Pen Takli	0.000	3.990	0.000	15.315	0.000	4.048	9.755	33.108
	BIPC Buldhana	**0.000**	**3.990**	**0.000**	**15.315**	**0.000**	**4.048**	**9.755**	**33.108**
Upper Godavari									
	Ambadi	0.000	1.914	0.000	0.611	0.000	1.368	3.871	7.765
	Bor Dahegaon	0.000	1.280	0.000	1.060	0.000	0.000	3.400	5.740
	Dheku	0.000	1.500	0.000	1.540	0.000	0.340	7.100	10.480
	Kolhi	0.000	0.233	0.110	2.087	0.000	1.043	1.250	4.723
	Narangi	0.000	0.500	0.000	3.140	0.000	0.950	6.600	11.190
	Tembhapuri	0.000	1.000	0.000	1.970	0.000	0.000	9.287	12.257
	CADA Abad	**0.000**	**6.427**	**0.110**	**10.408**	**0.000**	**3.701**	**31.508**	**52.154**
Middle Tapi (Satpuda)									

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Abhora	0.000	2.230	0.948	0.117	0.000	0.000	1.528	4.823
	Aner	3.907	18.067	18.131	0.000	0.000	0.000	14.540	54.645
	Karwand	0.000	3.720	3.540	0.038	0.159	3.668	4.620	15.745
	Malangaon	0.000	5.629	1.720	0.000	0.000	0.241	2.905	10.495
	Panzara	0.300	19.149	6.487	0.000	0.000	1.473	8.625	36.034
	Sonwad	0.000	11.040	0.000	0.000	0.000	2.170	5.530	18.740
	Suki	0.000	0.000	0.000	0.000	14.053	1.212	8.308	23.573
	Suki Pickup Wier	0.000	9.151	1.105	0.000	10.256	0.712	0.000	21.224
	CADA Jalgaon	**4.207**	**68.986**	**31.931**	**0.155**	**24.468**	**9.476**	**46.056**	**185.279**
Upper Godavari									
	Adhala	0.000	10.580	9.680	3.712	0.000	1.344	2.670	27.986
	Alandi	0.000	8.320	9.499	2.629	0.568	0.000	4.322	25.338
	Bhojapur	7.182	9.127	0.000	0.338	0.000	1.412	0.226	18.285
	Ghatshil Pargaon	0.000	1.690	0.000	0.000	0.000	3.920	1.190	6.800
	Mandohol	0.000	4.730	0.000	0.000	1.060	2.770	2.160	10.720
	Waldevi	0.000	0.000	0.000	1.280	22.694	42.860	3.050	69.884
	CADA Nashik	**7.182**	**34.447**	**19.179**	**7.959**	**24.322**	**52.306**	**13.618**	**159.013**
Upper Bhima									
	Visapur	2.376	13.750	11.548	2.230	0.000	1.838	8.120	39.862
	CADA Pune	**2.376**	**13.750**	**11.548**	**2.230**	**0.000**	**1.838**	**8.120**	**39.862**
Sina									
	Bori	0.000	0.000	0.000	6.380	0.000	0.360	4.475	11.215
	CADA Solapur	**0.000**	**0.000**	**0.000**	**6.380**	**0.000**	**0.360**	**4.475**	**11.215**
Wardha									
	Amalnalla	1.790	2.435	0.675	0.000	0.000	2.095	4.900	11.895
	Dham	0.000	17.370	0.000	5.090	0.000	5.700	8.200	36.360
	Pothra1	0.000	14.400	0.000	2.150	0.000	0.230	7.270	24.050
	CIPC	**1.790**	**34.205**	**0.675**	**7.240**	**0.000**	**8.025**	**20.370**	**72.305**
	Chandrapur								
Middle Tapi (Satpuda)									
	Bhokar (Mangrul)	0.000	0.000	0.931	0.000	0.000	0.000	1.370	2.301
	Mor	0.000	1.199	0.920	0.000	0.000	0.000	1.146	3.265
	JIPC Jalgaon	**0.000**	**1.199**	**1.851**	**0.000**	**0.000**	**0.000**	**2.516**	**5.566**
Lower Wainganga									
	Dongargaon (Chandrapur)	1.962	4.087	0.000	0.000	0.000	0.000	3.392	9.441
	Jam	0.000	0.000	0.000	0.000	0.000	3.162	3.068	6.230
	Kar	0.000	6.170	0.000	0.622	0.000	1.240	3.562	11.594
	NIC Nagpur	**1.962**	**10.257**	**0.000**	**0.622**	**0.000**	**4.402**	**10.022**	**27.265**
Painganga									

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Dongargaon (Nanded)	0.000	3.467	1.880	0.147	0.000	0.000	2.777	8.271
	Loni	0.000	2.629	1.369	0.134	0.000	0.000	1.503	5.635
	Nagzari	0.000	4.042	0.000	0.150	0.000	1.080	2.076	7.348
	NIC Nanded	**0.000**	**10.138**	**3.249**	**0.431**	**0.000**	**1.080**	**6.356**	**21.254**
Upper Bhima									
	Kasarsai	0.000	0.370	0.000	5.130	8.608	0.038	2.500	16.646
	Nazare	0.000	5.990	0.000	1.510	1.870	4.170	3.980	17.520
	Wadiwale	0.000	0.000	0.000	0.890	29.170	6.410	4.582	41.052
	PIC Pune	**0.000**	**6.360**	**0.000**	**7.530**	**39.648**	**10.618**	**11.062**	**75.218**
Painganga									
	Ekbhuji	0.000	1.450	0.000	1.370	0.000	2.015	3.530	8.365
	Sonal	0.000	0.000	0.000	0.000	0.000	0.300	1.460	1.760
	WIC Washim	**0.000**	**1.450**	**0.000**	**1.370**	**0.000**	**2.315**	**4.990**	**10.125**
Painganga									
	Adan	0.000	0.000	0.000	0.200	0.000	3.070	5.785	9.055
	Nawargaon	0.000	4.224	0.000	0.020	0.000	1.591	2.948	8.783
	YIC Yavatmal	**0.000**	**4.224**	**0.000**	**0.220**	**0.000**	**4.661**	**8.733**	**17.838**
Normal		**17.517**	**235.311**	**82.265**	**71.640**	**88.764**	**111.805**	**236.704**	**844.006**
Surplus									
Middle Wainganga									
	Bagheda	1.682	0.000	0.000	0.000	0.000	0.000	0.909	2.591
	Betekar Bothli	1.536	0.000	0.000	0.000	0.000	0.000	0.256	1.792
	Bodalkasa	8.150	1.902	0.000	0.000	0.000	0.060	0.381	10.493
	Chandpur	12.196	0.000	0.000	0.034	0.000	0.000	1.456	13.686
	Chandrabhaga (Nagpur)	0.000	0.000	0.000	0.792	0.000	0.071	0.155	1.018
	Chorakhmara	9.731	0.000	0.000	0.000	0.000	0.000	1.205	10.936
	Chulband	11.351	1.537	0.000	0.146	0.000	0.000	1.561	14.595
	Kanolibara	0.000	10.987	2.591	0.282	0.000	0.000	4.535	18.395
	Kesarnala	0.000	0.085	0.000	0.335	0.000	0.276	0.130	0.826
	Khairbanda	8.443	0.000	0.000	0.000	0.000	0.000	1.958	10.401
	Khekara Nalla	0.000	6.526	0.000	0.040	0.000	0.338	1.290	8.194
	Kolar	0.020	12.023	0.090	1.821	0.000	1.299	1.159	16.412
	Makardhokada-Saiki	0.000	1.837	0.000	0.024	0.000	1.345	1.811	5.016
	Managadh	3.329	1.642	1.810	0.000	0.000	0.000	0.875	7.656
	Mordham	0.000	0.086	0.000	0.594	0.000	0.056	0.229	0.965
	Pandharbodi	0.000	0.000	0.000	0.000	0.000	1.615	1.831	3.446
	Rengepar	2.999	0.622	0.000	0.000	0.000	0.000	0.430	4.051
	Sangrampur	1.964	0.000	0.000	0.000	0.000	0.000	0.229	2.193
	Sorna	3.215	0.000	0.000	0.000	0.000	0.000	0.302	3.517
	Tekepar LIS	0.000	0.000	0.000	35.770	0.000	0.000	0.000	35.770
	Umri	0.000	2.659	0.423	0.473	0.000	0.440	0.784	4.779

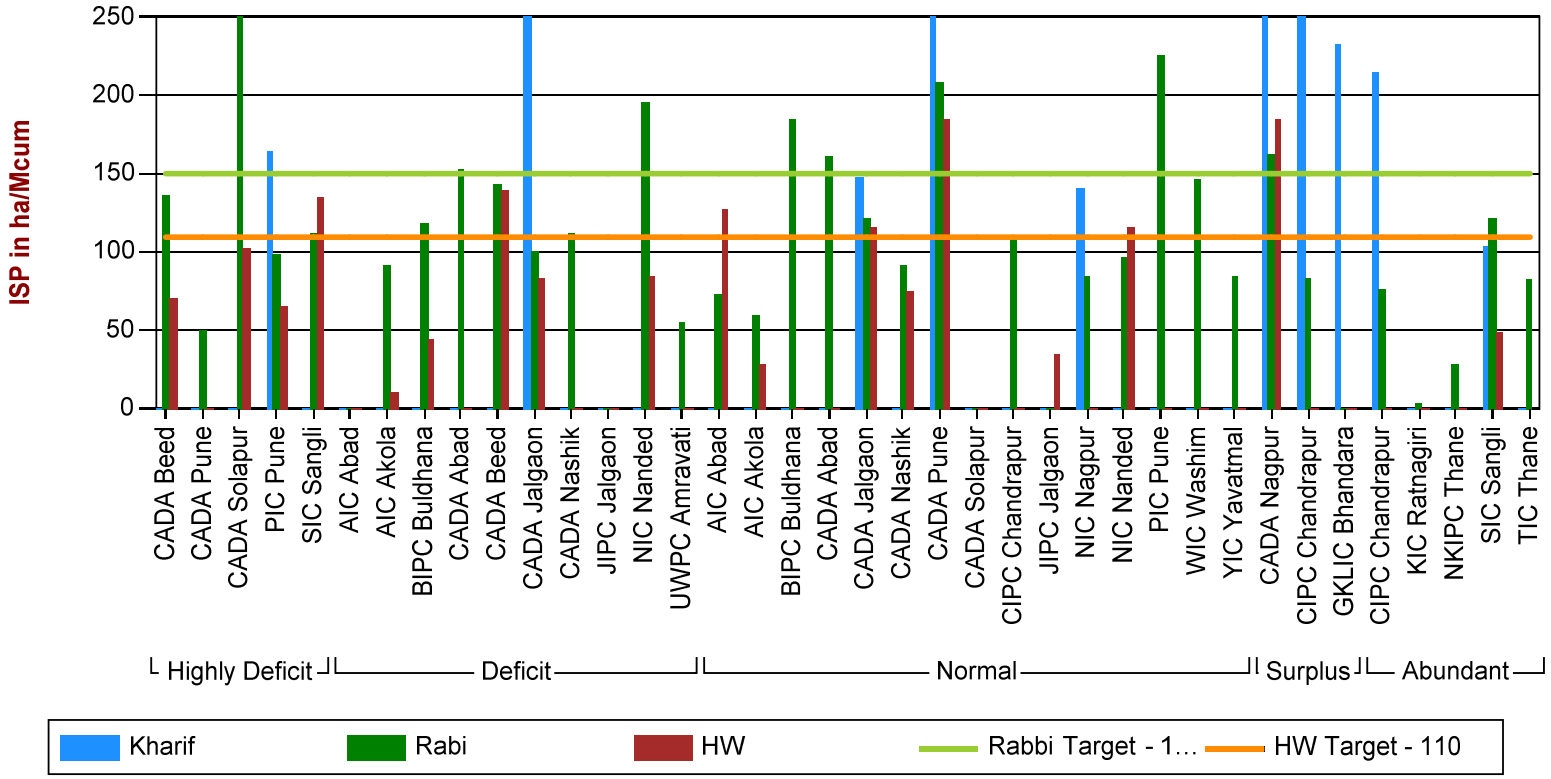
(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Wunna	0.000	0.000	0.000	0.179	0.000	8.407	4.441	13.027
	CADA Nagpur	**64.616**	**39.906**	**4.914**	**40.489**	**0.000**	**13.907**	**25.927**	**189.759**
Middle Wainganga	Chandai	4.450	0.444	0.000	0.024	0.000	0.000	4.509	9.427
	Chargaon	2.897	8.547	0.000	2.056	0.000	0.195	4.426	18.121
	Labhansarad	0.000	4.112	0.000	0.250	0.000	0.000	3.211	7.573
	Pakadigundam	1.280	4.768	0.000	0.000	0.000	1.563	2.902	10.513
	Panchadhara Complex	0.000	7.332	0.490	0.000	0.000	0.000	1.330	9.152
	CIPC	**8.627**	**25.203**	**0.490**	**2.330**	**0.000**	**1.758**	**16.378**	**54.786**
	Chandrapur								
Middle Wainganga	Katangi	1.681	0.651	0.965	0.329	0.000	1.776	3.725	9.127
	GKLIC	**1.681**	**0.651**	**0.965**	**0.329**	**0.000**	**1.776**	**3.725**	**9.127**
	Bhandara								
Surplus		**74.924**	**65.760**	**6.369**	**43.149**	**0.000**	**17.441**	**46.030**	**253.672**
Abundant									
Wardha	Dongargaon (Wardha)	0.000	2.172	0.210	0.000	0.000	0.000	1.447	3.829
	Ghorazari	29.276	0.214	0.000	0.000	0.000	0.000	5.193	34.683
	Naleshwar	11.373	0.507	0.000	0.000	0.000	0.000	1.689	13.569
	CIPC	**40.649**	**2.893**	**0.210**	**0.000**	**0.000**	**0.000**	**8.329**	**52.081**
	Chandrapur								
Vashishthi	Natuwadi	0.000	21.972	0.000	0.000	0.000	0.692	0.922	23.586
	KIC Ratnagiri	**0.000**	**21.972**	**0.000**	**0.000**	**0.000**	**0.692**	**0.922**	**23.586**
North Konkan	Hetwane	0.000	4.448	0.000	0.000	0.000	37.098	9.589	51.136
	NKIPC Thane	**0.000**	**4.448**	**0.000**	**0.000**	**0.000**	**37.098**	**9.589**	**51.136**
Upper Krishna (W)	Chikotra	0.000	0.000	0.000	0.000	29.249	0.414	6.455	36.118
	Chitri	0.000	0.000	0.000	0.000	61.860	2.750	2.930	67.540
	Ghataprbha	0.000	0.000	0.000	0.000	15.601	0.250	1.303	17.154
	Jangamhatti	0.000	0.000	0.000	0.000	34.470	1.132	4.270	39.872
	Kadvi	0.000	0.000	0.000	0.000	22.927	0.392	6.580	29.899
	Kasari	0.000	0.000	0.000	0.000	73.326	0.531	6.070	79.927
	Krishna Canal & Khodshi Backwater	12.369	13.416	13.432	25.480	0.000	0.654	2.690	68.041
	Kumbhi	0.000	0.000	0.000	0.000	65.674	0.083	5.070	70.827
	Morna (Sangli)	0.000	0.000	0.000	0.105	3.980	8.563	2.864	15.512
	Patgaon	0.000	0.000	0.000	0.000	67.734	1.964	8.034	77.732

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
North Konkan	Yeoti Masoli	0.000	0.752	1.232	1.600	1.536	0.169	0.680	5.969
	SIC Sangli	**12.369**	**14.168**	**14.664**	**27.185**	**376.357**	**16.902**	**46.946**	**508.591**
	Rajanalla Complex	0.000	21.057	0.000	0.000	0.000	0.000	21.348	42.405
	Wandri	0.000	10.740	13.240	0.000	0.000	0.000	0.000	23.980
	TIC Thane	**0.000**	**31.797**	**13.240**	**0.000**	**0.000**	**0.000**	**21.348**	**66.385**
Abundant		**53.018**	**75.278**	**28.114**	**27.185**	**376.357**	**54.693**	**87.134**	**701.779**
Medium		**152.279**	**615.646**	**238.223**	**369.142**	**502.912**	**317.397**	**700.585**	**2896.184**

Indicator V : Medium Projects - Irrigation System Performance (Canals)



(Medium / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Highly Deficit				
Sina	Banganga	0	150	0
	Benitura	0	43	65
	Chandani	0	155	0
	Harni	0	210	85
	Jakapur			
	Kada	0	101	60
	Kadi	0	99	0
	Kambli	0	123	0
	Khandala	0	432	91
	Khandeshwar	0	157	0
	Khasapur	0	158	180
	Kurnoor	0	116	62
	Mehkari	0	101	60
	Ramganga	0	155	117
	Ruti	0	293	61
	Sakat	0	156	222
	Talwar	0	120	0
	Turori	0	0	0
	CADA Beed	**0**	**137**	**70**
Upper Krishna (E)	Yeralwadi	0	50	0
	CADA Pune	**0**	**50**	**0**
Remaining Bhima+ Man	Ashti	0	0	0
	Buddhihal	0	544	0
	Ekrukh	0	137	0
	Hingani (Pangaon)	0	173	99
	Jawalgaon	0	0	108
	Mangi	0	155	101
	CADA Solapur	**0**	**268**	**102**
Remaining Bhima+ Man	Andhali	0	0	0
	Khairy	0	82	0
	Mhaswad	164	69	51
	Nher	0	0	0
	Ranand	0	196	109
	Sina	0	81	26
	Tisangi	0	160	167
	PIC Pune	**164**	**100**	**65**
Upper Krishna (E)	Basappawadi	0	0	0

(Medium / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Dodda Nalla			
	Sankh	0	106	0
	Siddhewadi	0	143	135
	SIC Sangli	**0**	**112**	**135**
Highly Deficit		**164**	**120**	**81**
Deficit				
Purna+Dudhana	Wakod	0	360	0
	AIC Abad	**0**	**360**	**0**
Purna (Tapi)	Dnyanganga	0	0	0
	Mas	0	118	0
	Morna (Akola)	0	33	0
	Nirguna	0	88	0
	Paldhag	0	108	0
	Shahnoor	0	65	14
	Uma	0	0	0
	AIC Akola	**0**	**93**	**11**
Purna (Tapi)	Mun	0	100	0
	Torna	0	104	68
	Utawali	0	195	58
	BIPC Buldhana	**0**	**119**	**45**
Middle Tapi (South)	Ajanta Andhari	0	0	0
	Anjana Palashi	0	0	0
	Dhamna	0	0	0
	Gadadgad	0	333	219
	Galhati	0	336	0
	Girja	0	195	0
	Jivrekha	0	130	0
	Jui	0	0	0
	Kalyan Girija	0	131	0
	Karpara	0	0	0
	Khelna	0	0	0
	Lahuki	0	359	570
	Masoli	0	0	0
	Pir Kalyan	0	327	0
	Purna Nevpur	0	151	0
	Sukhana	0	84	0
	Upper Dudhana	0	87	0
	CADA Abad	**0**	**152**	**295**

(Medium / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Manjra	Belpara	0	143	0
	Bindusara	0	94	0
	Bodhegaon			
	Borna			
	Devarjan	0	0	0
	Gharni	0	140	82
	Kundalika			
	Mahasangvi	0	74	0
	Masalga	0	0	0
	Raigavan	0	0	0
	Renapur	0	0	0
	Rui	0	0	0
	Sakol	0	0	0
	Sangameshwar (Dokewadi)	0	0	284
	Saraswati			
	Sindphana	0	224	0
	Tawarja	0	107	115
	Terna	0	152	90
	Tiru	0	293	0
	Wan (Beed)			
	Whati	0	142	0
	CADA Beed	**0**	**144**	**139**
Girna	Agnavati	0	86	0
	Bhokarbari	0	68	0
	Bori	0	85	175
	Burai	0	100	0
	Hiwara	0	125	0
	Jamkhedi	0	0	0
	Kanoli	0	115	57
	Manyad	0	69	71
	Rangawali	288	318	73
	Tondapur	0	0	0
	CADA Jalgaon	**288**	**100**	**84**
Girna	Haranbari	0	128	0
	Kelzar	0	159	0
	Nagya Sakya	0	104	0
	CADA Nashik	**0**	**113**	**0**
Middle Tapi (Satpuda)				

(Medium / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Bahula	0	0	0
	JIPC Jalgaon	**0**	**0**	**0**
Manjra	Karadkhed	0	164	72
	Kudala	0	213	111
	Kundrala	0	645	0
	Mahalingi	0	0	0
	Pethwadaj	0	0	0
	NIC Nanded	**0**	**195**	**85**
Purna (Tapi)	Chandrabhaga (Amravati)	0	35	0
	Purna (Achalpur)	0	113	0
	UWPC Amravati	**0**	**55**	**0**
Deficit		**288**	**116**	**71**
Normal				
Upper Godavari	Shivna Takali	0	74	127
	AIC Abad	**0**	**74**	**127**
Painganga	Borgaon	0	154	0
	Goki	0	84	0
	Koradi	0	0	0
	Lower Pus	0	66	37
	Saikheda	0	60	17
	Waghadi	0	26	0
	AIC Akola	**0**	**61**	**28**
Painganga	Pen Takli	0	186	0
	BIPC Buldhana	**0**	**186**	**0**
Upper Godavari	Ambadi	0	190	0
	Bor Dahegaon	0	83	0
	Dheku	0	209	0
	Kolhi	0	253	200
	Narangi	0	102	0
	Tembhapuri	0	145	0
	CADA Abad	**0**	**162**	**200**
Middle Tapi (Satpuda)	Abhora	0	88	144
	Aner	141	150	110
	Karwand	0	162	142
	Malangaon	0	135	93
	Panzara	97	147	108
	Sonwad	0	64	0
	Suki	0	0	0

(Medium / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Suki Pickup Wier	0	75	180
	CADA Jalgaon	**148**	**123**	**116**
Upper Godavari	Adhala	0	71	67
	Alandi	0	94	84
	Bhojapur	0	98	0
	Ghatshil Pargaon	0	246	0
	Mandohol	0	71	0
	Waldevi	0	0	0
	CADA Nashik	**0**	**92**	**75**
Upper Bhima	Visapur	318	209	185
	CADA Pune	**318**	**209**	**185**
Sina	Bori	0	0	0
	CADA Solapur	**0**	**0**	**0**
Wardha	Amalnalla	0	487	0
	Dham	0	67	0
	Pothra1	0	103	0
	CIPC Chandrapur	**0**	**112**	**0**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0	0	0
	Mor	0	0	72
	JIPC Jalgaon	**0**	**0**	**36**
Lower Wainganga	Dongargaon (Chandrapur)	140	86	0
	Jam	0	0	0
	Kar	0	84	0
	NIC Nagpur	**140**	**85**	**0**
Painganga	Dongargaon (Nanded)	0	72	179
	Loni	0	134	31
	Nagzari	0	92	0
	NIC Nanded	**0**	**96**	**117**
Upper Bhima	Kasarsai	0	976	0
	Nazare	0	179	0
	Wadiwale	0	0	0
	PIC Pune	**0**	**225**	**0**
Painganga	Ekbhuji	0	147	0
	Sonal	0	0	0
	WIC Washim	**0**	**147**	**0**
Painganga	Adan	0	0	0
	Nawargaon	0	86	0

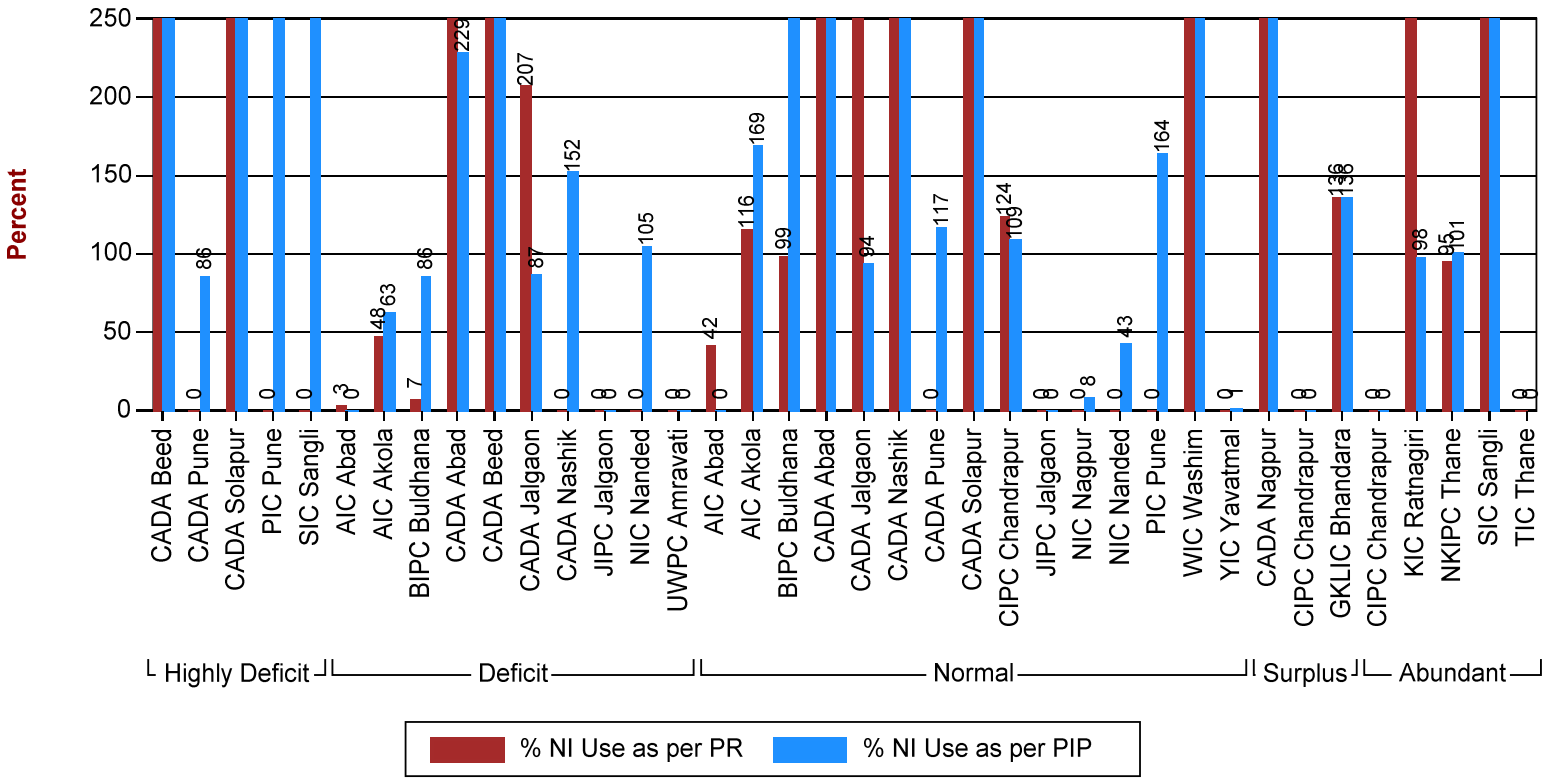
(Medium / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	YIC Yavatmal	**0**	**86**	**0**
Normal		**94**	**112**	**102**
Surplus				
Middle Wainganga	Bagheda	683	0	0
	Betekar Bothli	499	0	0
	Bodalkasa	384	470	0
	Chandpur	528	0	0
	Chandrabhaga (Nagpur)	0	0	0
	Chorakhmara	385	0	0
	Chulband	265	201	0
	Kanolibara	0	84	317
	Kesarnala	0	9	0
	Khairbanda	597	0	0
	Khekara Nalla	0	79	0
	Kolar	217	152	77
	Makardhokada-Saiki	0	167	0
	Managadh	289	625	46
	Mordham	0	309	0
	Pandharbodi	0	0	0
	Rengepar	315	579	0
	Sangrampur	403	0	0
	Sorna	272	0	0
	Tekepar LIS	0	0	0
	Umri	0	122	4
	Wunna	0	0	0
	CADA Nagpur	**416**	**163**	**186**
Middle Wainganga	Chandai	252	0	0
	Chargaon	317	22	0
	Labhansarad	0	137	0
	Pakadigundam	250	177	0
	Panchadhara Complex	0	68	0
	CIPC Chandrapur	**273**	**83**	**0**
Middle Wainganga	Katangi	232	0	97
	GKLIC Bhandara	**232**	**0**	**97**
Surplus		**395**	**131**	**158**
Abundant				
Wardha	Dongargaon (Wardha)	0	101	0
	Ghorazari	200	0	0

(Medium / 2008-09) Unit: ha.MCum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Naleshwar	253	0	0
	CIPC Chandrapur	**215**	**76**	**0**
Vashishthi	Natuwadi	0	3	0
	KIC Ratnagiri	**0**	**3**	**0**
North Konkan	Hetwane	0	28	0
	NKIPC Thane	**0**	**28**	**0**
Upper Krishna (W)	Chikotra	0	0	0
	Chitri	0	0	0
	Ghataprbha	0	0	0
	Jangamhatti	0	0	0
	Kadvi	0	0	0
	Kasari	0	0	0
	Krishna Canal & Khodshi Backwater	104	108	53
	Kumbhi	0	0	0
	Morna (Sangli)	0	0	0
	Patgaon	0	0	0
	Yeoti Masoli	0	382	16
	SIC Sangli	**104**	**122**	**50**
North Konkan	Rajanalla Complex	0	93	0
	Wandri	0	63	0
	TIC Thane	**0**	**83**	**0**
Abundant		**189**	**64**	**26**
		282	**110**	**81**

Indicator VI : Medium Projects - Percentage of Planned and Actual Non - Irrigation Use



(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Highly Deficit						
Sina						
	Banganga	0.61	0.62	0.61	98	100
	Benitura	0.84	0.83	0.83	100	100
	Chandani	1.76	2.55	1.76	69	100
	Harni	0.00	0.00	0.00	0	0
	Jakapur				0	0
	Kada	1.92	0.00	0.27	0	710
	Kadi	1.60	0.00	0.00	0	0
	Kambli	0.00	0.00	0.00	0	0
	Khandala	0.00	0.00	0.00	0	0
	Khandeshwar	0.00	0.00	0.00	0	0
	Khasapur	1.38	0.00	1.38	0	100
	Kurnoor	5.82	0.00	3.10	0	188
	Mehkari	0.00	0.00	0.00	0	0
	Ramganga	0.00	0.00	0.00	0	0
	Ruti	0.00	0.00	0.48	0	0
	Sakat	0.36	0.00	0.36	0	100
	Talwar	0.15	0.00	0.13	0	120
	Turori	2.51	1.91	0.00	131	0
	CADA Beed	**16.940**	**5.917**	**8.918**	**286**	**190**
Upper Krishna (E)						
	Yeralwadi	3.75	0.00	4.12	0	91
	CADA Pune	**3.750**	**0.000**	**4.117**	**0**	**91**
Remaining Bhima+ Man						
	Ashti	19.22	0.00	2.93	0	656
	Buddhihal	0.30	0.00	0.00	0	0
	Ekrukh	3.29	5.13	0.00	64	0
	Hingani (Pangaon)	1.73	1.45	1.68	120	103
	Jawalgaon	0.00	4.25	0.20	0	0
	Mangi	0.24	0.00	0.24	0	103
	CADA Solapur	**24.790**	**10.830**	**5.045**	**229**	**491**
Remaining Bhima+ Man						
	Andhali	0.43	0.00	0.00	0	0
	Khairy	0.03	0.00	0.47	0	7
	Mhaswad	0.00	0.00	0.00	0	0
	Nher	0.03	0.00	0.03	0	100
	Ranand	0.00	0.00	0.00	0	0

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Sina	0.39	0.00	1.50	0	26
	Tisangi	0.15	0.00	5.07	0	3
	PIC Pune	**1.020**	**0.000**	**7.067**	**0**	**14**
Upper Krishna (E)						
	Basappawadi	0.00	0.00	0.00	0	0
	Dodda Nalla				0	0
	Sankh	0.00	0.00	0.00	0	0
	Siddhewadi	0.78	0.00	1.00	0	78
	SIC Sangli	**0.780**	**0.000**	**1.000**	**0**	**78**
Highly Deficit		**47.280**	**16.747**	**26.147**	**282**	**181**
Deficit						
Purna+Dudhana						
	Wakod	0.00	1.95	0.00	0	0
	AIC Abad	**0.000**	**1.950**	**0.000**	**0**	**0**
Purna (Tapi)						
	Dnyanganga	3.25	8.69	6.08	37	53
	Mas	2.64	7.72	2.50	34	106
	Morna (Akola)	0.66	6.34	0.95	10	69
	Nirguna	0.18	0.00	0.55	0	33
	Paldhag	1.79	0.37	1.50	482	119
	Shahnoor	7.54	0.00	7.00	0	108
	Uma	0.48	1.35	0.18	35	264
	AIC Akola	**16.540**	**24.467**	**18.760**	**68**	**88**
Purna (Tapi)						
	Mun	0.33	5.13	0.50	6	66
	Torna	0.00	0.12	0.00	0	0
	Utawali	0.00	0.75	0.00	0	0
	BIPC Buldhana	**0.330**	**5.994**	**0.500**	**6**	**66**
Middle Tapi (South)						
	Ajanta Andhari	1.20	0.00	1.20	0	100
	Anjana Palashi	0.81	0.00	0.00	0	0
	Dhamna	0.20	0.00	0.00	0	0
	Gadadgad	0.06	0.00	0.00	0	0
	Galhati	0.00	0.00	0.00	0	0
	Girja	1.59	3.20	1.05	50	151
	Jivrekha	0.15	0.00	0.00	0	0
	Jui	2.08	0.00	1.54	0	135
	Kalyan Girija	0.00	0.00	0.00	0	0
	Karpara	0.52	0.00	2.80	0	19
	Khelna	2.00	0.00	2.00	0	100

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Lahuki	0.00	0.00	0.00	0	0
	Masoli	2.05	0.00	2.93	0	70
	Pir Kalyan	3.03	0.00	3.03	0	100
	Purna Nevpur	1.08	0.00	1.02	0	106
	Sukhana	0.62	0.00	0.63	0	99
	Upper Dudhana	0.10	0.00	0.20	0	50
	CADA Abad	**15.480**	**3.200**	**16.394**	**484**	**94**
Manjra						
	Belpara	0.00	0.00	0.00	0	0
	Bindusara	3.24	0.00	3.50	0	93
	Bodhegaon				0	0
	Borna				0	0
	Devarjan	0.00	0.00	0.00	0	0
	Gharni	1.96	0.00	1.96	0	100
	Kundalika				0	0
	Mahasangvi	0.55	0.00	0.64	0	86
	Masalga	0.71	0.00	0.98	0	73
	Raigavan	1.98	0.28	0.00	698	0
	Renapur	2.62	3.90	2.62	67	100
	Rui	1.49	2.36	0.00	63	0
	Sakol	0.55	0.00	0.55	0	100
	Sangameshwar (Dokewadi)	0.00	0.00	0.00	0	0
	Saraswati				0	0
	Sindphana	0.90	0.00	1.25	0	72
	Tawarja	1.79	3.89	1.79	46	100
	Terna	4.50	4.81	2.85	94	158
	Tiru	2.39	0.00	2.39	0	100
	Wan (Beed)				0	0
	Whati	0.51	0.00	0.51	0	100
	CADA Beed	**23.180**	**15.246**	**19.032**	**152**	**122**
Girna						
	Agnavati	0.58	0.58	0.78	100	74
	Bhokarbari	0.31	0.00	0.40	0	78
	Bori	3.80	7.08	10.27	54	37
	Burai	2.11	0.00	2.11	0	100
	Hiwara	2.51	0.00	2.50	0	100
	Jamkhedi	0.08	0.00	0.08	0	99
	Kanoli	2.94	0.00	2.47	0	119
	Manyad	1.20	0.00	0.85	0	141

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Rangawali	0.00	0.00	0.00	0	0
	Tondapur	2.23	0.86	0.74	261	302
	CADA Jalgaon	**15.760**	**8.515**	**20.201**	**185**	**78**
Girna						
	Haranbari	6.62	0.00	7.08	0	94
	Kelzar	2.35	0.00	2.12	0	111
	Nagya Sakya	0.00	0.00	0.00	0	0
	CADA Nashik	**8.970**	**0.000**	**9.200**	**0**	**98**
Middle Tapi (Satpuda)						
	Bahula	0.00	0.00	0.00	0	0
	JIPC Jalgaon	**0.000**	**0.000**	**0.000**	**0**	**0**
Manjra						
	Karadkhed	2.31	0.00	2.50	0	92
	Kudala	0.58	0.00	0.62	0	94
	Kundrala	0.91	0.00	1.15	0	79
	Mahalingi	0.00	0.00	0.00	0	0
	Pethwadaj	1.19	0.00	1.40	0	85
	NIC Nanded	**4.990**	**0.000**	**5.670**	**0**	**88**
Purna (Tapi)						
	Chandrabhaga (Amravati)	0.00	9.62	0.00	0	0
	Purna (Achalpur)	0.93	5.73	0.00	16	0
	UWPC Amravati	**0.930**	**15.347**	**0.000**	**6**	**0**
Deficit		**86.180**	**74.719**	**89.757**	**115**	**96**
Normal						
Upper Godavari						
	Shivna Takali	1.50	3.79	0.00	40	0
	AIC Abad	**1.500**	**3.792**	**0.000**	**40**	**0**
Painganga						
	Borgaon	0.00	0.00	0.00	0	0
	Goki	1.59	0.00	0.00	0	0
	Koradi	2.21	10.68	2.13	21	104
	Lower Pus	0.07	0.00	0.76	0	10
	Saikheda	0.48	0.65	2.40	74	20
	Waghadi	3.12	0.00	2.52	0	124
	AIC Akola	**7.470**	**11.330**	**7.810**	**66**	**96**
Painganga						
	Pen Takli	4.05	15.58	2.82	26	144
	BIPC Buldhana	**4.050**	**15.580**	**2.820**	**26**	**144**
Upper Godavari						
	Ambadi	1.37	0.00	1.46	0	94

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Bor Dahegaon	0.00	0.00	0.00	0	0
	Dheku	0.34	0.30	0.03	113	1133
	Kolhi	1.04	0.00	0.44	0	237
	Narangi	0.95	0.00	0.75	0	127
	Tembhapuri	0.00	0.00	0.00	0	0
	CADA Abad	**3.700**	**0.300**	**2.680**	**1234**	**138**
Middle Tapi (Satpuda)						
	Abhora	0.00	0.00	0.00	0	0
	Aner	0.00	0.00	0.00	0	0
	Karwand	3.67	0.00	0.96	0	384
	Malangaon	0.24	0.00	0.24	0	100
	Panzara	1.47	0.89	1.44	166	102
	Sonwad	2.17	0.00	2.61	0	83
	Suki	1.21	0.00	1.25	0	97
	Suki Pickup Wier	0.71	0.00	1.25	0	57
	CADA Jalgaon	**9.480**	**0.890**	**7.746**	**1065**	**122**
Upper Godavari						
	Adhala	1.34	0.00	1.34	0	100
	Alandi	0.00	0.00	0.00	0	0
	Bhojapur	1.41	0.00	1.70	0	83
	Ghatshil Pargaon	3.92	0.00	0.07	0	5600
	Mandohol	2.77	0.00	1.09	0	254
	Waldevi	42.86	12.17	0.00	352	0
	CADA Nashik	**52.310**	**12.170**	**4.198**	**430**	**1246**
Upper Bhima						
	Visapur	1.84	0.00	1.91	0	96
	CADA Pune	**1.840**	**0.000**	**1.911**	**0**	**96**
Sina						
	Bori	0.36	2.10	2.38	17	15
	CADA Solapur	**0.360**	**2.100**	**2.380**	**17**	**15**
Wardha						
	Amalnalla	2.10	0.00	0.00	0	0
	Dham	5.70	8.77	9.70	65	59
	Pothra1	0.23	0.00	0.27	0	85
	CIPC Chandrapur	**8.030**	**8.770**	**9.970**	**92**	**80**
Middle Tapi (Satpuda)						
	Bhokar (Mangrul)	0.00	1.56	0.00	0	0
	Mor	0.00	0.00	0.00	0	0

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Lower Wainganga	**JIPC Jalgaon**	**0.000**	**1.560**	**0.000**	**0**	**0**
	Dongargaon (Chandrapur)	0.00	0.00	0.00	0	0
	Jam	3.16	0.00	5.92	0	53
	Kar	1.24	0.00	1.39	0	89
	NIC Nagpur	**4.400**	**0.000**	**7.309**	**0**	**60**
Painganga	Dongargaon (Nanded)	0.00	0.00	0.00	0	0
	Loni	0.00	0.00	0.00	0	0
	Nagzari	1.08	0.00	1.00	0	108
	NIC Nanded	**1.080**	**0.000**	**1.000**	**0**	**108**
Upper Bhima	Kasarsai	0.04	0.00	0.04	0	103
	Nazare	4.17	0.00	4.35	0	96
	Wadiwale	6.41	0.00	4.66	0	138
	PIC Pune	**10.620**	**0.000**	**9.047**	**0**	**117**
Painganga	Ekbhuji	2.02	0.76	0.00	265	0
	Sonal	0.30	0.00	0.40	0	75
	WIC Washim	**2.320**	**0.760**	**0.400**	**305**	**579**
Painganga	Adan	3.07	49.83	11.76	6	26
	Nawargaon	1.59	2.71	2.71	59	59
	YIC Yavatmal	**4.660**	**52.543**	**14.473**	**9**	**32**
Normal		**111.800**	**109.795**	**71.744**	**102**	**156**
Surplus						
Middle Wainganga	Bagheda	0.00	0.00	0.00	0	0
	Betekar Bothli	0.00	0.00	0.00	0	0
	Bodalkasa	0.06	0.00	0.08	0	75
	Chandpur	0.00	0.00	0.00	0	0
	Chandrabhaga (Nagpur)	0.07	0.00	0.17	0	42
	Chorakhmara	0.00	0.00	0.00	0	0
	Chulband	0.00	0.00	0.00	0	0
	Kanolibara	0.00	0.00	0.00	0	0
	Kesarnala	0.28	0.00	0.30	0	93
	Khairbanda	0.00	0.00	0.00	0	0
	Khekara Nalla	0.34	0.00	0.00	0	0
	Kolar	1.30	1.21	2.01	107	65

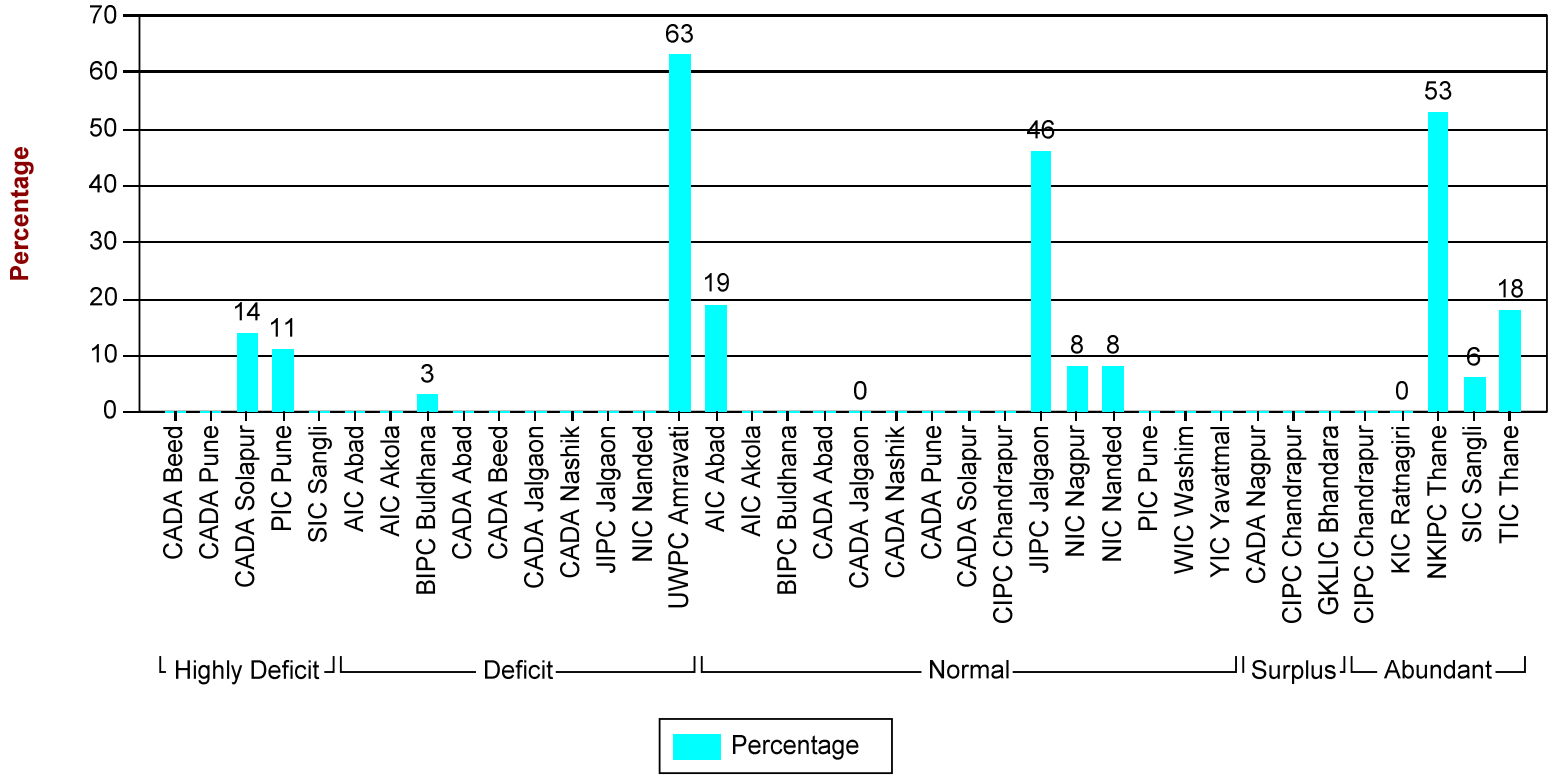
(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Makardhokada-Saiki	1.35	0.00	2.03	0	66
	Managadh	0.00	0.00	0.00	0	0
	Mordham	0.06	0.00	0.04	0	127
	Pandharbodi	1.62	0.00	0.00	0	0
	Rengepar	0.00	0.00	0.00	0	0
	Sangrampur	0.00	0.00	0.00	0	0
	Sorna	0.00	0.00	0.00	0	0
	Tekepar LIS	0.00	0.00	0.00	0	0
	Umri	0.44	0.00	0.00	0	0
	Wunna	8.41	11.55	0.00	73	0
	CADA Nagpur	**13.910**	**12.760**	**4.626**	**109**	**301**
Middle Wainganga						
	Chandai	0.00	0.00	0.00	0	0
	Chargaon	0.20	0.00	0.00	0	0
	Labhansarad	0.00	0.00	0.00	0	0
	Pakadigundam	1.56	0.00	0.00	0	0
	Panchadhara Complex	0.00	0.00	0.00	0	0
	CIPC Chandrapur	**1.760**	**0.000**	**0.000**	**0**	**0**
Middle Wainganga						
	Katangi	1.78	0.89	0.89	200	200
	GKLIC Bhandara	**1.780**	**0.890**	**0.890**	**200**	**200**
Surplus		**17.440**	**13.650**	**5.516**	**128**	**316**
Abundant						
Wardha						
	Dongargaon (Wardha)	0.00	0.00	0.00	0	0
	Ghorazari	0.00	0.00	0.00	0	0
	Naleshwar	0.00	0.00	0.00	0	0
	CIPC Chandrapur	**0.000**	**0.000**	**0.000**	**0**	**0**
Vashishthi						
	Natuwadi	0.69	0.04	0.70	1688	99
	KIC Ratnagiri	**0.690**	**0.041**	**0.700**	**1688**	**99**
North Konkan						
	Hetwane	37.10	39.00	36.50	95	102
	NKIPC Thane	**37.100**	**39.000**	**36.500**	**95**	**102**
Upper Krishna (W)						
	Chikotra	0.41	7.70	0.00	5	0
	Chitri	2.75	2.06	2.53	133	109
	Ghataprbha	0.25	0.00	0.15	0	167
	Jangamhatti	1.13	0.00	1.02	0	111
	Kadvi	0.39	0.00	0.22	0	178

(Medium / 2008-09) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
North Konkan	Kasari	0.53	0.00	0.00	0	0
	Krishna Canal & Khodshi Backwater	0.65	0.69	0.69	95	95
	Kumbhi	0.08	0.00	0.40	0	21
	Morna (Sangli)	8.56	0.00	0.00	0	0
	Patgaon	1.96	0.00	0.00	0	0
	Yeoti Masoli	0.17	0.00	0.17	0	100
	SIC Sangli	**16.900**	**10.451**	**5.180**	**162**	**326**
	Rajanalla Complex	0.00	0.00	0.00	0	0
	Wandri	0.00	0.00	0.00	0	0
	TIC Thane	**0.000**	**0.000**	**0.000**	**0**	**0**
Abundant		**54.690**	**49.492**	**42.380**	**111**	**129**
Medium		**317.400**	**264.403**	**235.544**	**120**	**135**

Indicator VII : Medium Projects - Percentage of Unutilised Water to Live Storage



(Medium / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Highly Deficit							
Sina	Banganga	0.79	0.00	0.08	0.71	4.96	14.26
	Benitura	1.68	1.34	0.00	0.34	11.47	2.94
	Chandani	0.00	0.00	1.63	0.00	16.18	0.00
	Harni	0.00	0.00	1.43	0.00	11.17	0.00
	Jakapur	0.00	0.00	0.00	0.00	0.00	0.00
	Kada	0.00	0.00	1.21	0.00	8.55	0.00
	Kadi	0.00	0.00	0.00	0.00	5.21	0.00
	Kambli	0.00	0.00	0.07	0.00	1.37	0.00
	Khandala	0.00	1.01	0.79	0.00	5.24	0.00
	Khandeshwar	0.00	8.78	0.92	0.00	4.49	0.00
	Khasapur	0.00	13.04	0.00	0.00	13.04	0.00
	Kurnoor	0.00	2.98	0.03	0.00	32.28	0.00
	Mehkari	0.00	0.00	3.20	0.00	8.60	0.00
	Ramganga	0.81	0.00	0.06	0.76	5.34	14.17
	Ruti	0.45	0.00	0.21	0.25	9.89	2.52
	Sakat	0.41	13.48	0.23	0.00	3.93	0.00
	Talwar	0.00	0.00	0.00	0.00	3.24	0.00
	Turori	0.00	0.00	0.00	0.00	1.00	0.00
	CADA Beed	**4.14**	**40.63**	**9.84**	**2.05**	**145.97**	**1.40**
Upper Krishna (E)	Yeralwadi	0.00	0.00	0.00	0.00	17.49	0.00
	CADA Pune	**0.00**	**0.00**	**0.00**	**0.00**	**17.49**	**0.00**
Remaining Bhima+ Man	Ashti	9.21	0.00	9.16	0.05	17.63	0.28
	Buddhihal	0.00	0.00	0.00	0.00	0.00	0.00
	Ekrukh	1.47	0.00	0.00	1.47	18.72	7.86
	Hingani (Pangaon)	10.03	0.00	0.00	10.03	32.34	31.02
	Jawalgaon	6.91	0.00	0.00	6.91	29.19	23.68
	Mangi	4.26	0.00	0.08	4.19	30.40	13.76
	CADA Solapur	**31.89**	**0.00**	**9.24**	**22.65**	**128.29**	**17.66**
Remaining Bhima+ Man	Andhali	1.05	7.42	0.00	0.00	2.18	0.00
	Khairy	2.03	0.00	0.00	2.03	12.64	16.08
	Mhaswad	9.84	0.00	0.00	9.84	44.32	22.20
	Nher	1.33	0.00	0.00	1.33	3.46	38.44
	Ranand	2.79	0.00	0.00	2.79	6.42	43.46
	Sina	8.89	0.00	4.03	4.86	52.30	9.30
	Tisangi	2.80	0.00	0.11	2.69	24.46	10.99
	PIC Pune	**28.74**	**7.42**	**4.14**	**23.54**	**145.79**	**16.15**
Upper Krishna (E)	Basappawadi	0.00	0.00	0.00	0.00	0.00	0.00
	Dodda Nalla	0.00	0.00	0.00	0.00	0.00	0.00

(Medium / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Sankh	0.00	0.00	0.00	0.00	2.92	0.00
	Siddhewadi	0.00	1.76	0.00	0.00	5.58	0.00
	SIC Sangli	**0.00**	**1.76**	**0.00**	**0.00**	**8.49**	**0.00**
Highly Deficit		**64.77**	**49.81**	**23.21**	**48.25**	**446.03**	**10.82**
Deficit							
Purna+Dudhana	Wakod	0.00	1.25	0.10	0.00	3.46	0.00
	AIC Abad	**0.00**	**1.25**	**0.10**	**0.00**	**3.46**	**0.00**
Purna (Tapi)	Dnyanganga	2.79	6.40	0.00	0.00	20.10	0.00
	Mas	0.00	0.00	0.00	0.00	7.85	0.00
	Morna (Akola)	1.01	10.70	0.00	0.00	8.65	0.00
	Nirguna	0.00	0.00	0.00	0.00	14.48	0.00
	Paldhag	1.19	0.00	0.40	0.79	7.56	10.45
	Shahnoor	18.69	25.38	13.23	0.00	32.93	0.00
	Uma	0.00	2.33	0.00	0.00	0.24	0.00
	AIC Akola	**23.68**	**44.81**	**13.63**	**0.79**	**91.81**	**0.86**
Purna (Tapi)	Mun	0.00	0.00	1.75	0.00	17.50	0.00
	Torna	0.60	0.00	0.78	0.00	6.91	0.00
	Utawali	4.29	0.00	0.15	4.14	19.79	20.92
	BIPC Buldhana	**4.89**	**0.00**	**2.68**	**4.14**	**44.20**	**9.37**
Middle Tapi (South)	Ajanta Andhari	0.00	0.00	0.15	0.00	1.09	0.00
	Anjana Palashi	1.31	0.00	0.71	0.60	7.40	8.11
	Dhamna	0.00	0.00	0.00	0.00	0.00	0.00
	Gadadgad	0.00	0.00	0.00	0.00	4.64	0.00
	Galhati	0.00	0.00	0.02	0.00	7.90	0.00
	Girja	0.00	0.00	0.16	0.00	15.60	0.00
	Jivrekha	0.00	0.00	0.00	0.00	5.14	0.00
	Jui	0.04	0.00	0.00	0.04	2.60	1.61
	Kalyan Girija	0.96	0.00	0.00	0.96	8.30	11.57
	Karpara	0.00	0.00	1.79	0.00	8.38	0.00
	Khelna	0.00	0.00	0.51	0.00	3.31	0.00
	Lahuki	0.00	0.00	0.01	0.00	4.32	0.00
	Masoli	0.00	0.00	0.07	0.00	8.99	0.00
	Pir Kalyan	0.21	0.00	0.00	0.21	12.22	1.72
	Purna Nevpur	0.00	0.00	0.00	0.00	9.34	0.00
	Sukhana	0.00	0.00	0.92	0.00	9.80	0.00
	Upper Dudhana	0.00	0.00	0.20	0.00	4.83	0.00
	CADA Abad	**2.52**	**0.00**	**4.54**	**1.81**	**113.86**	**1.59**
Manjra	Belpara	0.00	0.00	0.00	0.00	1.53	0.00
	Bindusara	0.18	0.00	0.00	0.18	7.11	2.53

(Medium / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Bodhegaon	0.00	0.00	0.00	0.00	0.00	0.00
	Borna	0.00	0.00	0.00	0.00	0.00	0.00
	Devarjan	0.00	0.00	0.00	0.00	2.47	0.00
	Gharni	0.00	0.00	1.18	0.00	22.46	0.00
	Kundalika	0.00	0.00	0.00	0.00	0.00	0.00
	Mahasangvi	0.00	0.00	0.07	0.00	5.88	0.00
	Masalga	0.00	0.00	0.00	0.00	3.18	0.00
	Raigavan	0.00	0.00	0.00	0.00	11.26	0.00
	Renapur	0.00	0.00	0.15	0.00	9.55	0.00
	Rui	0.09	0.09	0.83	0.00	8.61	0.00
	Sakol	0.00	0.00	0.17	0.00	8.34	0.00
	Sangameshwar (Dokewadi)	1.08	0.00	3.52	0.00	15.04	0.00
	Saraswati	0.00	0.00	0.00	0.00	0.00	0.00
	Sindphana	0.01	0.00	0.02	0.00	4.87	0.00
	Tawarja	0.00	0.00	0.00	0.00	18.42	0.00
	Terna	2.33	0.00	0.67	1.67	19.66	8.47
	Tiru	0.00	0.00	0.00	0.00	11.00	0.00
	Wan (Beed)	0.00	0.00	0.00	0.00	0.00	0.00
	Whati	0.00	0.00	0.14	0.00	8.27	0.00
	CADA Beed	**3.69**	**0.09**	**6.75**	**1.85**	**157.64**	**1.17**
Girna	Agnavati	0.00	0.00	0.00	0.00	2.76	0.00
	Bhokarbari	0.05	0.00	0.00	0.05	3.14	1.49
	Bori	0.00	0.00	0.00	0.00	25.15	0.00
	Burai	0.00	0.00	0.00	0.00	14.21	0.00
	Hiwara	0.00	0.00	0.00	0.00	9.60	0.00
	Jamkhedi	0.25	0.00	0.00	0.25	12.34	2.03
	Kanoli	0.00	0.00	1.30	0.00	8.45	0.00
	Manyad	0.00	2.15	0.00	0.00	40.55	0.00
	Rangawali	0.00	0.00	0.27	0.00	12.89	0.00
	Tondapur	0.00	0.00	0.57	0.00	0.99	0.00
	CADA Jalgaon	**0.30**	**2.15**	**2.14**	**0.30**	**130.08**	**0.23**
Girna	Haranbari	0.60	0.00	0.49	0.11	33.02	0.33
	Kelzar	0.89	0.00	0.00	0.89	16.22	5.49
	Nagya Sakya	0.00	0.00	0.07	0.00	11.24	0.00
	CADA Nashik	**1.49**	**0.00**	**0.56**	**1.00**	**60.48**	**1.65**
Middle Tapi (Satpuda)	Bahula	0.00	0.00	0.00	0.00	2.19	0.00
	JIPC Jalgaon	**0.00**	**0.00**	**0.00**	**0.00**	**2.19**	**0.00**

(Medium / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Manjra	Karadkhed	0.00	0.00	0.00	0.00	7.78	0.00
	Kudala	0.07	0.00	0.38	0.00	4.29	0.00
	Kundrala	0.00	0.00	0.00	0.00	3.65	0.00
	Mahalingi	0.00	0.00	0.62	0.00	1.29	0.00
	Pethwadaj	0.00	0.00	0.00	0.00	2.86	0.00
	NIC Nanded	**0.07**	**0.00**	**1.00**	**0.00**	**19.87**	**0.00**
Purna (Tapi)	Chandrabhaga (Amravati)	26.85	0.00	0.00	26.84	41.25	65.08
	Purna (Achalpur)	21.92	0.00	1.33	20.60	33.05	62.33
	UWPC Amravati	**48.77**	**0.00**	**1.33**	**47.44**	**74.30**	**63.85**
Deficit		**85.41**	**48.30**	**32.72**	**57.33**	**697.88**	**8.21**
Normal							
Upper Godavari	Shivna Takali	6.72	0.00	0.00	6.72	34.86	19.28
	AIC Abad	**6.72**	**0.00**	**0.00**	**6.72**	**34.86**	**19.28**
Painganga	Borgaon	0.00	0.00	0.00	0.00	1.69	0.00
	Goki	0.00	0.00	0.00	0.00	10.39	0.00
	Koradi	0.00	0.00	0.02	0.00	1.90	0.00
	Lower Pus	0.00	8.50	0.00	0.00	54.34	0.00
	Saikheda	0.00	0.00	0.00	0.00	27.18	0.00
	Waghadi	0.00	0.00	0.00	0.00	16.32	0.00
	AIC Akola	**0.00**	**8.50**	**0.02**	**0.00**	**111.82**	**0.00**
Painganga	Pen Takli	0.00	7.38	0.08	0.00	28.39	0.00
	BIPC Buldhana	**0.00**	**7.38**	**0.08**	**0.00**	**28.39**	**0.00**
Upper Godavari	Ambadi	1.75	0.00	0.00	1.75	11.43	15.33
	Bor Dahegaon	0.00	0.00	0.00	0.00	5.70	0.00
	Dheku	0.21	0.00	0.59	0.00	9.99	0.00
	Kolhi	0.25	0.00	2.06	0.00	2.92	0.00
	Narangi	0.00	0.00	0.00	0.00	11.39	0.00
	Tembhapuri	1.97	0.00	0.00	1.97	14.85	13.27
	CADA Abad	**4.18**	**0.00**	**2.65**	**3.72**	**56.28**	**6.61**
Middle Tapi (Satpuda)	Abhora	1.49	0.00	0.29	1.20	6.02	19.97
	Aner	3.42	0.00	5.39	0.00	59.21	0.00
	Karwand	4.30	0.00	1.71	2.59	20.73	12.48
	Malangaon	0.00	0.00	0.00	0.00	11.33	0.00
	Panzara	3.17	0.00	0.00	3.17	35.63	8.90
	Sonwad	1.14	0.00	3.49	0.00	13.88	0.00
	Suki	12.95	0.00	1.84	11.12	39.85	27.90
	Suki Pickup Wier	0.00	0.00	2.94	0.00	0.00	0.00
	CADA Jalgaon	**26.47**	**0.00**	**15.65**	**18.08**	**186.65**	**9.68**

(Medium / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Upper Godavari	Adhala	0.82	0.00	0.00	0.82	27.60	2.97
	Alandi	0.66	0.00	0.19	0.47	27.46	1.70
	Bhojapur	0.00	0.00	0.22	0.00	10.11	0.00
	Ghatshil Pargaon	0.00	0.00	0.00	0.00	4.76	0.00
	Mandohol	0.00	0.00	0.00	0.00	8.78	0.00
	Waldevi	3.14	0.00	0.00	3.14	32.09	9.78
	CADA Nashik	**4.62**	**0.00**	**0.41**	**4.43**	**110.80**	**4.00**
Upper Bhima	Visapur	4.59	0.00	10.57	0.00	25.61	0.00
	CADA Pune	**4.59**	**0.00**	**10.57**	**0.00**	**25.61**	**0.00**
Sina	Bori	0.00	0.00	0.00	0.00	19.24	0.00
	CADA Solapur	**0.00**	**0.00**	**0.00**	**0.00**	**19.24**	**0.00**
Wardha	Amalnalla	0.00	1.50	0.94	0.00	16.24	0.00
	Dham	11.71	0.00	9.50	2.21	50.03	4.42
	Pothra1	0.61	0.00	0.00	0.61	23.38	2.61
	CIPC Chandrapur	**12.32**	**1.50**	**10.44**	**2.82**	**89.65**	**3.15**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	3.75	0.00	0.03	3.71	6.50	57.15
	Mor	3.89	0.00	0.95	2.94	7.89	37.22
	JIPC Jalgaon	**7.63**	**0.00**	**0.98**	**6.65**	**14.39**	**46.22**
Lower Wainganga	Dongargaon (Chandrapur)	1.38	1.74	0.00	0.00	9.68	0.00
	Jam	2.46	0.00	0.57	1.89	6.95	27.22
	Kar	1.24	0.00	0.40	0.84	11.96	7.01
	NIC Nagpur	**5.08**	**1.74**	**0.97**	**2.73**	**28.59**	**9.55**
Painganga	Dongargaon (Nanded)	0.19	0.00	0.00	0.19	8.76	2.17
	Loni	1.88	0.00	0.10	1.78	8.29	21.48
	Nagzari	0.11	0.00	0.00	0.11	6.37	1.76
	NIC Nanded	**2.18**	**0.00**	**0.10**	**2.08**	**23.42**	**8.90**
Upper Bhima	Kasarsai	2.78	4.10	0.00	0.00	16.06	0.00
	Nazare	0.00	0.00	0.00	0.00	12.49	0.00
	Wadiwale	3.19	0.10	3.50	0.00	30.39	0.00
	PIC Pune	**5.97**	**4.20**	**3.50**	**0.00**	**58.94**	**0.00**
Painganga	Ekbhuji	1.97	1.08	0.00	0.89	9.29	9.59
	Sonal	0.00	0.00	0.05	0.00	0.00	0.00
	WIC Washim	**1.97**	**1.08**	**0.05**	**0.89**	**9.29**	**9.59**
Painganga	Adan	0.00	4.36	0.96	0.00	3.81	0.00
	Nawargaon	2.08	0.00	0.00	2.08	12.34	16.84
	YIC Yavatmal	**2.08**	**4.36**	**0.96**	**2.08**	**16.15**	**12.87**

(Medium / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Normal		**83.81**	**28.75**	**46.37**	**50.20**	**814.07**	**6.17**
Surplus							
Middle Wainganga	Bagheda	0.00	0.00	0.00	0.00	0.13	0.00
	Betekar Bothli	0.00	0.00	0.00	0.00	0.00	0.00
	Bodalkasa	0.00	0.00	0.00	0.00	1.75	0.00
	Chandpur	0.00	0.00	0.00	0.00	0.10	0.00
	Chandrabhaga (Nagpur)	0.00	0.62	0.00	0.00	0.73	0.00
	Chorakhmara	0.05	0.00	0.00	0.05	0.98	5.42
	Chulband	0.00	0.00	0.00	0.00	2.63	0.00
	Kanolibara	0.00	1.73	0.00	0.00	18.00	0.00
	Kesarnala	0.00	0.37	0.00	0.00	0.63	0.00
	Khairbanda	0.00	0.00	0.00	0.00	1.23	0.00
	Khekara Nalla	0.00	2.32	0.00	0.00	8.68	0.00
	Kolar	0.97	4.06	0.00	0.00	17.65	0.00
	Makardhokada-Saiki	0.40	0.00	0.00	0.40	4.08	9.88
	Managadh	0.00	0.00	0.00	0.00	4.04	0.00
	Mordham	0.00	0.49	0.00	0.00	0.93	0.00
	Pandharbodi	0.00	0.00	0.00	0.00	3.33	0.00
	Rengepar	0.00	0.00	0.00	0.00	0.65	0.00
	Sangrampur	0.00	0.00	0.00	0.00	0.16	0.00
	Sorna	0.00	0.00	0.00	0.00	0.00	0.00
	Tekepar LIS	0.00	0.00	0.00	0.00	0.00	0.00
	Umri	0.00	0.63	0.00	0.00	4.76	0.00
	Wunna	2.20	0.00	1.22	0.98	12.39	7.90
	CADA Nagpur	**3.63**	**10.23**	**1.23**	**1.43**	**82.84**	**1.73**
Middle Wainganga	Chandai	0.00	2.51	0.00	0.00	1.12	0.00
	Chargaon	0.00	0.00	0.34	0.00	8.80	0.00
	Labhansarad	0.00	0.87	0.09	0.00	7.35	0.00
	Pakadigundam	0.00	1.51	0.05	0.00	11.80	0.00
	Panchadhara Complex	1.68	0.00	1.46	0.32	9.82	2.24
	CIPC	**1.68**	**4.89**	**1.94**	**0.32**	**38.89**	**0.82**
	Chandrapur						
Middle Wainganga	Katangi	0.00	0.00	0.00	0.00	6.67	0.00
	GKLIC	**0.00**	**0.00**	**0.00**	**0.00**	**6.67**	**0.00**
	Bhandara						
Surplus		**5.31**	**15.12**	**3.16**	**1.75**	**128.39**	**1.37**
Abundant							

Indicator VII: Percentage of Unutilized water to Live Storage -

(Medium / 2008-09) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Wardha	Dongargaon (Wardha)	0.50	0.00	0.04	0.46	4.39	10.48
	Ghorazari	0.00	0.00	0.30	0.00	2.77	0.00
	Naleshwar	0.00	0.70	0.26	0.00	0.97	0.00
	CIPC	**0.50**	**0.70**	**0.60**	**0.46**	**8.14**	**5.65**
	Chandrapur						
Vashishthi	Natuwadi	0.77	0.00	0.62	0.15	26.33	0.58
	KIC Ratnagiri	**0.77**	**0.00**	**0.62**	**0.15**	**26.33**	**0.58**
North Konkan	Hetwane	67.09	0.00	0.80	66.29	124.67	53.17
	NKIPC Thane	**67.09**	**0.00**	**0.80**	**66.29**	**124.67**	**53.17**
Upper Krishna (W)	Chikotra	10.32	0.00	0.00	10.32	43.82	23.55
	Chitri	0.25	0.00	0.00	0.25	52.73	0.47
	Ghataprbha	0.00	0.00	0.00	0.00	17.41	0.00
	Jangamhatti	0.75	0.00	0.82	0.00	33.83	0.00
	Kadvi	16.16	0.00	0.00	16.16	70.56	22.90
	Kasari	10.03	0.00	0.00	10.03	77.97	12.86
	Krishna Canal & Khodshi Backwater	6.50	0.00	37.17	0.00	7.81	0.00
	Kumbhi	0.91	0.00	0.00	0.91	76.50	1.18
	Morna (Sangli)	1.53	0.00	1.77	0.00	16.63	0.00
	Patgaon	26.68	0.00	0.00	26.68	105.57	25.27
	Yeoti Masoli	1.08	1.33	0.00	0.00	7.05	0.00
	SIC Sangli	**74.20**	**1.33**	**39.76**	**64.34**	**509.87**	**12.62**
North Konkan	Rajanalla Complex	47.37	0.00	0.24	47.13	260.55	18.09
	Wandri	545.82	1.27	542.97	1.58	0.00	0.00
	TIC Thane	**593.19**	**1.27**	**543.21**	**48.71**	**260.55**	**18.70**
Abundant		**735.76**	**3.30**	**584.98**	**179.96**	**929.56**	**19.36**
Medium		**975.06**	**145.28**	**690.45**	**337.48**	**3015.94**	**11.19**

(Medium / 2008-09) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Highly Deficit						
Sina						
	Banganga	0.00	0.00	92.54	0.00	7.46
	Benitura	0.00	7.13	56.80	11.66	24.41
	Chandani	0.00	0.00	64.14	17.98	17.88
	Harni	0.00	0.00	76.50	23.50	0.00
	Jakapur					
	Kada	0.00	0.00	60.98	36.99	2.03
	Kadi	0.00	0.00	96.48	2.57	0.95
	Kambli	0.00	0.00	100.00	0.00	0.00
	Khandala	0.00	2.00	68.04	17.55	12.41
	Khandeshwar	0.00	0.00	67.63	26.62	5.76
	Khasapur	0.00	0.00	79.88	16.35	3.77
	Kurnoor	0.00	3.67	52.76	34.19	9.37
	Mehkari	0.00	0.00	85.53	8.94	5.53
	Ramganga	0.00	0.00	78.26	21.74	0.00
	Ruti	0.00	0.00	84.06	14.23	1.71
	Sakat	0.00	0.00	64.51	18.80	16.69
	Talwar	0.00	0.00	79.20	20.07	0.73
	Turori	0.00	16.36	66.36	0.00	17.27
	CADA Beed	0.00	1.11	73.37	17.93	7.59
Upper Krishna (E)						
	Yeralwadi	0.00	0.00	97.79	0.68	1.53
	CADA Pune	0.00	0.00	97.79	0.68	1.53
Remaining Bhima+ Man						
	Ashti	13.03	0.00	24.09	13.46	49.42
	Buddhihal	4.15	0.00	93.12	2.73	0.00
	Ekrukh	0.00	0.00	68.20	1.73	30.08
	Hingani (Pangaon)	10.26	4.04	32.43	31.38	21.89
	Jawalgaon	9.52	0.00	44.27	32.60	13.61
	Mangi	0.00	0.00	38.89	36.20	24.91
	CADA Solapur	5.98	0.90	46.08	24.74	22.31
Remaining Bhima+ Man						
	Andhali	0.00	0.00	0.00	0.00	0.00
	Khairy	0.18	0.00	72.94	20.67	6.21
	Mhaswad	35.81	0.00	20.55	41.72	1.91
	Nher	0.00	0.00	0.00	0.00	0.00
	Ranand	10.49	0.00	61.49	27.27	0.75
	Sina	8.44	0.00	59.15	31.81	0.61
	Tisangi	9.83	0.00	47.57	30.84	11.76
	PIC Pune	19.61	0.00	41.68	34.78	3.92

(Medium / 2008-09) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Upper Krishna (E)						
	Basappawadi	0.00	0.00	0.00	0.00	0.00
	Dodda Nalla					
	Sankh	3.07	0.00	65.95	30.98	0.00
	Siddhewadi	7.04	0.00	48.59	42.25	2.11
	SIC Sangli	5.79	0.00	54.05	38.71	1.45
Highly Deficit						
Deficit						
Purna+Dudhana						
	Wakod	0.00	0.00	100.00	0.00	0.00
	AIC Abad	0.00	0.00	100.00	0.00	0.00
Purna (Tapi)						
	Dnyanganga	0.00	14.45	75.74	7.52	2.28
	Mas	0.00	2.13	97.87	0.00	0.00
	Morna (Akola)	0.00	7.55	76.31	0.00	16.13
	Nirguna	0.00	0.14	94.99	0.00	4.88
	Paldhag	0.00	10.17	86.37	0.00	3.45
	Shahnoor	0.00	0.00	84.37	0.00	15.63
	Uma	0.00	0.00	0.00	0.00	0.00
	AIC Akola	0.00	4.29	85.35	1.29	9.07
Purna (Tapi)						
	Mun	0.00	3.84	95.59	0.00	0.58
	Torna	0.00	0.36	91.46	8.19	0.00
	Utawali	0.00	2.41	51.42	43.65	2.52
	BIPC Buldhana	0.00	2.87	82.95	13.17	1.01
Middle Tapi (South)						
	Ajanta Andhari	0.00	62.50	37.50	0.00	0.00
	Anjana Palashi	0.00	13.45	59.36	0.00	27.19
	Dhamna	0.00	46.30	52.12	0.00	1.58
	Gadadgad	2.08	17.16	46.96	6.25	27.54
	Galhati	14.59	38.17	31.52	0.00	15.72
	Girja	0.00	27.61	69.06	0.06	3.27
	Jivrekha	2.21	10.84	84.96	0.00	1.99
	Jui	0.00	0.00	100.00	0.00	0.00
	Kalyan Girija	0.00	26.23	65.82	0.00	7.95
	Karpara	10.44	27.72	52.38	3.69	5.76
	Khelna	1.70	6.40	90.47	0.00	1.44
	Lahuki	0.00	1.81	94.46	0.00	3.73
	Masoli	12.22	35.69	24.28	1.78	26.03
	Pir Kalyan	0.00	14.95	65.57	0.00	19.48
	Purna Nevpur	0.00	15.71	83.42	0.00	0.87

(Medium / 2008-09) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Sukhana	0.00	20.94	71.20	0.37	7.49
	Upper Dudhana	0.00	34.94	63.80	1.27	0.00
	CADA Abad	2.13	22.04	67.40	0.57	7.86
Manjra						
	Belpara	0.00	15.86	64.14	7.83	12.17
	Bindusara	0.00	14.81	85.19	0.00	0.00
	Bodhegaon					
	Borna					
	Devarjan	0.00	14.88	52.36	0.33	32.43
	Gharni	0.00	1.37	57.55	2.42	38.67
	Kundalika					
	Mahasangvi	0.00	1.28	89.75	7.08	1.89
	Masalga	0.00	5.99	53.77	0.00	40.24
	Raigavan	0.00	0.00	15.08	0.54	84.38
	Renapur	0.00	2.82	56.07	0.31	40.81
	Rui	0.00	0.00	37.53	37.71	24.76
	Sakol	0.00	13.83	57.67	4.11	24.39
	Sangameshwar (Dokewadi)	0.00	0.00	31.88	29.66	38.46
	Saraswati					
	Sindphana	0.00	54.80	39.77	0.00	5.43
	Tawarja	0.00	0.07	51.81	5.56	42.55
	Terna	0.00	0.00	52.50	12.16	35.34
	Tiru	0.00	10.90	40.66	0.60	47.84
	Wan (Beed)					
	Whati	0.00	3.83	41.19	1.53	53.45
	CADA Beed	0.00	8.24	49.81	8.50	33.45
Girna						
	Agnavati	26.26	30.67	32.98	1.26	8.82
	Bhokarbari	32.55	15.77	50.66	0.88	0.15
	Bori	23.45	18.01	55.12	1.90	1.52
	Burai	25.81	4.46	69.73	0.00	0.00
	Hiwara	28.64	13.89	49.73	3.09	4.65
	Jamkhedi	0.00	0.00	99.37	0.00	0.63
	Kanoli	31.25	0.00	68.75	0.00	0.00
	Manyad	15.23	13.40	59.79	5.72	5.86
	Rangawali	51.16	8.31	16.35	15.87	8.31
	Tondapur	29.54	43.97	13.07	0.00	13.41
	CADA Jalgaon	28.20	11.37	51.24	4.96	4.22
Girna						
	Haranbari	5.95	0.00	80.75	6.89	6.41
	Kelzar	6.40	0.00	83.53	6.48	3.58

(Medium / 2008-09) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Nagya Sakya	10.93	0.24	79.37	9.47	0.00
	CADA Nashik	7.21	0.05	81.30	7.35	4.09
Middle Tapi (Satpuda)						
	Bahula	0.00	0.00	85.40	14.60	0.00
	JIPC Jalgaon	0.00	0.00	85.40	14.60	0.00
Manjra						
	Karadkhed	0.00	23.06	46.97	12.96	17.00
	Kudala	0.00	4.46	56.88	18.22	20.45
	Kundrala	0.00	26.07	15.36	32.86	25.71
	Mahalingi	0.00	78.46	21.54	0.00	0.00
	Pethwadaj	0.00	16.20	62.68	0.00	21.13
	NIC Nanded	0.00	23.44	43.40	15.27	17.90
Purna (Tapi)						
	Chandrabhaga (Amravati)	0.00	0.00	100.00	0.00	0.00
	Purna (Achalpur)	0.00	0.00	12.72	18.30	68.98
	UWPC Amravati	0.00	0.00	61.50	8.07	30.43
Deficit						
Normal						
Upper Godavari						
	Shivna Takali	0.00	25.56	74.44	0.00	0.00
	AIC Abad	0.00	25.56	74.44	0.00	0.00
Painganga						
	Borgaon	0.00	34.07	65.93	0.00	0.00
	Goki	0.00	24.49	73.84	0.71	0.95
	Koradi	0.00	7.14	89.80	0.00	3.06
	Lower Pus	0.00	4.30	65.12	22.37	8.21
	Saikheda	0.00	43.17	42.07	14.76	0.00
	Waghadi	0.00	9.98	85.62	3.55	0.85
	AIC Akola	0.00	14.88	63.65	16.38	5.08
Painganga						
	Pen Takli	3.48	0.00	94.57	1.96	0.00
	BIPC Buldhana	3.48	0.00	94.57	1.96	0.00
Upper Godavari						
	Ambadi	0.00	17.48	82.10	0.00	0.42
	Bor Dahegaon	0.00	0.00	100.00	0.00	0.00
	Dheku	0.00	27.08	66.11	6.81	0.00
	Kolhi	0.00	3.66	81.01	15.09	0.24
	Narangi	0.00	0.00	100.00	0.00	0.00
	Tembhapuri	0.00	14.47	82.85	0.00	2.67
	CADA Abad	0.00	16.37	78.79	3.82	1.03
Middle Tapi (Satpuda)						
	Abhora	5.09	22.68	32.31	2.79	37.12

(Medium / 2008-09) Unit: %

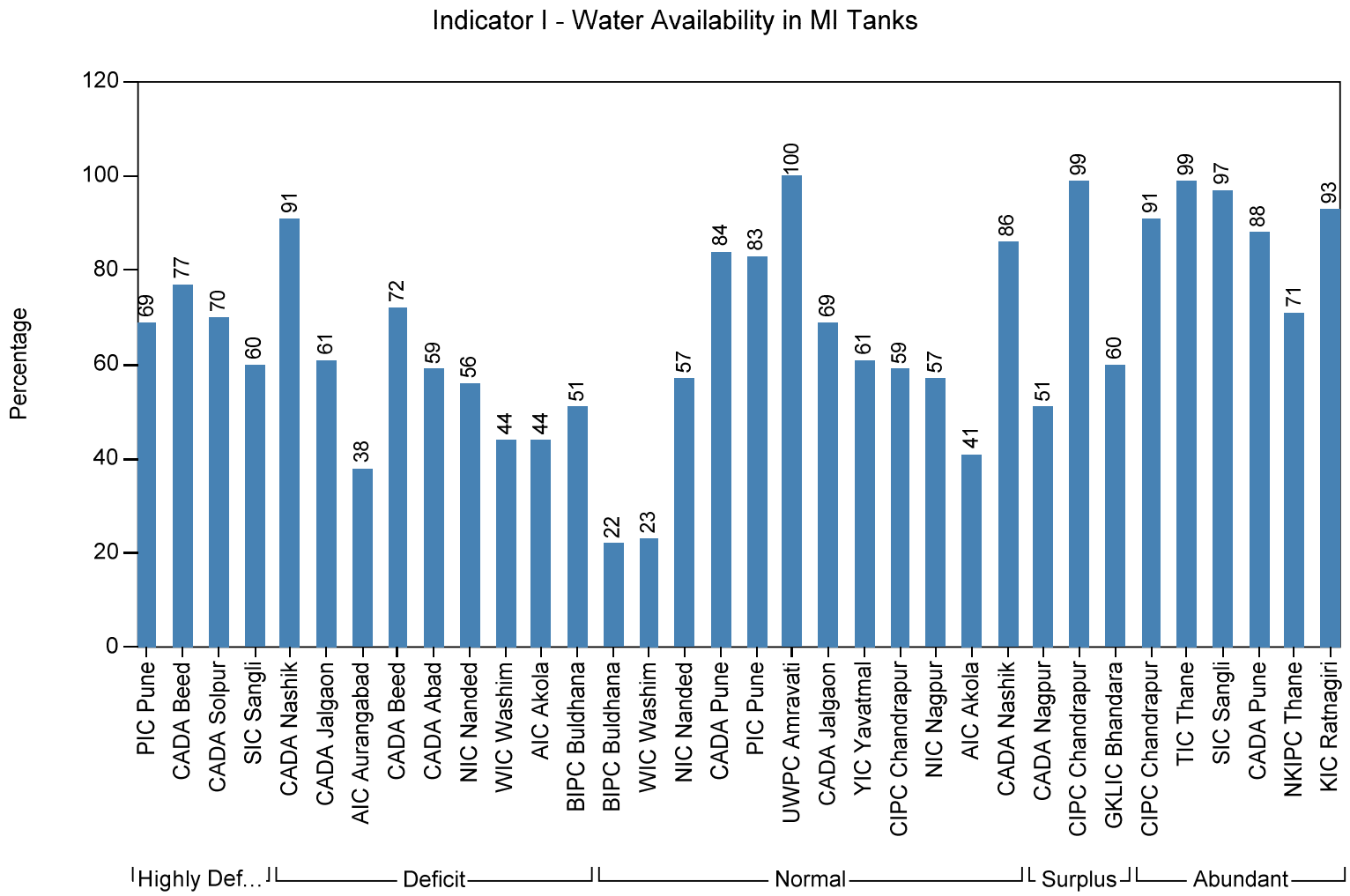
Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Aner	12.22	5.47	54.76	7.73	19.83
	Karwand	19.93	0.00	58.83	21.25	0.00
	Malangaon	37.28	0.00	62.04	0.00	0.69
	Panzara	35.47	0.00	64.37	0.02	0.13
	Sonwad	38.51	0.00	61.49	0.00	0.00
	Suki	0.00	0.00	0.00	0.00	0.00
	Suki Pickup Wier	7.76	11.53	20.18	0.66	59.88
	CADA Jalgaon	23.30	3.86	53.52	4.32	15.00
Upper Godavari						
	Adhala	25.63	0.40	58.99	9.27	5.70
	Alandi	11.92	0.00	33.72	1.58	52.78
	Bhojapur	15.79	0.00	80.45	0.85	2.91
	Ghatshil Pargaon	0.00	0.00	79.51	20.49	0.00
	Mandohol	0.00	0.00	94.33	5.67	0.00
	Waldevi	5.00	0.00	50.18	35.47	9.34
	CADA Nashik	13.62	0.09	56.17	6.67	23.45
Upper Bhima						
	Visapur	11.27	0.01	31.31	11.75	45.66
	CADA Pune	11.27	0.01	31.31	11.75	45.66
Sina						
	Bori	0.00	0.00	66.15	0.86	32.99
	CADA Solapur	0.00	0.00	66.15	0.86	32.99
Wardha						
	Amalnalla	0.00	0.00	100.00	0.00	0.00
	Dham	0.00	1.28	90.27	0.00	8.45
	Pothra1	0.00	0.00	100.00	0.00	0.00
	CIPC Chandrapur	0.00	0.57	95.69	0.00	3.75
Middle Tapi (Satpuda)						
	Bhokar (Mangrul)	0.00	0.00	0.00	0.00	0.00
	Mor	0.00	0.00	0.00	100.00	0.00
	JIPC Jalgaon	0.00	0.00	0.00	100.00	0.00
Lower Wainganga						
	Dongargaon (Chandrapur)	32.96	15.83	51.21	0.00	0.00
	Jam	0.00	0.00	0.00	0.00	0.00
	Kar	0.00	0.00	100.00	0.00	0.00
	NIC Nagpur	14.74	7.08	78.18	0.00	0.00
Painganga						
	Dongargaon (Nanded)	0.00	28.02	19.26	51.66	1.05
	Loni	0.00	20.88	70.88	6.32	1.93
	Nagzari	0.00	52.53	43.96	2.81	0.70
	NIC Nanded	0.00	35.24	44.63	18.94	1.19
Upper Bhima						

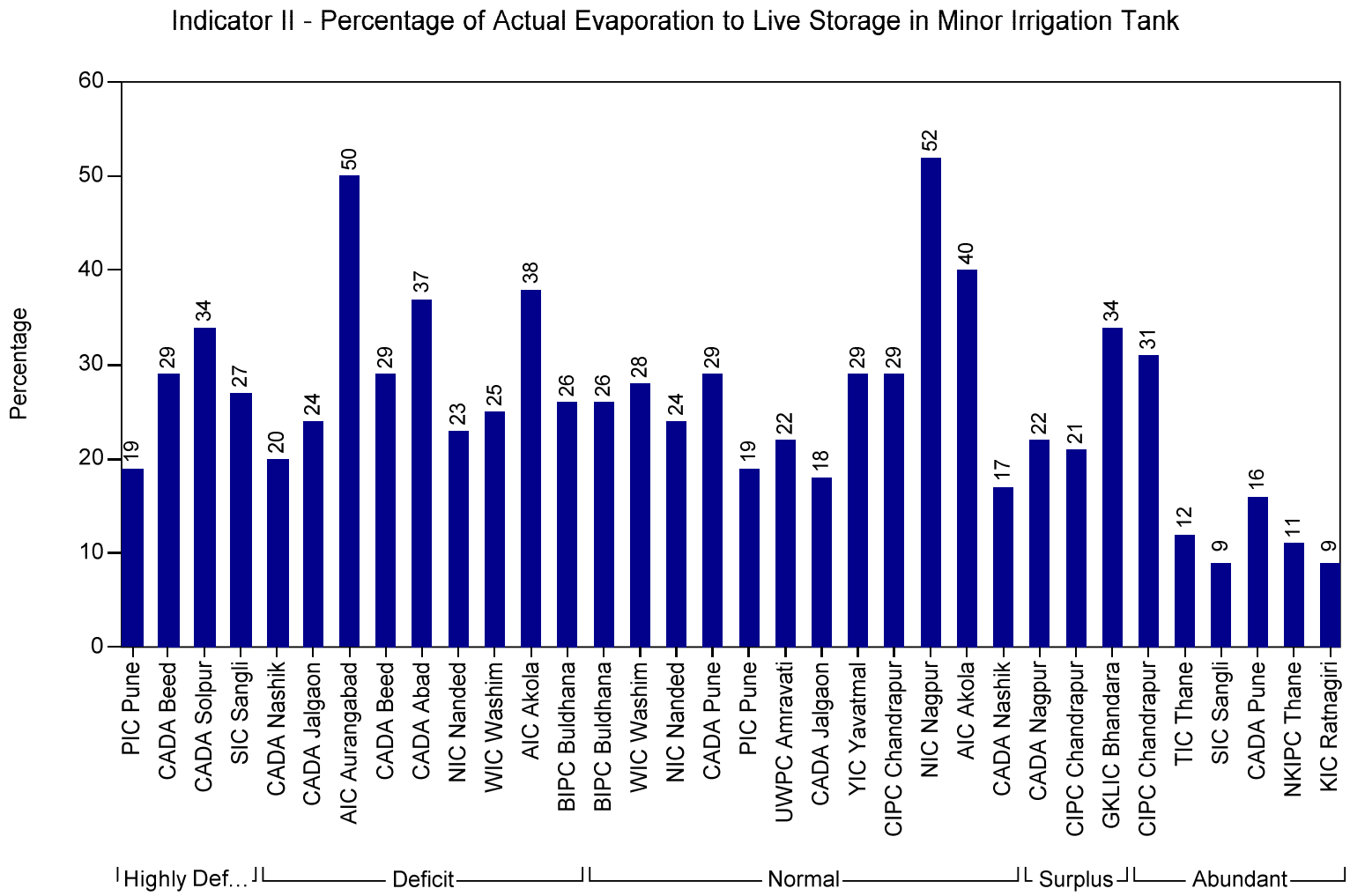
(Medium / 2008-09) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Kasarsai	31.00	0.00	40.53	16.97	11.50
	Nazare	0.00	0.00	99.15	0.00	0.85
	Wadiwale	36.34	0.00	32.07	8.52	23.06
	PIC Pune	26.26	0.00	50.34	8.57	14.83
Painganga						
	Ekbhuji	0.00	0.00	98.91	0.82	0.27
	Sonal	0.00	0.00	0.00	0.00	0.00
	WIC Washim	0.00	0.00	98.91	0.82	0.27
Painganga						
	Adan	100.00	0.00	0.00	0.00	0.00
	Nawargaon	0.00	0.00	100.00	0.00	0.00
	YIC Yavatmal	1.40	0.00	98.60	0.00	0.00
Normal						
Surplus						
Middle Wainganga						
	Bagheda	100.00	0.00	0.00	0.00	0.00
	Betekar Bothli	99.22	0.00	0.78	0.00	0.00
	Bodalkasa	100.00	0.00	0.00	0.00	0.00
	Chandpur	95.93	0.00	4.07	0.00	0.00
	Chandrabhaga (Nagpur)	7.89	0.00	34.07	2.87	55.18
	Chorakhmara	100.00	0.00	0.00	0.00	0.00
	Chulband	99.83	0.00	0.00	0.00	0.17
	Kanolibara	0.00	0.00	99.77	0.23	0.00
	Kesarnala	0.00	10.18	38.50	0.00	51.32
	Khairbanda	100.00	0.00	0.00	0.00	0.00
	Khekara Nalla	0.00	14.55	85.19	0.00	0.25
	Kolar	0.44	2.03	91.70	0.69	5.14
	Makardhokada-Saiki	0.00	0.00	100.00	0.00	0.00
	Managadh	92.11	0.00	0.00	7.89	0.00
	Mordham	1.73	0.00	57.75	0.00	40.52
	Pandharbodi	0.00	0.00	0.00	0.00	0.00
	Rengepar	100.00	0.00	0.00	0.00	0.00
	Sangrampur	100.00	0.00	0.00	0.00	0.00
	Sorna	100.00	0.00	0.00	0.00	0.00
	Tekepar LIS	91.68	0.00	8.32	0.00	0.00
	Umri	0.74	12.53	73.07	7.07	6.60
	Wunna	50.00	0.00	50.00	0.00	0.00
	CADA Nagpur	82.72	0.60	15.56	0.37	0.75
Middle Wainganga						
	Chandai	100.00	0.00	0.00	0.00	0.00
	Chargaon	51.66	0.00	48.34	0.00	0.00

(Medium / 2008-09) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Labhansarad	0.00	0.00	100.00	0.00	0.00
	Pakadigundam	19.43	0.00	80.57	0.00	0.00
	Panchadhara Complex	0.00	0.25	99.75	0.00	0.00
	CIPC Chandrapur	38.32	0.03	61.65	0.00	0.00
Middle Wainganga						
	Katangi	75.58	0.00	0.00	24.42	0.00
	GKLIC Bhandara	75.58	0.00	0.00	24.42	0.00
Surplus						
Abundant						
Wardha						
	Dongargaon (Wardha)	0.00	6.36	91.20	0.00	2.44
	Ghorazari	100.00	0.00	0.00	0.00	0.00
	Naleshwar	100.00	0.00	0.00	0.00	0.00
	CIPC Chandrapur	95.52	0.28	4.09	0.00	0.11
Vashishthi						
	Natuwadi	0.00	0.00	93.32	0.00	6.68
	KIC Ratnagiri	0.00	0.00	93.32	0.00	6.68
North Konkan						
	Hetwane	0.00	0.00	98.72	0.00	1.28
	NKIPC Thane	0.00	0.00	98.72	0.00	1.28
Upper Krishna (W)						
	Chikotra	0.00	0.00	32.82	0.00	67.18
	Chitri	0.00	0.00	8.17	0.88	90.96
	Ghataprbha	0.00	0.00	9.07	0.00	90.93
	Jangamhatti	0.00	0.00	16.49	0.22	83.29
	Kadvi	0.00	0.00	41.64	5.74	52.61
	Kasari	0.00	0.00	19.98	2.95	77.07
	Krishna Canal & Khodshi Backwater	33.96	0.00	36.84	0.00	29.20
	Kumbhi	0.00	0.00	12.83	0.00	87.17
	Morna (Sangli)	0.00	0.00	47.50	0.00	52.50
	Patgaon	0.00	0.00	9.53	4.01	86.46
	Yeoti Masoli	8.39	0.00	83.12	0.00	8.49
	SIC Sangli	6.16	0.00	23.11	1.24	69.49
North Konkan						
	Rajanalla Complex	0.00	0.00	0.00	0.00	100.00
	Wandri	0.00	0.00	100.00	0.00	0.00
	TIC Thane	0.00	0.00	72.53	0.00	27.47
Abundant						


Indicator I - Water Availability in MI Tanks
Percentage
120
100
80
60
40
20
0
69
77
70
60
91
61
38
72
59
56
44
44
51
22
23
57
84
83
100
69
61
59
57
41
86
51
99
60
91
99
97
88
71
93
PIC Pune
CADA Beed
CADA Solpur
SIC Sangli
CADA Nashik
CADA Jalgaon
AIC Aurangabad
CADA Beed
CADA Abad
NIC Nanded
WIC Washim
AIC Akola
BIPC Buldhana
BIPC Buldhana
WIC Washim
NIC Nanded
CADA Pune
PIC Pune
UWPC Amravati
CADA Jalgaon
YIC Yavatmal
CIPC Chandrapur
NIC Nagpur
AIC Akola
CADA Nashik
CADA Nagpur
CIPC Chandrapur
GKLIC Bhandara
CIPC Chandrapur
TIC Thane
SIC Sangli
CADA Pune
NKIPC Thane
KIC Ratnagiri
Highly Def...
Deficit
Normal
Surplus
Abundant


Indicator II - Percentage of Actual Evaporation to Live Storage in Minor Irrigation Tank
Percentage
0
10
20
30
40
50
60
19
29
34
27
20
24
50
29
37
23
25
38
26
26
28
24
29
19
22
18
29
29
52
40
17
22
21
34
31
12
9
16
11
9
PIC Pune
CADA Beed
CADA Solpur
SIC Sangli
CADA Nashik
CADA Jalgaon
AIC Aurangabad
CADA Beed
CADA Abad
NIC Nanded
WIC Washim
AIC Akola
BIPC Buldhana
BIPC Buldhana
WIC Washim
NIC Nanded
CADA Pune
PIC Pune
UWPC Amravati
CADA Jalgaon
YIC Yavatmal
CIPC Chandrapur
NIC Nagpur
AIC Akola
CADA Nashik
CADA Nagpur
CIPC Chandrapur
GKLIC Bhandara
CIPC Chandrapur
TIC Thane
SIC Sangli
CADA Pune
NKIPC Thane
KIC Ratnagiri
Highly Def...
Deficit
Normal
Surplus
Abundant

Indicator I: Water Availability in MI Tanks (2008-09) -

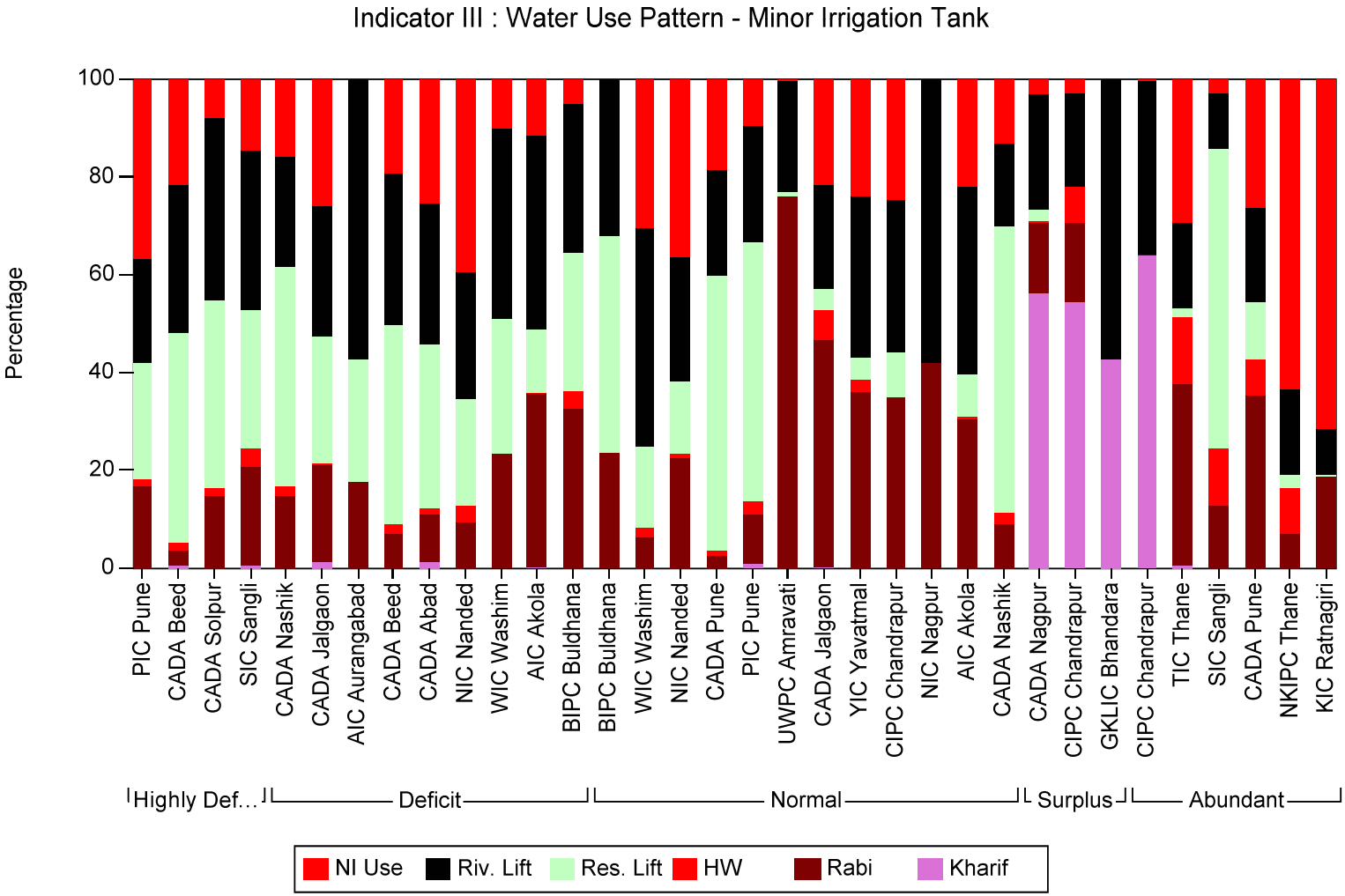
Unit: Mcum

Circle	MLStorage	Design Live Storage	Percentage
PIC Pune	41.40	59.88	69.14
CADA Beed	248.00	323.43	76.68
CADA Solpur	76.43	109.05	70.09
SIC Sangli	99.06	165.43	59.88
Highly Deficit	**464.89**	**657.79**	**68.95**
CADA Nashik	56.16	61.40	91.47
CADA Jalgaon	60.99	99.81	61.11
AIC Aurangabad	33.17	87.03	38.11
CADA Beed	306.33	423.69	72.30
CADA Abad	98.82	167.66	58.94
NIC Nanded	48.22	86.14	55.98
WIC Washim	12.63	28.57	44.21
AIC Akola	67.69	155.20	43.61
BIPC Buldhana	35.59	70.46	50.51
Deficit	**719.60**	**1179.96**	**57.36**
BIPC Buldhana	5.28	23.77	22.21
WIC Washim	29.84	131.00	22.78
NIC Nanded	72.05	127.15	56.67
CADA Pune	43.22	51.58	83.79
PIC Pune	138.97	167.32	83.06
UWPC Amravati	9.88	9.88	100.00
CADA Jalgaon	134.03	193.14	69.40
YIC Yavatmal	53.24	87.81	60.63
CIPC Chandrapur	17.42	29.73	58.59
NIC Nagpur	17.11	30.15	56.75
AIC Akola	98.51	239.64	41.11
CADA Nashik	105.43	122.81	85.85
Normal	**724.98**	**1213.98**	**61.74**
CADA Nagpur	119.58	234.30	51.04
CIPC Chandrapur	35.47	35.92	98.75
GKLIC Bhandara	9.20	15.28	60.21
Surplus	**164.25**	**285.50**	**70.00**
CIPC Chandrapur	53.47	58.88	90.81
TIC Thane	182.25	184.92	98.56
SIC Sangli	139.15	143.96	96.66
CADA Pune	10.98	12.52	87.70
NKIPC Thane	69.16	97.69	70.80
KIC Ratnagiri	93.88	100.90	93.04
Abundant	**548.89**	**598.87**	**89.59**
Grand Total:	**2623**	**3936**	**67**

Indiacator II: Percentage of Actual Evaporation to Live Storage in Minor Irrigation Tank (2008-09) -

Unit: Mcum

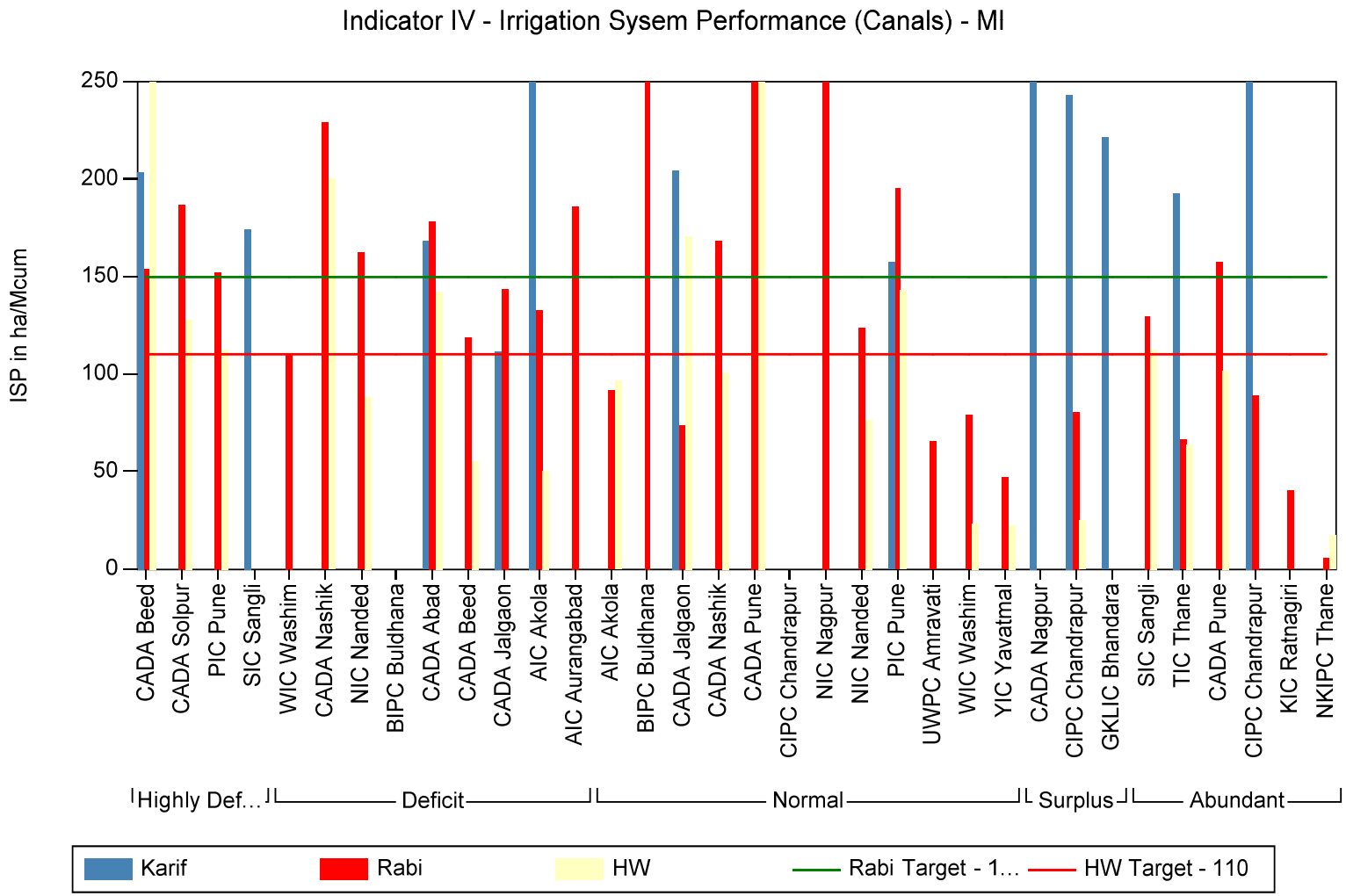
Circle	Evaporation Loss	MLStorage Observed	Percentage
PIC Pune	8.07	41.40	19.49
CADA Beed	70.83	248.00	28.56
CADA Solpur	26.00	76.43	34.02
SIC Sangli	27.22	99.06	27.48
Highly Deficit	**132.12**	**464.89**	**27.39**
CADA Nashik	11.01	56.16	19.60
CADA Jalgaon	14.60	60.99	23.94
AIC Aurangabad	16.46	33.17	49.62
CADA Beed	88.23	306.33	28.80
CADA Abad	36.15	98.82	36.58
NIC Nanded	11.33	48.22	23.50
WIC Washim	3.18	12.63	25.18
AIC Akola	25.45	67.69	37.60
BIPC Buldhana	9.36	35.59	26.30
Deficit	**215.77**	**719.60**	**30.12**
BIPC Buldhana	1.35	5.28	25.57
WIC Washim	8.26	29.84	27.68
NIC Nanded	17.59	72.05	24.41
CADA Pune	12.61	43.22	29.18
PIC Pune	25.87	138.97	18.62
UWPC Amravati	2.15	9.88	21.76
CADA Jalgaon	23.74	134.03	17.71
YIC Yavatmal	15.48	53.24	29.08
CIPC Chandrapur	4.99	17.42	28.65
NIC Nagpur	8.92	17.11	52.13
AIC Akola	38.95	98.51	39.54
CADA Nashik	17.76	105.43	16.85
Normal	**177.67**	**724.98**	**27.60**
CADA Nagpur	26.04	119.58	21.78
CIPC Chandrapur	7.51	35.47	21.17
GKLIC Bhandara	3.14	9.20	34.13
Surplus	**36.69**	**164.25**	**25.69**
CIPC Chandrapur	16.54	53.47	30.93
TIC Thane	21.94	182.25	12.04
SIC Sangli	12.26	139.15	8.81
CADA Pune	1.77	10.98	16.12
NKIPC Thane	7.44	69.16	10.76
KIC Ratnagiri	7.98	93.88	8.50
Abundant	**67.93**	**548.89**	**14.53**
Grand Total:	**630**	**2623**	**26**


Indicator III : Water Use Pattern - Minor Irrigation Tank
Percentage
100
80
60
40
20
0
PIC Pune
CADA Beed
CADA Solpur
SIC Sangli
CADA Nashik
CADA Jalgaon
AIC Aurangabad
CADA Beed
CADA Abad
NIC Nanded
WIC Washim
AIC Akola
BIPC Buldhana
BIPC Buldhana
WIC Washim
NIC Nanded
CADA Pune
PIC Pune
UWPC Amravati
CADA Jalgaon
YIC Yavatmal
CIPC Chandrapur
NIC Nagpur
AIC Akola
CADA Nashik
CADA Nagpur
CIPC Chandrapur
GKLIC Bhandara
CIPC Chandrapur
TIC Thane
SIC Sangli
CADA Pune
NKIPC Thane
KIC Ratnagiri
Highly Def...
Deficit
Normal
Surplus
Abundant
NI Use
Riv. Lift
Res. Lift
HW
Rabi
Kharif

Indicator III: Water Use Pattern - Minor Irrigation Tank (2008-09) -

Unit: Mcum

Circle	Kharif	Rabi	HW	Reservoir	NIuse	Evaporation	Leakage	Total
PIC Pune	0.00	6.47	0.50	9.11	2.64	8.07	14.06	40.85
CADA Beed	1.21	7.43	3.69	100.64	1.41	70.83	50.90	236.11
CADA Solpur	0.00	10.25	1.22	26.56	1.72	26.00	5.46	71.21
SIC Sangli	0.58	16.88	3.03	23.77	4.80	27.22	12.10	88.38
Highly Deficit	**1.79**	**41.03**	**8.44**	**160.08**	**10.57**	**132.11**	**82.52**	**436.55**
CADA Nashik	0.00	7.18	0.97	22.10	2.89	11.01	7.77	51.92
CADA Jalgaon	0.70	10.94	0.20	14.21	7.35	14.60	14.35	62.35
AIC Aurangabad	0.00	5.08	0.00	7.14	3.91	16.46	0.00	32.58
CADA Beed	0.00	20.22	5.48	114.93	12.83	88.23	53.98	295.67
CADA Abad	1.39	12.56	1.55	41.98	4.69	36.15	31.79	130.10
NIC Nanded	0.00	4.14	1.39	9.52	1.15	11.33	17.26	44.78
WIC Washim	0.00	1.93	0.00	2.29	1.70	3.18	0.84	9.94
AIC Akola	0.06	22.79	0.04	8.12	2.35	25.45	7.28	66.09
BIPC Buldhana	0.00	10.03	1.16	8.75	0.23	9.36	1.61	31.15
Deficit	**2.15**	**94.87**	**10.79**	**229.03**	**37.09**	**215.77**	**134.87**	**724.57**
BIPC Buldhana	0.00	0.99	0.00	1.86	0.90	1.35	0.00	5.10
WIC Washim	0.00	1.18	0.38	3.07	5.41	8.26	5.62	23.92
NIC Nanded	0.00	15.66	0.72	10.45	0.76	17.59	25.33	70.51
CADA Pune	0.00	1.57	0.58	33.23	4.15	12.61	10.92	63.07
PIC Pune	1.14	10.57	3.09	56.97	3.88	25.87	10.06	111.59
UWPC Amravati	0.00	7.17	0.00	0.08	0.00	2.15	0.01	9.41
CADA Jalgaon	0.44	52.71	6.55	5.25	13.13	23.74	24.59	126.41
YIC Yavatmal	0.00	16.75	1.40	1.89	2.39	15.48	11.22	49.13
CIPC Chandrapur	0.00	5.58	0.00	1.51	0.00	4.99	3.96	16.04
NIC Nagpur	0.00	6.44	0.00	0.00	2.28	8.92	0.00	17.65
AIC Akola	0.00	31.08	0.28	9.25	2.98	38.95	22.38	104.92
CADA Nashik	0.00	9.29	2.63	60.79	3.03	17.76	13.54	107.04
Normal	**1.58**	**158.99**	**15.63**	**184.35**	**38.92**	**177.67**	**127.63**	**704.78**
CADA Nagpur	61.44	15.96	0.46	2.37	4.85	26.04	3.28	114.40
CIPC Chandrapur	21.22	6.22	2.88	0.00	0.00	7.51	1.04	38.88
GKLIC Bhandara	2.35	0.00	0.00	0.00	0.63	3.14	0.00	6.12
Surplus	**85.01**	**22.18**	**3.34**	**2.37**	**5.48**	**36.69**	**4.32**	**159.39**
CIPC Chandrapur	30.02	0.09	0.00	0.00	0.00	16.54	0.10	46.75
TIC Thane	0.85	46.40	17.50	1.87	13.23	21.94	37.03	138.81
SIC Sangli	0.00	13.84	12.62	65.87	0.75	12.26	2.92	108.26
CADA Pune	0.00	3.26	0.69	1.10	0.07	1.77	2.43	9.32
NKIPC Thane	0.00	2.96	3.96	1.10	4.69	7.44	26.71	46.85
KIC Ratnagiri	0.00	15.40	0.00	0.21	2.06	7.98	58.69	84.35
Abundant	**30.87**	**81.95**	**34.77**	**70.14**	**20.80**	**67.94**	**127.88**	**434.35**
Grand Total:	**121**	**399**	**73**	**646**	**113**	**630**	**477**	**2460**


Indicator IV - Irrigation Sysem Performance (Canals) - MI
ISP in ha/Mcum
250
200
150
100
50
0
CADA Beed
CADA Solpur
PIC Pune
SIC Sangli
WIC Washim
CADA Nashik
NIC Nanded
BIPC Buldhana
CADA Abad
CADA Beed
CADA Jalgaon
AIC Akola
AIC Aurangabad
AIC Akola
BIPC Buldhana
CADA Jalgaon
CADA Nashik
CADA Pune
CIPC Chandrapur
NIC Nagpur
NIC Nanded
PIC Pune
UWPC Amravati
WIC Washim
YIC Yavatmal
CADA Nagpur
CIPC Chandrapur
GKLIC Bhandara
SIC Sangli
TIC Thane
CADA Pune
CIPC Chandrapur
KIC Ratnagiri
NKIPC Thane
Highly Def...
Deficit
Normal
Surplus
Abundant
Karif
Rabi
HW
Rabi Target - 1...
HW Target - 110

Indicator IV - Irrigation System Performance (Canals) (2008-09) -

Unit: ha/Mcum

Circle	Karif	Rabi	HW
CADA Beed	203.31	153.91	282.93
CADA Solpur	0.00	187.20	128.03
PIC Pune	0.00	151.89	112.80
SIC Sangli	174.14	0.00	0.00
Highly Deficit	**188.72**	**164.33**	**174.59**
WIC Washim	0.00	110.36	0.00
CADA Nashik	0.00	229.11	200.00
NIC Nanded	0.00	162.56	88.49
BIPC Buldhana	0.00	0.00	0.00
CADA Abad	168.35	178.16	141.94
CADA Beed	0.00	118.32	55.47
CADA Jalgaon	111.43	144.16	0.00
AIC Akola	400.00	132.56	50.00
AIC Aurangabad	0.00	185.91	0.00
Deficit	**226.59**	**164.14**	**107.18**
AIC Akola	0.00	91.25	96.43
BIPC Buldhana	0.00	419.19	0.00
CADA Jalgaon	204.55	73.95	170.53
CADA Nashik	0.00	167.92	101.27
CADA Pune	0.00	285.35	263.79
CIPC Chandrapur	0.00	0.00	0.00
NIC Nagpur	0.00	266.30	0.00
NIC Nanded	0.00	123.63	76.39
PIC Pune	157.72	195.16	142.60
UWPC Amravati	0.00	65.82	0.00
WIC Washim	0.00	78.81	23.68
YIC Yavatmal	0.00	46.75	22.86
Normal	**181.13**	**132.85**	**112.19**
CADA Nagpur	352.59	0.00	0.00
CIPC Chandrapur	243.12	80.55	25.00
GKLIC Bhandara	221.28	0.00	0.00
Surplus	**272.33**	**80.55**	**25.00**
SIC Sangli	0.00	129.34	112.60
TIC Thane	192.94	66.01	63.56
CADA Pune	0.00	157.36	101.45
CIPC Chandrapur	315.22	88.89	0.00
KIC Ratnagiri	0.00	39.98	0.00
NKIPC Thane	0.00	5.29	17.65
Abundant	**254.08**	**89.50**	**73.82**
Grand Total:	**81**	**122**	**67**

SEDIMENTATION STUDIES OF MAJOR AND MEDIUM RESERVOIRS, DONE BY REMOTE SENSING TECHNIQUE, AND BY HYBRID TECHNIQUE AT MERI, NASHIK

Sr. No	Name of reservoir	District	Basin/	C'ment area sq.km	Gross Storage Mm^3	Live Storage Mm^3	Dead Storage Mm^3	Year of first impoun ding	Year of Siltation Survey	Siltation Period years	Live Storage lost due to silt Mm^3	% loss in live storage	Annual % loss in live storage	Designed rate of siltation ha-m/100 sq.km/yr	Estimated rate of siltation ha-m/100 sq.km/yr	% of live storage covered under study
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Nathsagar	A'bad	Godavari	21750	2909	2171	738	1975	94-97	20	127	6.98	0.35	3.57	4.4	86%
	Major															Live Storage
2	Koyna	Satara	Krishna	891.8	2797.45	2677.7	119.8	1961	99-2000	39	No Loss	No loss	No Loss	3.57		60%
	Major															Live Storage
3	Ujjani	Solapur	Krishna	14856	3320	1517	1803	1977	2004-05	27	238.096	11.28	0.42	3.57	9.09	100%
	Major					For Live storage portion →					156.67	10.81	0.4			Live Storage
4	Kanher	Satara	Krishna	204.56	286.13	271.68	14.45	1984	99-2000	16	4.01	1.4	0.087	3.57	12.25	57%
	Major					For Live storage portion →					3.209	1.118	0.074			Live Storage
5	Veer *	Pune	Krishna	1756	279	266	13	1965	2008	43	39.355	14.13	0.329	3.57	5.212	Total
	Major					For Live storage portion →					30.384	11.406	0.265			Reservoir
																Storage
6	Panshet	Pune	Krishna	120.3	303	294	9	1970	99-2000	30	12.56	5.07	0.17	3.57	33.25	89%
	Major															Live Storage
7	Bhatghar *	Pune	Krishna	331.5	672.65	672.65	0	1927	2007	80	108.59	16.14	0.2	3.57	40.94	Total
	Major															Reservoir
																Storage
8	Varasgaon *	Pune	Krishna	130	375.361	363.189	12.172	1987	2008	21	2.122	0.5653	0.0269	3.57	7.773	Total
	Major															Reservoir
																Storage
9	Manjara	Beed	Manjara	2373	251	173	78	1982	2001-02	20	27.03	13.16	0.66	3.57	5.69	100%
	Major															Live Storage
10	Upper Wardha	Amravati	Godavari	4302	786.48	614.8	171.68	1990	2002-03	12	22.47	4.25	0.35	3.57	4.35	86%
	Major															Live Storage
11	Karanjwan *	Nashik	Godavari	248	175.57	164.188	11.382	1974	2008	34	16.965	9.66	0.284	3.57	20.119	Total
	Medium					For Live storage portion →					8.598	5.237	0.154			Reservoir
																Storage
12	Bor	Wardha	Godavari	380.75	138.75	127.42	11.33	1965	2002-03	37	4.443	3.96	0.107	3.57	3.15	88%
	Major															Live Storage
13	Lower Wunna	Nagpur	Godavari	397.6	62.18	53.18	9	1990	2007	17	9.19	17.29	1.02	3.57	13.6	100%
	Nand															Live Storage
14	Totla Doh	Nagpur	Godavari	4273	1241	1091	150	1982	2006	24	80.514	6.95	0.29	3.57	7.85	100%
	Major					For Live storage portion →					66.9	6.116	0.255			Live Storage

Sr. No	Name of reservoir	District	Basin/	C'ment area sq.km	Gross Storage Mm^3	Live Storage Mm^3	Dead Storage Mm^3	Year of first impounding	Year of Siltation Survey	Siltation Period years	Live Storage lost due to silt Mm^3	% loss in live storage	Annual % loss in live storage	Designed rate of siltation ha-m/100 sq.km/yr	Estimated rate of siltation ha-m/100 sq.km/yr	% of live storage covered under study
15	Gangapur	Nashik	Godavari	357.4	212.51	200.51	12	1965	2002-03	37	19	9.52	0.4	3.57	11.48	80%
	Major															Live Storage
16	Darna	Nashik	Godavari	404	203.057	201.667	2.96	1916	2001-03	86	11.199	6.82	0.079	3.57	3.22	82%
	Major															Live Storage
17	Vaitarna	Nashik	Konkan	160.8	353.96	331.31	22.65	1976	2001-03	28	0.2154	0.084	0.0028	not known	0.446	73%
	Major															Live Storage
18	Ozarkhed	Nashik	Godavari	182	69.91	61	8.91	1984	2002-03	18	1.93	3.24	0.18	3.57	5.89	87%
	Medium															Live Storage
19	Dham	Wardha	Godavari	371.33	72.46	62.51	9.95	1986	2002-03	16	2.356	3.97	0.248	3.57	3.98	95%
	Medium															Live Storage
20	Pench	Nagpur	Godavari	4661	230	180	50	1976	2006	30	30.2489	16.66	0.555	3.57	6.62	100%
	Major															live storage
21	Upper Pus	Yevatmal	Godavari	596	113.91	91.269	22.65	1970	2006	36	7.8958	8.65	0.24	3.57	3.68	100%
	Major															live storage
22	Adan	Washim	Godavari	798	78.32	67.25	11.07	1976	2006	30	14.168	19.6	0.653	3.57	5.92	100%
	Medium					For Live storage portion →					11.847	17.75	0.591			storage
23	Yeldari	Parbhani	Godavari	7362	966.42	156.34	810.08	1962	2006	44	99.646	11.37	0.258	3.57	3.076	100%
	Major					For Live storage portion →					71.671	8.84	0.2			storage
24	Siddheshwar	Hingoli	Godavari	7700	250.85	80.96	169.96	1962	2006	44	1.547	1.02	0.023	3.57	0.8	100%
	Major															live storage
25	Katepurna	Akola	Tapi	514	97.67	86.32	11.35	1970	2006	36	7.8815	8.949	0.249	3.57	4.26	100%
	Medium					For Live storage portion →					5.53	6.7088	0.186			live storage
26	Lower Pus	Yavatmal	Godavari	686	81.16	59.63	21.53	1985	2006	21	0.84	1.27	0.061	3.57	0.58	100%
	Medium					For Live storage portion →					0.338	0.575	0.027			live storage
27	Arunavati	Yavatmal	Godavari	894	227.8357	180.6321	47.2	1994	2006	12	0.6067	0.317	0.026	3.57	0.5655	100%
	Major					For Live storage portion →					0.11	0.06	0.005			live storage
28	Kelzer	Nashik	Tapi	54.39	17.1	16.22	0.88	1985	2008	23	0.05	0.29	0.01	3.57	0.4	100%
	Medium															live storage
29	Chanakapur	Nashik	Tapi	269	79.94	76.86	3.08	1973	2006	33	13.28	17.3	0.524	3.57	15	100%
	Medium															live storage
30	Alandi	Nashik	Godavari	74.59	29.53	27.47	2.06	1975	2006	31	1.42	5.17	0.167	3.57	6.2	100%
	Medium															live storage
31	Kadava	Nashik	Godavari	173.23	59.59	52.91	6.68	1992	2006	14	5.12	9.68	0.691	3.57	21.1	100%
	Medium															live storage
32	Mulshi *	Pune	Krishna	247.7	752	522	230	1927	2007	80	No reduction in storage					Total

Sr. No	Name of reservoir	District	Basin/	C'ment area sq.km	Gross Storage Mm^3	Live Storage Mm^3	Dead Storage Mm^3	Year of first impounding	Year of Siltation Survey	Siltation Period years	Live Storage lost due to silt Mm^3	% loss in live storage	Annual % loss in live storage	Designed rate of siltation ha-m/100 sq.km/yr	Estimated rate of siltation ha-m/100 sq.km/yr	% of live storage covered under study
	Major															Reservoir
																Storage
33	Erai	C'pur	Godavari	550	226.5	193	33.5	1985	2007	22	48.207	24.207	1.134	not known	39.84	100
	Major															
34	U. Penganga	Nanded	Godavari	4650	1279.06	964.099	314.961	1983	2003	20	28.633	3.08	0.154	3.57	3.08	100 % live
	Major															storage
35	Bhatsa	Thane	West	388.5	976.1	942.1	34	1979	2003	24	28.13	5.79	0.24	3.57	30.2	50%
	Major		Flowing													live storage
36	Khadakwasla *	Pune	Krishna	501.8	86	56	30	1879	2007	128	No reduction in storage					Total
	Major															Reservoir
37	Mula *	A'Nagar	Godavari	2276	735.8	608.45	127.35	1972	2008	36	41.572	5.633	0.156	3.57	5.074	Total
	Major					For Live storage portion →					30.25	4.96	0.138			Reservoir
																Storage
38	Tansa *	Thane	West	135.56	not	184.6	not	1892	2008	116	18.239	9.88	0.0851	not	11.598	Total
	Major		Flowing		known		known							available		Reservoir
																Storage
39	Modaksagar *	Thane	West	450.62	204.981	not known		1954	2008	54	23.381	11.37	0.21	not	9.608	Total
	Major		Flowing			For Live storage portion →					18.008	9.96	0.184	available		Reservoir
																Storage
40	Dhom	Satara	Krishna	215.5	382	331	51	1977	1999-2000	23	6.39	1.93	0.08	3.57	13.36	70
	Major															
41	Mukane	Nashik	Godavari	129.6	214.16	203.97	10.19	1994	2002-03	9	10.66	5.23	0.65	7.14	6.4	82
	Major															
42	Bhandardara	Ahmadnagar	Godavari	121.73	313	304	9	1926	2002-03	77	1.4	0.46	0.07	7.5	—	78
	Major															
43	Majalgaon	Beed	Godavari	3840	453.64	312	141.64	1986	2003-04	18	26.14	8.38	0.3	3.57	20.34	90
	Major															
44	Lower Terna	Osmanabad	Godavari	1787	160.48	113.98	46.5	1989	2002-03	13	22.98	20.16	1.55	7.57	16.25	80
	Major															

Annexure-V

Organisation Chart of Irrigation Management

Secretary (CAD)