सत्यमेव जयते

Report On
WATER AUDITING OF IRRIGATION SYSTEMS IN MAHARASHTRA STATE
2009-10

WATER RESOURCES DEPARTMENT
Government of Maharashtra, India
March 2011

Details of photos on cover page: Jayakwadi project, Pomegranates grown on drip irrigation, Cotton grown on drip irrigation, Harvesting of Garlic.

Report on
Water Auditing of Irrigation Projects in Maharashtra State
2009-10

*

*

*

Government of Maharashtra
Water Resources Department
March 2011

FOREWORD

Large number of irrigation projects are constructed in the State to harness the water resources available for use.

These projects are constructed using public exchequer. Proper utilisation of water and achieving the objective of enhanced productivity should be the aim of all involved in the Water Sector.

The State Water Policy has stressed importance of water audit. Government of India has also given importance to this subject by issuing guidelines for water audit in 2005.

Water auditing is being conducted in the State since last so many years. Correctness of data collected at lower level of management plays an important role in analysis, conclusion & implementation of corrective measures. Training to the field staff is given regularly for developing awareness of proper methods of collection of data.

There is wide variation in availability of water in the reservoirs due to vagaries of rainfall. During 2009-10, 186 talukas received less to very less rainfall, 88 talukas received average rainfall and 81 talukas received more than average rainfall.

Number of projects audited this year is 2234, which has increased by 124 over last year.

It will not be out of place to mention that there is continual increase in area irrigated per million cubic metres.

There is need to improve efficiency in irrigation water use due to increasing demand for non-irrigation purposes.

I appreciate sincere efforts taken by Director General, WALMI, Chief Engineer, MWRDC, Aurangabad and his team for preparation of this report.

Comments & suggestions on this report will be appreciated.

C. S. MODAK
Secretary (CAD)

Maharashtra Water Resources Development Centre, Aurangabad

Team associated with Water Audit Report

Name		**Designation**
Shri G. V. Vyawahare	:	Executive Engineer
Shri H. L. Kulkarni	:	Executive Engineer
Shri S. P. Bhargodeo	:	Executive Engineer
Shri O. B. Bhoyar	:	Sub Divisional Engineer
Smt. S. A. Sulakhe	:	Assistant Engineer Grade-I
Smt. R. S. Patil	:	Assistant Engineer Grade-I
Shri S. D. Joshi	:	Sub Divisional Engineer
Shri S. G. Deshpande	:	Sub Divisional Officer
Shri P. R .Bahalaskar	:	Sectional Engineer
Shri S. A. Mulani	:	Sectional Engineer
Shri B. A. Chivate	:	Assistant Engineer Grade-II
Shri K. K. Barbind	:	Sectional Engineer
Shri S. M. Bhosle	:	Sectional Engineer
Shri R .R. Kulkarni	:	Typist
Shri L. R. Jadhav	:	Typist
Smt. M. S. Tupe	:	Typist
Shri N. A. Bansode	:	Dafter Karkoon
Shri S. M. Kedare	:	Dafter Karkoon
Shri A. B. Naybal	:	Dafter Karkoon
Smt A. B. Wakpanjar	:	Dafter Karkoon

ABBREVIATIONS

CCA	Culturable Command Area
CRT	Converted Regular Temporary
Cum	Cubic Metre
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
MWIC	Maharashtra Water & Irrigation Commision
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
PIM	Participatory Irrigation Management
PR	Project Report
PIP	Preliminary Irrigation Programme
SWF	Standing Wave Flume
WALMI	Water and Land Management Institute
WUA	Water Users' Association
AIC Akola	Akola Irrigation Circle, Akola
AIC Aurangabad	Aurangabad Irrigation Circle Aurangabad
BIPC Buldhana	Buldhana Irrigation Project Circle Buldhana
CADA	Command Area Development Authority
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

C O N T E N T S		
Sr. No.	**Description**	**Page No.**
1	Executive Summary	1
2	Chapter-1: Introduction	6
3	Chapter-2: Annual Water Account 2009-10	16
4	Chapter-3: Observations	21
5	Chapter-4: Water Auditing of Irrigation Projects at Administrative Level – A state Preview	70
	Charts I to XVI for WA at Administrative Level	72
6	Annexures	
	Annexure I: Indicators of Major projects	96
	Annexure II: Indicators of Medium projects	146
	Annexure III: Indicators of Minor projects	222
	Annexure IV: Organization Chart	231
	Annexure V: Abstract of Silt survey conducted by MERI, Nashik	232

Executive summary

The geographical area of Maharashtra is 307.78 lac Hectares, out of which cultivable area is 225 lac Hectares.

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

Irrigation potential to the tune of 4.634 Mha is created by the end of June 2009 through 79 major, 249 medium & 3004 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
2009-10	2234

There is increase of 124 projects over last year for water auditing.

On receipt of the water accounts, 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 actually observed as compared to norms fixed by GOM.

During 2009-10, water accounts of 57 major projects (having 74 reservoirs), 203 medium projects (having 206 reservoirs) & 1974 State sector minor projects were audited. The water audit report is limited to these projects only. The storages in the reservoirs in the State on 15th October were as follows.

Sr. No.	Percent Storage	Major	Medium	Minor
1	80 to 100	23	81	881
2	50 to 80	14	41	282
3	Below 50	20	81	811
		57	203	1974

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

Plan group	Water availability (Cum)/ha	Major	Medium	Minor	Total
Highly Deficit	Below 1500	3	35	317	355
Deficit	1501-3000	12	69	644	725
Normal	3001-8000	26	50	542	618
Surplus	8001-12000	3	28	209	240
Abundant	Above 12000	13	21	262	296
Total		**57**	**203**	**1974**	**2234**

Some projects are complex projects such as Khadakwasla, Bhatghar-Veer, Kukadi, Upper Godavari, Purna, Pench, Bagh, Lower Wunna, etc., 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 2009-10.

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 (Canals)

VI. Percentage of Planned & Actual Non-Irrigation Use

VII. Percentage of 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 57 major, 203 medium and 1974 minor Projects in the light of information supplied by the concerned project authorities, the main observations are as listed below:

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

2. Actual water used for irrigation on many projects was more than anticipated water use in PIP for the year, although total area irrigated increased to 13.67 lac Ha. against PIP provisions of 12.89 lac Ha.

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

Annual actual area irrigated on canal, reservoir, and river lifts (of major and medium projects) as compared to PIP is 106% However the achievement on some projects (Wan, N.M.C. express,Pus and Bor) is below 50% of the set target in PIP.

3. Irrigation System Performance observed on some projects in Rabbi season(N.M.C. express, Lower Wunna, Kadwa, Kanher, Bhatsa, Kal-Amba, Surya Hatnur, Bhandardara,Pench complex,Dhom,Tillari) is below 60% of the State norms.

4. Irrigation System Performance observed in HW on Purna complex, Gangapur, Upper Godavari complex and Upper Penganga 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 of Upper Godavari complex and Jayakwadi Project stage I is satisfactory.

6. Percentage of leakages on MI projects is high (14% of live storage) so also total evaporation losses from available water of 2456 Mm^3 was 621 Mm^3 i.e. (25%). Thus 39% of water is lost in evaporation and leakages.

Water Use:

At state level during the irrigation year 2009-10 actual live storage of 19148 Mcum was available on15th October 2009 against total design live storage of 29750 Mcum.

In 57 major, 203 medium & 1974 minor projects considered together (9833 + 1496 + 1049) 12378 Mcum of water is used on canals, reservoir & river lifts for irrigation purpose. Total Non Irrigation water use is (2679+329+133) 3141 Mcum, which is 16 % of the actual live storage. The total irrigation use is 65% of the actual live storage.

Water use on reservoir through lifts on all types of projects is (782+323+540) 1645 Mcum which is 13 % of the total irrigation water use.

The total evaporation losses on major projects 2133 Mcum (16%), medium 742 Mcum (24%) and minor 621 Mcum (25%) is observed. Total overall loss of water on account of evaporation at state level is 3495 Mcum (18%) of live storage.

Data collected from 57 major & 203 medium projects show that, a gross Preliminary Irrigation Programme of (1057938+230948) = 1288886 Ha. Was framed during the irrigation year. Against the target, actual area irrigated is 1366717Ha (106%).

Annual average ISP observed at the state level (excluding MI projects) is 121 Ha/Mcum.

Unutilized storages at the end of irrigation year (excluding inflow in HW & design carry over), on major and medium projects are 1498 Mcum and 487 Mcum respectively. The total unutilized storage as compared to live storage on 15th October 2009 is 12%.

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 is yet to be installed, the data collected at nearby meterological station 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 will also be more realistic.

More emphasis shall 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.
iv) Water remained unutilized in some projects

The computed data for above reasons is enclosed here with.

Effect of low Kharif utilisation on total irrigated area

(Area in lac 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	2003-04	38.62	14.56	5.18	36	9.38	24
2	2004-05	39.13	14.8	4.51	30	10.29	26
3	2005-06	40.03	15.05	5.07	34	9.98	25
4	2006-07	41.31	15.05	6.57	44	8.48	21
5	2007-08	43.31	15.8	7.34	46	8.46	19
6	2008-09	44.86	16.27	7.29	45	8.98	20
7	2009-10	46.34	16.8	7.57	45	9.23	20

(Reference: Irrigation status report 2009-10, page No.29)

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 lac 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	2003-04	38.62	24.06	11.6	31	7.46	19
2	2004-05	39.13	24.33	12.46	37	9	23
3	2005-06	40.03	24.98	18.44	16	3.75	9
4	2006-07	41.31	26.26	20.24	8	2.1	5
5	2007-08	43.31	27.51	20.3	12	3.3	8
6	2008-09	44.86	28.59	28.59	25	7.14	16
7	2009-10	46.34	29.54	17.85	42	12.41	6

(Reference: Irrigation status report 2009-10, 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 2003-04 to 2009-10 varies from 8% to 42% resulting reduction in irrigated area from 2% to 12%. The percentage of reduction in irrigated area to total irrigation potential created varies from 5% to 23%.

Total reduction in irrigated area due to above two reasons for year 2009-10 works out to (20% + 6%) 26%

Effect of Unutilised Water on Total Irrigated Area

In addition to above huge quantity of water remained unutilized at the end of the irrigation year in major and medium projects as shown below.

Unutilised water at end of year

Quantity in Mcum

Sr.No.	Type of project	No.	Unutilized water	Percentage with actual live storage
1	Major	33	1498	11
2	Medium	59	434	14

Note. Unutilized water above 1 Mcum is considered

The overall impact of all these factors which can be calculated, so also some factors which can not be calculated tends to affect the total irrigation.

Chapter-1

Introduction

Background

The geographical area of Maharashtra is 307.78 lac Ha. Of which the cultivable area is 225 lac 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). 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.

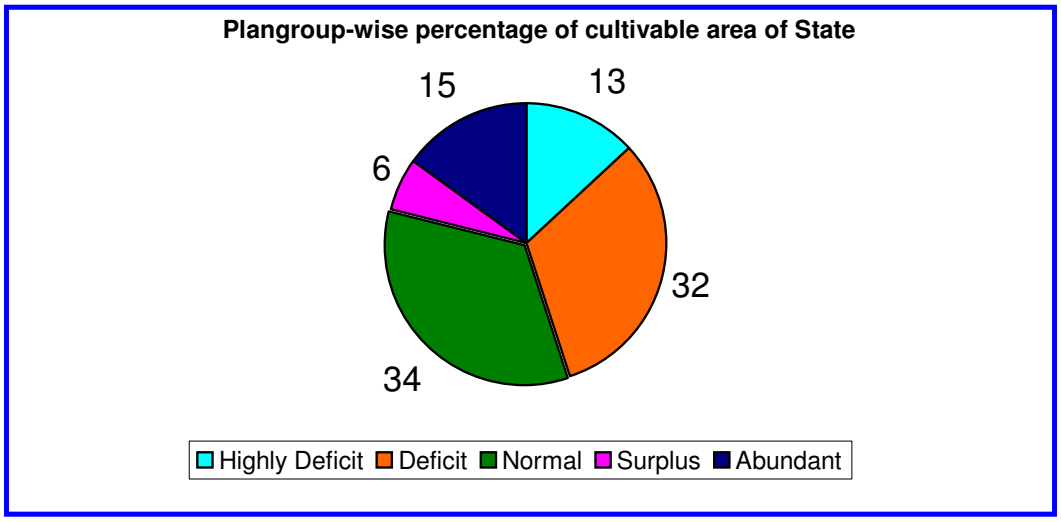
The sub basins are as follows:

Sr. No.	River Basin	Sub basin	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

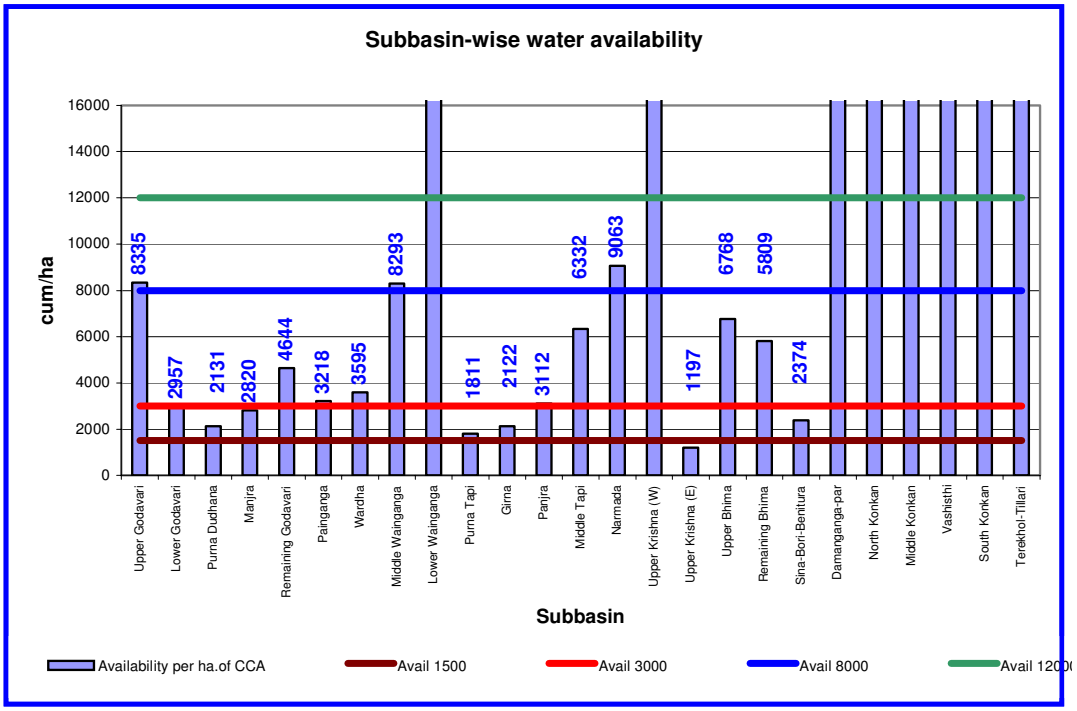
Sr. No.	River Basin	Sub basin	Abbreviated name	Classification for planning on the basis of availability of natural water per unit CCA
III	Narmada	14) Narmada	Narmada	Surplus
IV	Krishna	15) Upper Krishna (West)	Upper Krishna (W)	Abundant
		16) Upper Krishna (East)	Upper Krishna (E)	Highly Deficit
		17) 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

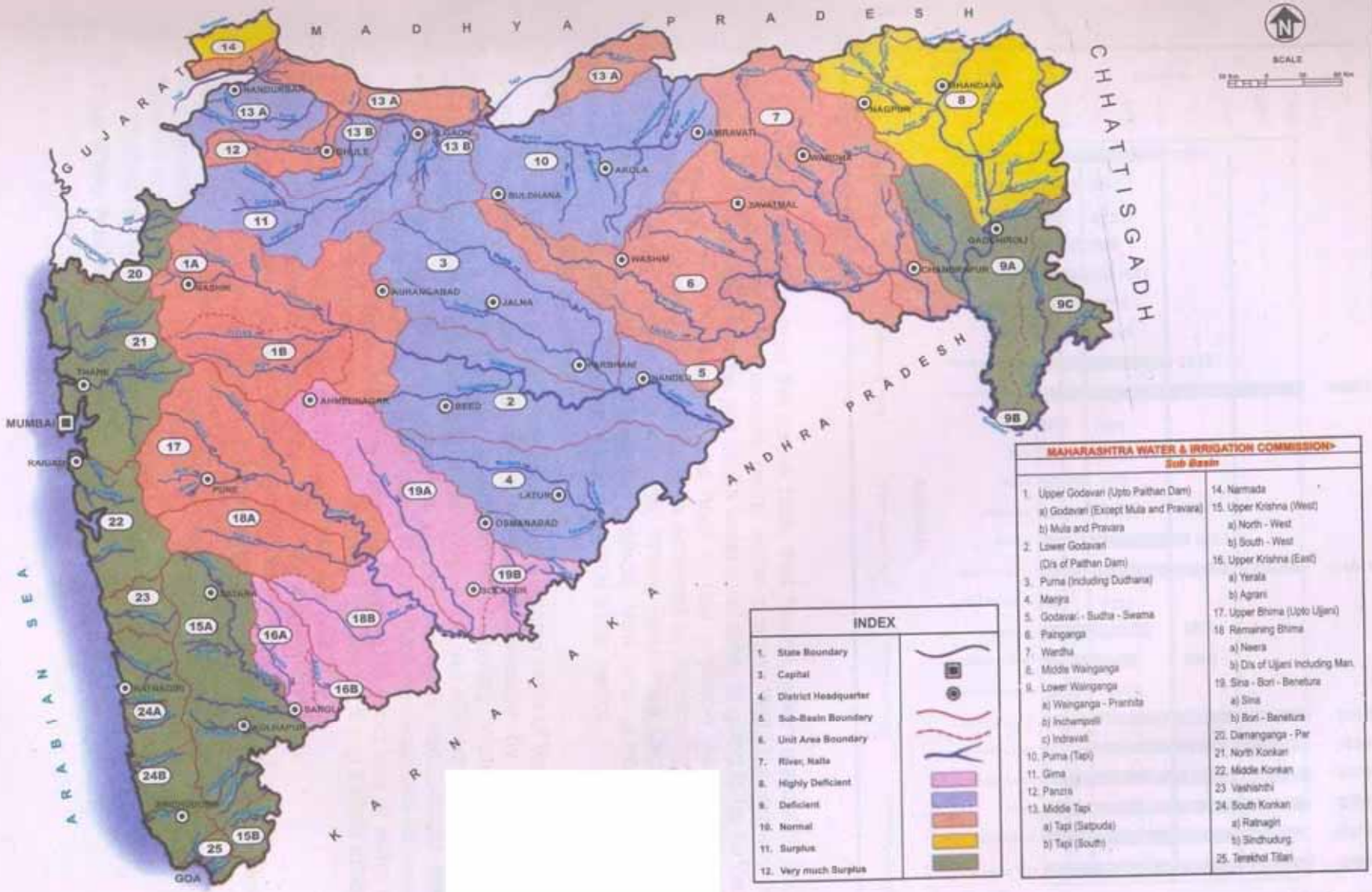


A graph showing basin-wise availability of water is shown below.



From above graph it is seen that, there are nine 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 and improve Irrigation System performance. The State has already started Water auditing of irrigation projects since last 7 years. Rise in Non irrigation water excluding that for hydro power use from 3858 Mcum to 6880 Mcum in last 10 years underlines the urgency of water auditing in Non irrigation water use sector also.

SUB - BASINS IN MAHARASHTRA AS PROPOSED BY THE COMMISSION & CATEGORIZATION THEREOF IN PLANNING GROUPS



INDEX	
1. State Boundary	
3. Capital	
4. District Headquarter	
5. Sub-Basin Boundary	
6. Unit Area Boundary	
7. River, Nalla	
8. Highly Deficient	
9. Deficient	
10. Normal	
11. Surplus	
12. Very much Surplus	

MAHARASHTRA WATER & IRRIGATION COMMISSION>
Sub Basin

1. Upper Godavari (Upto Paithan Dam)
   a) Godavari (Except Mula and Pravara)
   b) Mula and Pravara
2. Lower Godavari (D/s of Paithan Dam)
3. Purna (Including Dudhana)
4. Manjra
5. Godavari - Sudha - Swama
6. Painganga
7. Wardha
8. Middle Wainganga
9. Lower Wainganga
   a) Wainganga - Pranhita
   b) Inchampalli
   c) Indravati
10. Purna (Tapi)
11. Girna
12. Panzra
13. Middle Tapi
    a) Tapi (Satpuda)
    b) Tapi (South)
14. Narmada
15. Upper Krishna (West)
    a) North - West
    b) South - West
16. Upper Krishna (East)
    a) Yerala
    b) Agrani
17. Upper Bhima (Upto Ujjani)
18. Remaining Bhima
    a) Neera
    b) D/s of Ujjani including Man.
19. Sina - Bori - Benetura
    a) Sina
    b) Bori - Benetura
20. Damanganga - Par
21. North Konkan
22. Middle Konkan
23. Vashishthi
24. South Konkan
    a) Ratnagiri
    b) Sindhudurg
25. Terekhol Tillari

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 leakages & the cost of this lost utility. Comprehensive Water Audit can give a detailed profile of distribution system & water users, thereby facilitating easier & effective management of resources and improved reliability.

It willalso prove as an effective tool for understanding & assessment of performance level of the service for future.

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

Water audit facilitates comparison between planned 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.

1.4.0 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 4.634 Mha is created by the end of June 2009 through 79 major, 249 medium & 3004 State sector minor irrigation projects. Maharashtra has incorporated 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
2009-10	2234

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
2009-10	33211	19366	12113/63	4763/ 25	20848	4.634	1.656	2.543	137	210
(Ref: Irrigation Status Report, 2009-10 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, 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 therein 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 State sector projects since last seven 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.

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 showing location of irrigation circles is exhibited on page 8 of this report.

1.6.0 Water Audit Procedure

1.7.2 Checking Water Account

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 actually 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 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 (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 arrears 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 2009-10

1.7.1 During 2009-10 water accounts of 57 major projects (having 74 reservoirs), 203 medium projects (having 206 reservoirs) & 1974 State sector minor projects were received and audited. The water audit report is limited to these projects only. The lesser number of major projects is due to grouping of reservoirs in a complex project.

At present, there are 66 divisions looking after the irrigation management mainly of completed projects in the State. There are some 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 2009-10 is prepared and communicated to respective management circles. The status of inspection is as below:

Water audit unit No.	Number of Divisions	
	Total	Inspected
1	24	11
2	20	15
3	22	11
Total	66	37

1.8.0 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.

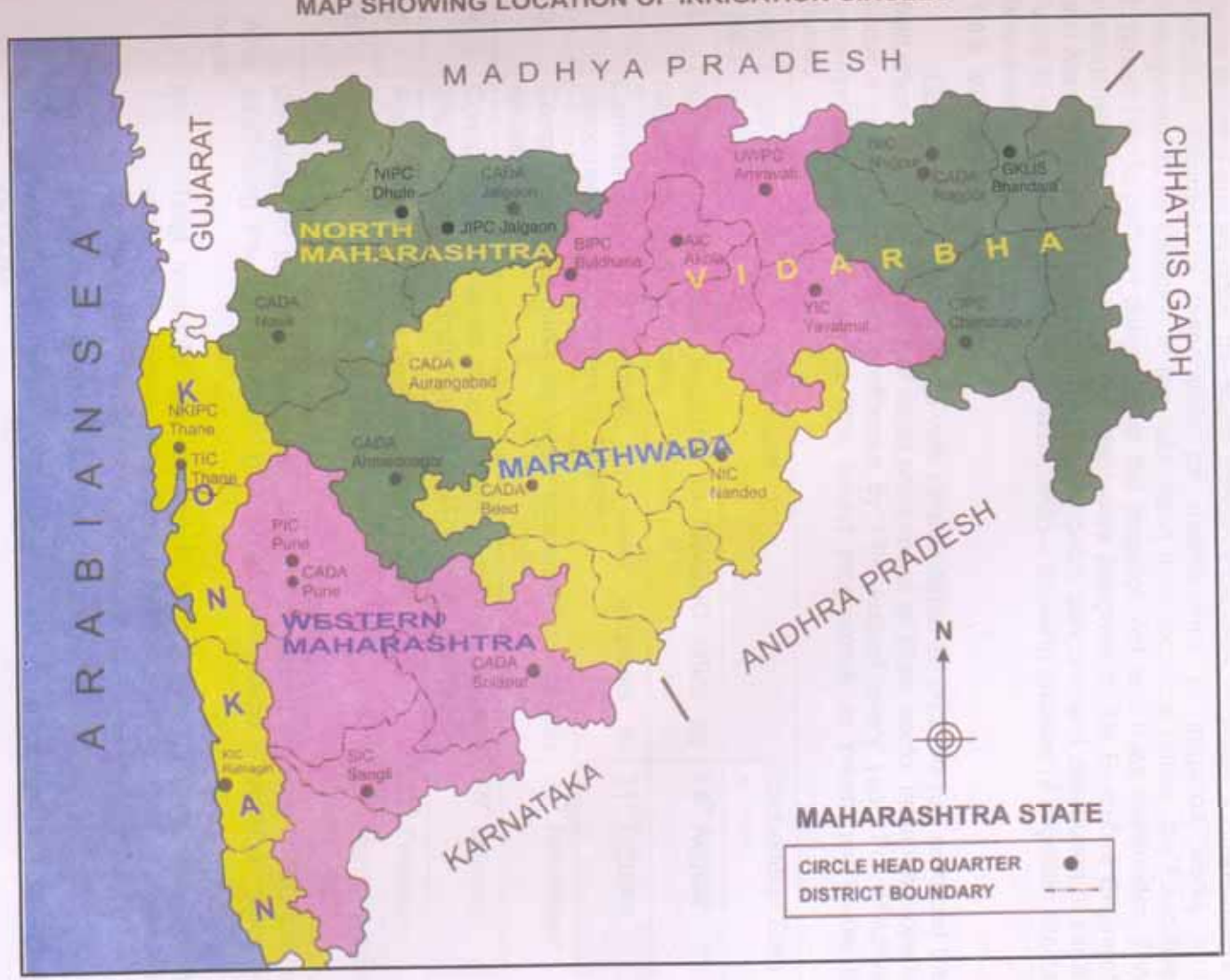
i) Irrigating maximum possible lands with available storages.
ii) Adopting rotational water supply.
iii) Keeping flow period to the minimum possible by letting maximum possible discharge in canal to minimize the transit losses.
iv) Encourage night irrigation.
v) Encourage farmers' participation in irrigation planning and implementation through canal advisory committees, and village meetings.
vi) Keeping 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 submitting water account is with executive engineer and superintending engineer.
x) The norms for Irrigation System Performance in Rabbi & 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 (by electronic water meter) for Non Irrigation water use and assessment of water charges.

MAP SHOWING LOCATION OF IRRIGATION CIRCLES



Chapter-2

Annual Water Accounts 2009-10

2.1.0 Rainfall during 2009-10

The State received rains from South-West Monsoon from 01 June 2009. Rainfall received during the period from 01 June to 31st October 2009 was 80% of normal rainfall. As per data available on web site of Agriculture department of govt. of Maharashtra for 355 talukas in the state, in 7 talukas rainfall received was less than 40%. In 178 taluka the rainfall received was between 41 to 80% which is deficit rainfall. In 134 talukas it was normal (81 to 120%). It was more than 120% of average rainfall in 36 talukas.

Water accounts of 57 major, 203 medium and 1974 minor projects were received from concerned circles in standard template files provided by MWRDC office.

Following are the general observations after analysis of the data.

2.2.1 Water Availability in Reservoirs:

Region wise availability of storages is as follows.

Water-Mcum.

Sr.no.	Region	Storage in Mcum	Percentage
1	Aurangabad	1954	28
2	Nasik	2665	68
3	Amrawati	1174	46
4	Nagpur	2025	58
5	Pune	8584	90
6	Konkan	2747	81
	Total	19149	64

In Aurangabad region, availability in major projects like Manar, Upper Penganga, Purna complex, Lower Terna, Jayakwadi and Majalgaon was less in the range of 6 to 36 percent bringing the average of the region to 28 percent.

Similarly, lesser availability in Arunawati, Katepurna, Nalganga and Pus projects has affected the overall availability of Amrawati region.

2.2.2 Percentage of Actual Evaporation to Live Storage:

Region wise actual evaporation observed is as follows.

Water- Mcum

Sr.no.	**Region**	**Evaporation**	**Live storage**	**Percentage with live storage**
1	Aurangabad	864.44	1954	44
2	Nasik	522.91	2665	20
3	Amrawati	301.93	1174	26
4	Nagpur	444.53	2025	22
5	Pune	1164.60	8584	14
6	Konkan	196.55	2747	7

Verification of evaporation data is necessary in projects where the figures are inconsistent As the water availability in majority of projects is less and the storages were reserved for drinking water, the percentage of evaporation seems to be high.

The evaporation is partly compensated by seepage from hillocks surrounding the reservoir. This is more so in Konkan and Pune region.

2.2.3 Target and Achievement of Irrigation Potential Utilisation:

Utilization of irrigation potential in different regions is as follows.

Sr.no.	Region	Created potential up to june 2009 in Ha*	Targeted utilization of irrigation potential In Ha	Actual utilization of irrigation potential in Ha	Available storage in percentage in Mcum	Percentage with utilisation target	Percentage with Created Potential
1	Aurangabad	587795	67732	85726	28	126	15
2	Nasik	490112	128907	188123	68	145	38
3	Amrawati	267628	55393	33599	46	60	13
4	Nagpur	324587	173112	207705	58	119	64
5	Pune	900172	846375	841232	90	99	93
6	Konkan	41895	17367	10333	81	59	25
	State Total	2612189	1288886	1366718	64	106	52

Note: (*) Created potential includes that of major and medium projects only.

In projects where the percentage is more than 100, care should be taken while framing the PIP.

2.2.4 Water Use Pattern:

Region wise water use pattern is as follows.(major and medium projects)

Water – Mcum

Sr.no.	Region	Storage utilized for irrigation	Storage utilized for non-irrigation purpose	Unutilized storage	Percentage of Unutilised water with Live Storage
1	Aurangabad	999.54	536.32	52.51	2.68
2	Nasik	1825.38	557.14	157.33	5.90
3	Amrawati	441.59	153.22	231.62	19.72
4	Nagpur	1985.22	322.91	163.09	8.05
5	Pune	6687.7	1158.63	918.4	10.69
6	Konkan	438.10	412.89	462.14	16.82

Evaluation of SWF at canal as well as distributory head is necessary for realistic data about water use. Water meters shall be installed for LI schemes as well

as for non-irrigation use. Project authorities are required to concentrate on full utilization of available storage

The unutilized storage in Pune, Konkan and Amrawati region is very high. It is 10.69, 16.82 and 19.72 percent of available water.

2.2.5 Irrigation System Performance:

Irrigation system performance observed in different regions is as follows

ISP – Ha/Mcum

Sr.No.	Region	Irrigation system performance (ISP) observed	State norm for ISP	Ratio
1	Aurangabad	108	130	0.83
2	Nasik	114		0.87
3	Amrawati	96		0.73
4	Nagpur	116		0.89
5	Pune	132		1.01
6	Konkan	29		0.22
	State	121		0.93

Tha ISP in Konkan region is very low compared to other regions and State norm. This is because of percolating soils and unified crop of paddy.

Project authorities are advised to prepare action plan for securing improvement in water use efficiencies.

2.2.6 Percentage of Planned & Actual Non Irrigation Use

Comparision of planned and actual non-irrigation use is as follows

Water - Mcum

Sr.	Region	Planned non-irrigation use as per project report	Planned non-irrigation use as per PIP	Actual non-irrigation use	Percentage with project report	Percentage with PIP
1	Aurangabad	58.70	416.45	536.32	913.66	128.78
2	Nashik	364.26	691.80	557.14	152.95	80.53
3	Amrawati	246.13	112.15	153.22	62.25	136.62
4	Nagpur	275.88	313.31	322.91	117.04	103.06
5	Pune	765.12	856.88	1158.63	151.43	135.21
6	Konkan	1110.40	1012.78	412.89	37.18	40.76
	State	2819.91	3403.36	3141.11	111.39	92.29

2.2.7 Percentage of Unutilized Water to Live Storage

Region wise unutilized water is as follows.

Sr.no.	Region	Unutilized water	Live storage available on 15th October	Percentage with live storage
1	Aurangabad	52.51	1954	2.68
2	Nasik	157.33	2665	5.90
3	Amrawati	231.62	1174	19.72
4	Nagpur	163.09	2025	8.05
5	Pune	918.4	8584	10.69
6	Konkan	462.14	2747	16.82

In Amrawati region, the percentage of unutilized water is highest. This is because of non development of mindset of farmers towards irrigated agriculture. But unutilized 918 Mcum of water in Pune region, where irrigated agriculture is traditionally developed is not justifiable.

2.2.8 Conveyance Efficiency of main Canals

The conveyance efficiency of main canals is the ratio of water released in main canal to the sum of water supplied to distributaries and lifts. The conveyance efficiency of main canals can be ascertained subject to correct measurements. For obtaining correct data, construction of measuring devices at different locations, calibration of existing devices, proper maintenance of the structures and canal systems is necessary. Similarly the water lifted for different uses should be decided properly.

2.2.9 Actual Cropping pattern

Region wise cropping pattern observed in major and medium projects is as follows

Cropping pattern - Percentage

Sr.no.	Region	Kharif	Rabi	Two seasonal	Hot weather	Perennial
1	Aurangabad	7.66	49.92	22.98	9.59	29.06
2	Nasik	21.14	49.24	13.47	10.14	17.71
3	Amrawati	10.14	74.87	16.22	1.82	4.48
4	Nagpur	58.18	64.60	1.43	2.17	1.28
5	Pune	17.59	40.71	0.18	16.16	25.51
6	Konkan	6.65	48.00	1.34	6.44	73.76
	Total	19.12	59.05	9.31	6.64	17.05

Project authorities are advised to control the cropping pattern i.e. using maximum water in rabbi season and reduce area under water intensive crops.

2.3.0 Sedimentation studies

2.3.1 Sedimentation studies arecarried 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. Excepting three projects, reduction in live storage is not accounted for.

2.3.2 The actual rate of siltation is more than designed rate (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.
However in Bor (3.15), Darna (3.22), Vaitarna (0.446), Yeldari (3.076), Siddheshwar (0.8), Lower Pus (0.58), Arunawati (0.566), Kelzer (0.4) and Upper Penganga (3.08) projects the rate of siltation is on lower side.

2.3.3 Field officers should reduce live storages according to reduction of live storage due to silt accumulation. At present, water accounts are unnecessarily containing quantum which is not actually available in the reservoir.

2.3.4 Silt survey of remaining projects shall be taken up.

Chapter-3

Observations

Major Projects 2009-10

Indicator I: Water Availability in Reservoirs on 15th October.

Highly Deficit Plangroup:

CADA Solapur: In Ujjani project, the availability is 111% consistently for last four years. This is on account of enhancement of storage capacity by raising the height of dam by 0.5 metres.

Deficit Plangroup:

AIC Akola: Actual live storage in Katepurna project was 16 % during 2009-10, which was lowest water availability in the last three years.

In Nalganga project actual live storage was 23 % during the irrigation year 2009-10, comparatively lesser than past two years.

NIC Nanded: In Manar project yield has reduced to 6% this year as compared tolast year's 28%, whereas in Purna project the yield has decreased to 15% in 2009-10 as compared last year's 33%. In Vishnupuri Project yield received in 2009-10 is 100% for second consecutive year.

CADA Aurangabad: Jayakwadi project stage-I had a very low yield of 24% only for current year compared to 100% for last five years.

CADA Jalgaon: Girna project received 24 % live storage this year. The availability in 2007-08 & 2008-09 was 99% & 92% respectively.

BIPC Buldhana: Actual live storage in Wan project was 35%, which is remarkably low as compared to past two years.

CADA Beed: The yield in Manjra project has reduced to 60% for the year 2009-10, it was almost 100% for 2007-08 and 2008-09. Majalgaon and Lower Terna had yield only 36 & 30% respectively for 2009-10, for last two years (2007-08 and 2008-09) both projects had 83% and 100% yield.

CADA Nashik: Chankapur project received 100% live storage. There is consistency of 100% availability since last three years.

Normal Plangroup:

NIC Nanded: In Upper Penganga project the yield of the reservoir is very low i.e. 6% for 2009-10 as compared to last year's 43%.

YIC Yavatmal: In Arunawati Project actual live storage was 10% during the year 2009-10. Storage availability is continuously decreasing in last three years.

AIC Akola: Actual live storage available in Pus project was 31% which is lowest as compared to past two years.

CADA Pune: In Kukadi complex, the yield was reduced from 100% in 2006-07 to around 80 % during 2007-08 and 2008-09, which has still came down to 62% this year. Ghod project received only 52 % yield this year against 100 % for last three years.

CADA Nashik: Bhandardara & Kadwa projects are having consistency in availability.

The percentage of live storage in rest of the projects under CADA Nashik this year varies from 50 to 90%.

CIPC Chandrapur: Bor project was having 81% live storage during this year. However, the availability during last year was 45% only.

CADA Nagpur: During the irrigation year 2009-10, Lower Wunna project complex was having 90% live storage. However, the availability during last year was 67% only.

PIC Pune: Khadakwasla received 98 to 99% yield in last three years. However, this year yield is slightly reduced to 82%. Pawana, Chaskaman, Neera complex and Neera Deodhar had full storage like last three years. However, in Bhama Askhed the storage was less than 50% for last three years which is improved to 64% this year.

UWPC Amrawati: Upper Wardha project was filled to 93 % of designed live storage during 2009-10 which is better than previous year.

CADA Jalgaon: Hatnur project received 100% live storage. There is consistency of 100% availability since last three years.

Surplus Plangroup:

CADA Nagpur: During the irrigation year 2009-10, Bagh complex project was having 36% of live storage, whereas Pench complex & Itiadoh projects had 61% & 37% of designed live storage respectively.

Abundant Plangroup:

CIPC Chandrapur: Percentages of actual live storage to designed live storage in Asolamendha & Dina project were 14% & 45 % respectively. Last year the storages in Asolamendha & Dina were 22% & 5% respectively.

TIC Thane: All the three major projects i.e. Bhatsa, Kal Amba and Surya could not receive 100% storage for last three years. Out of these Kal Amba receives water from releases after power generation from Mulshi dam upstream.

CADA Pune: In Kanher project, there is consistency of 100 % storage for last four years. But in Dhom the yield is reduced to 77 % this year against 100% in last three years.

KIC Ratnagiri: Tillari project, which is newly included this year, is having 99% storage.

SIC Sangli: Dudhganga, Warna, Tulshi and Radhanagari are receiving almost 100% storage for last four years.

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

Deficit Plangroup:

BIPC Buldhana: The evaporation losses were 7% with available storage of 35% during the year 2009-10. As mentioned in previous reports all the aspects relating to the evaporation losses in this project may be investigated in detail so as to obtain correct values of evaporation losses. Project authorities submitted that new evaporimeter is established at dam site and henceforth evaporation losses will be measured accurately.

CADA Nashik: The percentage of annual evaporation of Chankapur project under CADA Nashik is 17%.

AIC Akola: Percentage evaporation based on 15th October live storage in the Katepurna was 22% & in Nalganga project under this circle was 30%. Very low storage may be the reason for higher percentage of evaporation along with some climatic aspects.

NIC Nanded: In Manar project the actual evaporation for the year 2009-10 is 99 %, in short, all available live storage is lost in evaporation. In Vishnupuri the evaporation losses are 21%, whereas in Purna project it is 30%.

CADA Aurangabad: Jayakwadi project stage-I has 40% evaporation losses which is due to the low yield (24%) as on 15th October.

CADA Jalgaon: The percentage of annual evaporation to actual live storage (on 15th October) of Girna project is 56%. The reason being only 24% availability.

CADA Beed: Percentage of evaporation in Lower Terna & Majalgaon is 79% & 73% respectively. The evaporation is high as the live storage on 15th October in these two projects is low as mentioned above (i.e. 30% & 36% respectively). In Majalgaon water utilisation is only in Hot Weather season which resulted in high percentage of evaporation.

Normal Plan group:

CIPC Chandrapur: In Bor Project percentage of evaporation to actual live storage on 15th October during 2009-10 was 8% (8.05 Mcum). However last year percentage was 10%.

PIC Pune: In Chaskaman project with 100% storage there is variation in evaporation from 11.32 Mcum to 18.4 Mcum in last four years. The field officers are required to verify the methods of data collection.

CADA Nashik: In all the projects the percentage of evaporation is varying from 5% to 16%,

UWPC Amravati: Evaporation losses on Upper Wardha project was 15%, just lower than the projected evaporation.

CADA Nagpur: The ratio of evaporation to live storage for Lower Wunna project complex works out to 26%.

CADA Jalgaon: In Hatnur project, the percentage of evaporation is 36%.

AIC Akola: Evaporation percentage as compared to past two years is highest in Pus project during the year 2009-10.

YIC Yavatmal: In case of Arunawati project evaporation loss was 107%. As available storage was only 10%. It seems that entire available storage is lost in evaporation along with some water from dead storage.

NIC Nanded: In Upper Penganga project the percentage of evaporation is 142% for 2009-10, as it had only 6 % live storage which has been utilized mostly in Hot Weather for domestic purpose.

Surplus Plangroup:

CADA Nagpur: Evaporation losses during 2009-10 in Bagh, Pench & Itiadoh projects were 18, 9 & 56% respectively.

Abundant Plangroup:

SIC Sangli: The quantity of evaporation in Tulshi project is remarkably high, 17.13 Mcum (19%) for last two years and 19.243 Mcum (21%) in the year 2006-07 against only 4.8 Mcum (5%) in 2009-10. It had 100 percent storage consistently for last four years

TIC Thane: In Bhatsa project, the evaporation is decreasing from 493.5 Mcum to 358 Mcum in last four years

CIPC Chandrapur: Evaporation loss on Asolamendha project was100% as live storage on 15th October was meager (14%, 8.08 Mcum). The maximum storage attained was on 9th September 2009 and the evaporation was 29% of maximum live storage (27.52 Mcum).

For Dina project evaporation loss was 66% as compared to storage on 15th October (30.36 Mcum) which is very high. The high percentage of evaporation is due to major utilization during Kharif season and lesser storage available on 15th October (45%).

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

Deficit Plangroup:

NIC Nanded: As there is a very low yield in Manar & Purna Complex irrigation planning was not done, though in Purna Complex efforts are taken to irrigate 11830 ha. total area. In Vishnupuri project PIP for irrigation & Non-irrigation utilization is not prepared by the project authorities in spite of 100% availability.

BIPC Buldhana: In Wan project achievement of irrigation potential utilization was 18% against the set target during the year 2009-10, which is lower than last year's achievement. Project authorities submitted that low water demands from the cultivators is the reason for the low achievement. Positive efforts should be taken to motivate cultivators for canal irrigation.

AIC Akola: Irrigation was not done in Katepurna project during this year also, as live storage available on 15th October was 16% only. Achievement on Nalganga project was 72% of the Preliminary Irrigation Programme during the year 2009-10, with storage availability of 23%. It is similar to last year's achievement.

CADA Aurangabad: There is 79% achievement of PIP target in Jayakwadi project stage-I (combined PLBC & PRBC). For PLBC it is 90% as it consists reservoir lift also where as achievement in PRBC is very low i.e. 32% only.

CADA Beed: The percentage of achievement to PIP target in Lower Terna, Manjra & Majalgaon is 153, 112 & 83 respectively; achievement in Lower Terna & Manjra is more than PIP target due to more irrigation water use through canal & reservoir lift against the provision in PIP.

CADA Jalgaon: In Girna project the achievement of actual area irrigated as compared to total area (as per PIP) is 119%.

CADA Nashik: In Chankapur project total area irrigated is 1.45 times more than the total area as per PIP.

Normal Plangroup:

NIC Nanded: As the water availability is just 6% in Upper Penganga project, provision for irrigation was not included in PIP

YIC Yavatmal: In Arunavati project 670 hectares are irrigated this year, without preparing any programme as in previous year.

AIC Aurangabad: The percentage achievement in NM Express canal against PIP target is very low i.e. 29 % only. Though it is an ongoing project, project authorities are advised to achieve the PIP target by utilizing created irrigation potential and prepare realistic PIP consist of non irrigation use as per experience.

CIPC Chandrapur: In Bor project, 46% target is achieved as compared to PIP provisions.

AIC Akola: Achievement against the estimated area in PIP in Pus project during the irrigation year 2009-10 is 49%, similar to last year.

UWPC Amravati: In Upper Wardha project, achievement was 63 % against the planned target in PIP, though the live storage on 15th Oct was 93% during the irrigation year 2009-10. This is unsatisfactory compared to last year.

CADA Pune: In spite of reduction in availability, the performance is good for Ghod and Kukadi complex.

PIC Pune: In Khadakwasla project in spite of 100 percent availability of water the target for irrigation for last four years is very low compared to actual irrigation resulting in achievement more than 100% even more than 200% in last two years. The project authorities should prepare realistic PIP. Similar is the case of Chaskaman, Pawana and Neera complex where utilisation is more than 100%.

CADA Jalgaon: In Hatnur Project, total area irrigated is 1.5 times more than the total area as per PIP.

CADA Nashik: In all the projects, the area considered in PIP was fully irrigated.

CADA Nagpur: Total area irrigated in Lower Wunna complex is 3881 Ha which is less as compared to last year (7185 Ha). The project authorities have not mentioned the figures of target utilization in PIP in spite of constant persuasion.

Surplus Plan group:

CADA Nagpur: Under Bagh complex there was no irrigation on Kalisarar and Sirpur reservoirs, however, in Pujaritola the area irrigated is 22993Ha but the PIP provisions are not given by project authorities. In Pench complex on Navegaon Khiry reservoir the achievement is 104% and on Khindsi reservoir the area irrigated is 118Ha but the PIP provisions are not given by project authorities. In Itiadoh 100% target is achieved as compared to PIP provisions.

Abundant Plangroup:

CADA Pune: In Kanher project, in spite of consistency of 100 percent availability, the utilisation of potential is reduced from 75% to 58% over last year. In Dhom project though the availability is reduced from 100% to 77% the utilisation is improved from 50 to 55% compared to last year.

TIC Thane: In Bhatsa, Kal-Amba and Surya, the achievement of potential utilisation has decreased over last three years. In Kal-Amba and Surya the utilisation is 51 and 58% respectively.

CIPC Chandrapur: In Asolamendha project the achievement is 78%. However, in Dina project actual area irrigated is 10925Ha but the PIP provisions are not mentioned by project authorities.

Indicator IV: Water Use Pattern

Highly Deficit Plangroup:

CADA Solapur: For Bhima project there is wide difference in PIP and utilisation in Rabbi, Hot Weatherand non-irrigation use.

Deficit Plangroup:

AIC Akola: Irrigation was not done during the year 2009-10 in Katepurna project due to lesser storage. Water was utilized only for Non irrigation purpose, as in previous year. In Nalganga project 27% of available storage was utilized predominantly for irrigation in Rabbi season and 10% in Hot Weather season for reservoir lifts & non irrigation use.

BIPC Buldhana: In Wan project, 8.68 Mcum i.e. 38% of total available storage is utilized for irrigation purpose in Rabbi Season and 3.603 Mcum i.e.16 % of available storage in Hot Weather season. Non irrigation use during the year 2009-10 was 37% of available storage. Whereas 81% was utilized for irrigation purpose in rabbi and Hot Weather seasons in the year 2008-09.

CADA Aurangabad: In Jayakwadi project stage-I the utilization through reservoir lifts is nearly 6 times that of canal due to less live storage. Non irrigation use is more than PIP & nearly 70% of irrigation water utilization. Most of the non-irrigation use is for thermal power station at Parli.

CADA Beed: In Jayakwadi project stage-II (Majalgoan) the actual water use (Irrigation and Non-Irrigation) in Hot Weather is more than that of Rabbi. In Lower Terna project the utilization in Rabbi is more than that of Hot Weather. In Manjra project water used in Hot Weather is maximum; the project authorities are required to be more vigilant to plan maximum water utilization in Rabbi season to avoid extra evaporation losses.

CADA Jalgaon: In Girna project, the major water use (28%) is in Hot Weather season.

CADA Nashik: In Chankapur project, the major water use (49%) is for non irrigation purposes.

NIC Nanded: In Manar project there is no utilization of water by canal flow for irrigation, as there is just 6% availability of live storage.

In Purna project water utilization by canal in Rabbi season is more compared to Hot Weather. non irrigation use (81.54Mcum) is nearly 1.25 times that of irrigation use, mainly because of scarcity of drinking water in Hingoli, Parbhani and Nanded districts.

In Vishnupuri project utilization of water for irrigation (32.15Mcum) is only through reservoir lifts in spite of 100% availability and 26.33Mcum water is utilized for non-irrigation purpose.

Normal Plangroup:

AIC Aurangabad: In NMC Express Canal water is utilized only 50% in Rabbi season against the PIP provision and rest being utilized for non irrigation utilization against no provision in PIP. Though the project is ongoing, proper planning of water use is needed.

AIC Akola: In Pus project, flow irrigation was not done through canals during 2009-10. Only11% reservoir storage was utilized for irrigation, and 45% was for non-irrigation purpose.

CADA Jalgaon: In Hatnur project, the major water use (35%) is for non irrigation. The major utilization on Canal is in Rabbi season (11%) as compared to gross utilization.

CADA Nagpur: In Lower Wunna complex project, the major water use (85%) was in Rabbi season by flow irrigation (89.67Mcum). During last year the water use in Rabbi season was 86% (133.95Mcum).

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 (27%) is on canal in Rabbi season as compared to gross utilization.

CADA Pune: In Kukadi complex, 218 Mcum water is used in Hot Weather for irrigation, though there was no provision in PIP.

CIPC Chandrapur: In Bor project, the major water use (74%) was in Rabbi season by flow irrigation (48.410 Mcum). During last year the water use in Rabbi season was 40.21 Mcum.

NIC Nanded: In Upper Penganga the water utilization is mainly for non irrigation (65.88 Mcum) against 56 Mcum PIP provision & very less use (1.36 Mcum) for irrigation purpose.

PIC Pune: In Khadakwasla project the water use for irrigation in Rabbi and Hot Weather is half of that planned in PIP, whereas non irrigation use is doubled over planning. In Chaskaman, the total utilisation is just 50% of planning. A total of 108 Mcum of water is let out through escape which is further utilised for irrigating area of K.T. weirs on Bhima river. However, only 4900 hectares are irrigated resulting in I.S.P. of 46 Ha/Mcum. The field officers are required to prepare realistic PIP and it is necessary to account total irrigated area.

In Chaskaman also the use is 50% of that planned in PIP.

UWPC Amrawati: In Upper Wardha project 61% (229.352 Mcum) of total utilisation (378.552 Mcum) was in Rabbi season. Utilisation in Kharif and Hot Weather seasons, for irrigation purpose including reservoir lifts was only 11%. Water utilization for non irrigation use was 8 %(32.098 Mcum) during the year 2009-10.

YIC Yavatmal: In Arunawati project reservoir water use was 1.635 Mcum (8%) and non irrigation use was 5% of total water available during the year 2009-10.

Surplus Plangroup:

CADA Nagpur: Under Bagh complex there was no irrigation in Kalisarar and sirpur reservoirs however in Pujaritola reservoir the utilization in Kharif and rabbi season was 70% and 25% respectively. In Pench complex in Navegaon khiry reservoir water utilization in Kharif and rabbi by flow irrigation was 41% and 39% respectively. Non-irrigation water use was 20%. In Khindsi reservoir water utilization in Kharif and rabbi by flow irrigation was 59% and 24% respectively. Non-irrigation water use was 16%.

In Itiadoh reservoir water utilization in Kharif and rabbi by flow irrigation was 79% and 18% respectively. Non-irrigation water use was 3% only.

Abundant Plangroup:

CADA Pune: In Dhom project the water use for irrigation in Hot Weather is doubled over the provision in PIP.

CIPC Chandrapur: In Asolamendha project water utilization in Kharif and rabbi by flow irrigation was 68% and 11% respectively. In Dina project water utilization in Kharif and rabbi by flow irrigation was 63% and 37% respectively.

SIC Sangli: There is remarkable difference between PIP and use of water for Rabbi, Hot Weather and non-irrigation use in Dudhganga and Warna project.

Indicator V: Irrigation System Performance (Canal)

Highly Deficit Plangroup:

CADA Solapur: In Bhima project, the ISP for Hot Weather is just 50% of State norms consistently for last four years.

Deficit Plangroup:

AIC Akola: In Katepurna project, irrigation was not done either on canals or on reservoir, therefore question of ISP does not arise. Same was the condition in previous year. On Nalganga project, ISP observed in Rabbi season was 143Ha/Mcum with 4 rotations, which includes post-seasonal water use. More improvement was expected, as major portion of command is handed over to WUA and water is supplied on volumetric basis.

BIPC Buldhana: ISP realised on wan project was 89 Ha/ Mcum with 6 Rotations in Rabbi Season & 79 Ha/Mcum with 1 Rotation in Hot Weather during the irrigation year 2009-10. ISP value is Low same as in previous year. During both the years ISP was very less than state norms. Project authorities are advised to investigate the reasons for lesser ISP values as compared to state norms.

CADA Aurangabad: In Jayakwadi project stage-I the irrigation system performance is 375 ha/Mcum for Rabbi season which is because of a single rotation.

CADA Beed: Lower Terna has ISP of 254 ha/Mcum for Rabbi season due to one rotation, Manjra and Majalgaon have no irrigation in Rabbi season. Manjra & Majalgaon has ISP of 92 & 69 ha/ Mcum respectively for Hot Weather season, though it seems to be improved compared last year's ISP 76 & 43 it is below norms in spite of two rotations only.

CADA Jalgaon: In Girna project, the ISP is improved from 56ha/Mcum (2008-09) to 94ha/Mcum (2009-10) in Rabbi season. However, in Hot Weather season it is lowered from 138 ha/Mcum (2008-09) to 90 ha/Mcum which is below Govt. norms. According to field officers, lower ISP is due to old canal system 50 to 60 years & pervious strata in tail reach.

CADA Nashik: In Chankapur project, there is no irrigation in Hot Weather season. The irrigation system performance in Rabbi season is slightly reduced from 149 ha/Mcum (2008-09) to 142 ha/ Mcum (2009-10) with 2 rotations.

NIC Nanded: Purna project has ISP of 198 and 109 ha/Mcum in Rabbi & Hot Weather season respectively which attained state target because of single rotation in each season. In Manar project irrigation is not done as there is no water available, whereas in Vishnupuri there was no canal irrigation in spite of 100% availability.

Normal Plangroup:

AIC Aurangabad: The ISP of NMC Express canal is very low i.e. 58 ha/Mcum. Even though it is an ongoing project authorities are advised to utilize available water judiciously and to be very watchful towards water use & irrigated area.

AIC Akola: Canal irrigation was not done in Pus project as available storage was less than 33%.

CADA Jalgaon: In Hatnur Project, the ISP is slightly reduced from 73ha/Mcum (2008-09) to 65 ha/Mcum (2009-10) in Rabbi season. Though 4 rotations are given in Rabbi 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) Bed levels of distributaries are higher than that of main canal.

iii) No night Irrigation.

iv) Inclination to irrigation on wells instead of flow irrigation.

CADA Nagpur: In case of Lower Wunna complex project, ISP observed on Wadgaon reservoir is 56Ha/ Mcum in Rabbi Season and 13Ha/ Mcum in Hot Weather, which is less as compared to state norms. In Nand reservoir irrigation was not done through canals.

CADA Nashik: In Bhandardara project, the ISP for Rabbi season is lowered from 87 ha/Mcum (2008-09) to 77 ha/Mcum (2009-10) with two rotations.

In Kadwa project, there is no improvement in irrigation system performance in all the three seasons over last year's performance. As per field officers, the ISP is low due to-

1- There is much percolation from canal embankment in km 0 to 88.

2- There are 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 low.

In Mula project, the irrigation system performance in last year was 90ha/Mcum with three rotations however this year the ISP is 152ha/Mcum with one rotation. In Hot Weather season there is slight improvement from 57ha/Mcum to 88ha/Mcum as compared to last year. 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.

CIPC Chandrapur: In Bor Project, ISP observed in Rabbi and Hot Weather season is 79Ha/Mcum with 3 rotations and 14Ha/Mcum with 6 rotations respectively. The performance is very poor as the ISP is below 20% of the State norm. Project authorities are advised to take stringent action to improve the system performance.

NIC Nanded: In Upper Penganga project the irrigation system performance has attained state norms in Hot Weather season i.e. 185 ha/Mcum because of a single rotation and it has no irrigation in Rabbi season.

UWPC Amravati: In Upper Wardha project, during the irrigation year 2009-10 ISP realised in Rabbi Season was 83Ha/Mcum with 6 rotations and 2Ha/Mcum in Hot Weather season. ISP in Hot Weather season is very much below the State norms. It was low during last two years also. Field authorities, should take positive action to enhance ISP to the state norm

YIC Yavatmal: Canal irrigation was not done in Arunawati project as available storage was less than 33%. It was the same condition during previous year also.

Surplus Plan group:

CADA Nagpur: ISP realised in Kharif season in Pujaritola of Bagh complex is 174 Ha/ Mcum. Under Bagh complex irrigation was not done on Kalisarar and Sirpur reservoirs. In Pench complex there was no irrigation in Khindsi project through canal. The ISP observed on Navegaon Khiry in Kharif, Rabbi and Hot Weather season is 98, 59 and 25Ha/ Mcum respectively. For Itiadoh project the ISP observed in Kharif season is 169Ha/ Mcum.

Abundant Plangroup:

CADA Pune: In Dhom and Kanher projects the ISP is very low in Rabbi and Hot Weather consistently for last four years. The field officers should take necessary steps for improvement of performance.

CIPC Chandrapur: In Asolamendha & Dina project ISP observed in Kharif season is 419 & 323 Ha/Mcum respectively. ISP observed in these projects is exceptionally high as compared to State norms.

TIC Thane: In Bhatsa and Surya, the ISP for Konkan season has reduced to 2/3 and 1/3 of their respective performance in 2006-07.

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

Highly Deficit Plangroup:

Deficit Plangroup:

AIC Akola: Actual non irrigation use in Katepurna project was (12.138Mcum) 131% of the provisions in the PIP (9.24Mcum) during the year 2009-10. It was more (123%) than the reservations set in the PIP during the year 2008-09 also.

Actual non irrigation use in Nalganga project was 85% of the estimated quantum in the PIP during the irrigation year 2009-10 and 19% of provision in the project report. It was 101% of PIP estimation &16% of the project provisions during the last year.

BIPC Buldhana: In Wan project, actual non irrigation use was excessive (141%) as compared to quota reserved in PIP. But it was 33% of the project provisions during the year 2009-10. Last year it was also excessive (140%) of PIP provisions.

CADA Aurangabad: Though in Jayakwadi project stage-I there is no provision for non irrigation use in the project report, actual use is slightly (8%) more than PIP provision.

CADA Beed: In Manjra & Majalgaon there is non irrigation use against projected provision which is 98% & 45% of PIP provision respectively. In case of Lower Terna actual use is 30% of projected provision and nearly 3 times of PIP provision. Project authorities are advised to prepare realistic PIP based on past experience.

CADA Jalgaon: In Girna project, the actual non irrigation Use is 108% of that considered in PIP.

CADA Nashik: In Chankapur project, the actual non irrigation use is lower (25.98 Mcum) than that considered in PIP (59.94Mcum). As per field officers, the provision for non irrigation 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.

NIC Nanded: In Manar project there is very less utilization for non irrigation (0.614 Mcum) against projected provision (2.62Mcum). In Vishnupuri project actual non-irrigation use (26.33 Mcum) is 217% of projected provision (12.15 Mcum) and it is against nil provision in PIP. In Purna project the non-irrigation use is (21%) more than PIP.

Normal Plangroup:

AIC Aurangabad: In NM Express canal non irrigation use (13 Mcum) is against nil provision in project report & PIP provisions and it is nearly 45% of total utilisation.

AIC Akola: In Pus project non irrigation use was excessive (320%) against the project report provisions but no provision was made in PIP during the year 2009-10. Similarly it was too excessive against the PIP target and project provisions during the last year i.e.2008-09.

CADA Jalgaon: In Hatnur project, the actual N.I. use is 99 & 92% as compared to provisions in project report and PIP respectively.

CADA Nagpur: In Lower Wunna project the actual non irrigation use is 51% of the project provisions on Wadgaon reservoir.

CADA Nashik: In Gangapur project, the actual non irrigation use exceeded to the

provision of PIP (118%). 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.

CADA Pune: In Kukadi project N.I. use increased alarmingly compared to last three years.

CIPC Chandrapur: In Bor Project, the actual non irrigation use is 17% as compared to projected provision.

NIC Nanded: In Upper Penganga Project actual use non irrigation use (65.882Mcum) is (18%) more than PIP provision & it is against no provision in project report.

PIC Pune: In Khadakwasla, the N.I. use is 216 % of provision in PIP. For 2008-09 also it was 142%. The provision in PIP should be consistent with use in past.

UWPC Amrawati: In Upper Wardha project actual non irrigation use was 92% of PIP provisions and 31% provision in project report during the year 2009-10, but last year it was 57 & 28% respectively.

YIC Yavatmal: During the year 2009-10 actual non irrigation water use in Arunavati project was 7% against project report & PIP provisions. Actual non irrigation use was less than project provisions and PIP during previous year also.

Surplus Plan group:

CADA Nagpur: Under Bagh complex there was no non irrigation use in Kalisarar reservoir, however, in Pujaritola and Sirpur reservoirs the total non irrigation use is 7.11 Mcum. The project authorities have not submitted the non irrigation use provisions of project report and PIP. On Khindsi reservoir the non irrigation use is 3.15 Mcum. The project authorities have not submitted the non irrigation use provisions of project report and PIP. In Navegaon Khairy reservoir the non irrigation use is 137% and 92% as compared to project and PIP provisions. In Itiadoh project the actual non irrigation use is 100% as compared to PIP provisions. Project provisions are not submitted by the project authorities.

Abundant Plangroup:

CADA Pune: In Dhom and Kanher, the provision for N.I. use is quite high compared to use for last four years.

CIPC Chandrapur: In Asolamendha and Dina projects there was no non irrigation use.

TIC Thane: In Bhatsa and Surya, the percentage of actual N.I. use to PIP provision is very low i.e. 38% and 16% respectively, which was consistent with PIP in past three years.

Indicator VII: Percentage of Unutilized Water to Maximum Live Storage

Highly Deficit Plangroup:

CADA Solapur: In Bhima project 134.79 Mcum water remained unutilised at the end of irrigation year.

Deficit Plangroup:

CADA Jalgaon: No unutilised water remained in reservoir at June end in Girna project.

NIC Nanded: All the projects under this circle have no unutilized water left by June end except Vishnupuri project which had 17% of unutilized water by June end and this is due to non planning use of total water in the reservoir.

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

AIC Akola: Unutilised storage in Katepurna project was 13% during the year 2009-10. Unutilised storage was not there during previous year.

In Nalganga project available storage was fully utilized during last three years.

CADA Beed: All the projects under this circle have no unutilized water left by June end.

CADA Nashik: In Chankapur project the unutilized water remained in reservoir at June end to the tune of 16%. However, the non irrigation use in July 2010 is 6.59Mcum. Thus the net balance water remained unutilized is 5.66 Mcum, which is 7% of the live storage.

BIPC Buldana: In Wan project 20% of available live storage remained as unutilized at the end of irrigation year 2009-10, which was comparatively higher than last two years.

Normal Plangroup:

YIC Yavatmal: In Arunavati project, available storage is utilized fully from last two years.

NIC Nanded: In Upper Penganga Project unutilized water by June end is nil.

CADA Pune: In Kanher project, 38.5 Mcum of water remained unutilised, means loss of around 2000 Ha of irrigation.

PIC Pune: In Neera complex, 104.37 Mcum of water remained unutilised, means loss of around 10000 Ha of irrigation. In Pawana remarkable quantity of water remained unutilised in last four years.

CADA Nashik: In Bhandardara, Kadwa, Gautami & Upper Godawari Complex projects, the percentage of unutilised water at June end is 10%, 2%, 16% & 9% respectively.

AIC Akola: In Pus project, available storage is fully utilized during this year.

CADA Jalgaon: In Hatnur project, the unutilised water remained in reservoir at June end is 11%.

CIPC Chandrapur: In Bor project unutilised water was to the tune of 14%. Necessary care should be taken by the project authorities to keep the unutilized water as minimum as possible.

CADA Nagpur: In Lower Wunna project (Wadgaon reservoir) unutilised water was to the tune of 15%. Necessary care should be taken by the project authorities to keep the unutilized water as minimum as possible.

UWPC Amravati: In Upper Wardha project 30% of live storage remained unutilized at the end of irrigation year 2009-10. Available storage is not being utilized fully from last three years.

Surplus Plan group:

CADA Nagpur: In Bagh, Pench and Itiadoh project unutilised storage appears to be 15%, 4% and 36% respectively. Necessary care should be taken by the project authorities to keep the unutilized water as minimum as possible.

Abundant Plangroup:

CIPC Chandrapur: In Asolamendha and Dina projects available storage is fully utilized.

SIC Sangli: In Warna project, the quantity of unutilised water at the end of year has increased over last four years from 66 Mcum to 260 Mcum.

Indicator VIII: Conveyance efficiency of main Canals (%)

Highly Deficit Plan group:

Deficit Plan group:

AIC Akola: Conveyance efficiency realized on Nalganga project in Rabbi season was 75% during the irrigation year 2009-10.

BIPC Buldhana: In Wan project, conveyance efficiency was 94% during Rabbi Season. But it is very low in Hot Weather Season.

CADA Aurangabad: In Jayakwadi stage-I, the conveyance efficiency is 86% & 65% for Left Bank canal in Rabbi & Hot Weather season respectively and 43% in Right Bank Canal for Rabbi season.

CADA Beed: Lower Terna project had conveyance efficiency of 58% for both Left Bank Canal & Right Bank Canal in Rabbi season. Manjra projects had 66% & 55% conveyance efficiency for Left Bank Canal & Right Bank Canal in Hot Weather season whereas it only 35% in Hot Weather for Right Bank canal of Majalgaon. Lesser availability & protective rotations have reduced conveyance efficiency.

CADA Jalgaon: Conveyance efficiency of Panzan left bank canal (Girna Dam) is 56% in Rabbi and 63% in Hot Weather season. However, the conveyance efficiency of canals from Jamda weir & Dahigaon weir is as below.

Canal	Jamda weir		Dahigaon weir	
	Rabbi	Hot Weather	Rabbi	Hot Weather
Left Bank Canal	0%	83%	13%	43%
Right Bank Canal	0%	77%	No Right Bank Canal	No Right Bank Canal

CADA Nashik: In Chankapur project, the conveyance efficiency of left bank canal is 71% & 77% in Rabbi and H.W Season respectively. The efficiency of right bank canal in Rabbi Season is 70%.

NIC Nanded: There is no utilisation of irrigation water through canals in Manar & Vishnupuri projects.

Normal Plangroup:

CADA Jalgaon: In Hatnur project, the conveyance efficiency of right bank canal is 53% & 63% in Rabbi & Hot Weather Season respectively.

CADA Nagpur: In Lower Wunna project field authorities have not maintained the data for this indicator.

CADA Nashik: In Bhandardara project, the conveyance efficiency of Left Bank Canal in Rabbi and Hot Weather season is 33% & 44% respectively. However, for Right Bank Canal it is 46% & 41% respectively. This is because of the water is let out through canals from ozar pick up weir, 85 km D/s of Bhandardara dam.

In Gangapur project the conveyance efficiency of Left Bank Canal in Rabbi and Hot Weather season is 55% & 48% respectively.

In Mula project, the conveyance efficiency of left bank canal in both the

seasons (Rabbi & Hot Weather) is lower than that of right bank canal. Field officers are required to give more attention to improve the efficiency of the left bank canal.

CADA Pune: In Ghod project the conveyance efficiency of right bank canal is less than that of left bank canal for last three years. In Kukadi complex there is slight improvement in conveyance efficiency over last two years.

CIPC Chandrapur: The conveyance efficiency of left bank canal of Bor project in Rabbi and Hot Weather season is 65% and 9% respectively. Losses in Hot Weather season should be minimized.

NIC Nanded: There is no prominent utilisation of water through canals for irrigation in Upper Penganga Project as maximum use being for non irrigation use as per demand.

PIC Pune: The conveyance efficiency of Chaskaman is low compared to Khadakwasla and Neera complex of same circle and similar agro climatic conditions. In Khadakwasla, there is improvement this year on account of improvement in accounting process. Moreover, in Khadakwasla and Neera complex, conveyance efficiency is more than 46%.

UWPC Amravati: Data for calculation of conveyance efficiency is not maintained in this project.

Surplus Plan group:

CADA Nagpur: For Bagh project the conveyance efficiency of Right Bank Canal in rabbi season is 81%. In Pench project data is not maintained by project authorities and for Itiadoh project data seems to be misleading so conclusions could not be drawn.

Abundant Plangroup:

CADA Pune: Conveyance efficiency of Dhom and Kanher projects is lowered down as compared to last three years.

CIPC Chandrapur: In Asolamendha & Dina Project flow irrigation was not done in rabbi and Hot Weather season.

TIC Thane: In Kal-Amba, the conveyance efficiency of right bank canal is much better (60%) than left bank canal (25%).

Indicator IX: Actual cropping pattern

Highly Deficit Plangroup:

CADA Solapur: In Bhima (Ujjani), there is slight increase in area under perennial crops from 36.4% to 42% in last four years.

Deficit Plangroup:

CADA Jalgaon: In Girna project, about 46% crops are under Rabbi season. The perennial crops are about 2%.

NIC Nanded: In Vishnupuri project perennial & Rabbi seasonal crops are 45% & 54% respectively where as in Purna Rabbi seasonals are maximum.

CADA Nashik: In Chankapur project, 62% crops are under Rabbi season.

CADA Aurangabad: In Jayakwadi Project, percentage of Rabbi seasonals, Two Seasonal crops & perennial crops is 27, 22 & 35% respectively.

BIPC Buldana: In Wan project Rabbi crops were irrigated over 80% of total irrigated area with nominal area under two seasonals and Hot Weather crops.

AIC Akola: In Nalganga project, out of total irrigated area 60% were two seasonal and 39% Rabbi seasonal.

CADA Beed: The percentages of perennial crops in Majalgaon and Manjra project are 84% & 74% respectively which is too high, whereas it is 33% in Lower Terna project.

Normal Plangroup:

UWPC Amrawati: In Upper Wardha project Rabbi crops were dominant (84%) with two seasonals 5% and 11% Perennial crops.

CADA Jalgaon: In Hatnur project, major percentage of crops (46%) is under Rabbi season and 17% crops (Sugarcane and Banana) are under perennial.

CADA Nashik: In Bhandardara project, the percentage of crops under Rabbi and perennial is 46% and 18% respectively. The predominant crops under Rabbi season are Wheat, Rabbi Jowar and Gram. In perennial, the predominant crop is sugarcane.

In Mula project, the percentages of crops in Rabbi, Hot Weather and Perennial are 38%, 21% & 21% respectively.

In Darna project, the percentages of crops in Rabbi, H.W & Perennial season are about 62%, 8% and 12% respectively. In Gangapur project percentage of crops in Rabbi & Perennial season is 44% & 23% respectively.

In Kadwa project, the prominent crops (59%) are under Rabbi season.

In Gautami project 92% crops are under Rabbi season & 8% under perennials.

In Kashyapi project 95% crops are under Rabbi season & 5% under perennials.

CADA Nagpur: Rabbi seasonal crops irrigated In Lower Wunna project were 95% and percentage of perennials was 1%.

PIC Pune & CADA Pune: Increase in perennial crops is observed in Kanher, Dhom and Pawana projects as compared to last three years.

YIC Yavatmal: in Arunawati project, 74% major crops were under Rabbi seasonals with 15% two seasonal and 11 % Hot Weather & perennial crops during the year 2009-10.

CIPC Chandrapur: Rabbi seasonal crops irrigated In Bor project were 97% and percentage of perennials was 1%.

AIC Aurangabad: In NMC Express Canal Rabbi seasonal crops are 96%.

NIC Nanded: In Upper Penganga Project percentage of crops in Rabbi is 61% which is similar to past.

AIC Akola: In Pus project during irrigation year 2009-10, rabbi seasonal were 63%, 32% two seasonals and 5% perennials.

Surplus Plan group:

CADA Nagpur: In Bagh, Itiadoh and Pench projects Kharif seasonals were 100, 100 and 60% respectively. Rabbi Seasonals percentage on Pench Project was 39%. These projects seem to be Kharif predominant.

Abundant Plan group:

CIPC Chandrapur: Asolamendha and Dina projects are totally Kharif oriented projects growing mainly paddy. In Kharif season itself 100% utilization is done.

Medium Projects

Indicator I: Water Availability in Reservoirs on 15th October.

Highly Deficit Plangroup:

CADA Beed: Ruti, Banganga, Ramganga, Kada & Khasapur projects have received 100% yield for the successive two years whereas Khandeshwar, Kurnoor & Chandani have received to 82 to 98% yield. Talwar, Mehkari, Benitura, Kadi & Sakat have received 57 to 66% yield. The rest of the projects have received yield below 50%. Turori & Khandala having only 2% &10% live storage this year against last years 16 and 100% respectively.

CADA Pune: Yeralwadi is receiving 100% yield since 2006-07 except 2008-09 when it was 89%.

PIC Pune: All the seven projects are receiving 100% yield since 2006-07 with the exception of Andhali, Mhaswad and Nher receiving 24, 31 and 21% in one of the four years.

Deficit Plangroup:

JIPC Jalgaon: In Bahula project, the availability of water is 10% only.

NIC Nanded: Karadkhed project had 41% storage followed by Kudala project having 33% storage, these had 71% & 99% yield respectively in the year 2008-09. The rest of the projects have very low yield or no yield at all.

AIC Akola: Live storages in medium projects during irrigation year 2009-10 was less than 33% in Uma, Morna, Dnyanganga and Mas projects. It varied from 34 to 80% in Shahnoor, Nirguna and Paldhag projects.

Storage availability is decreasing since 2007-08 in Uma, Nirguna, Dnyanganga, Mas and Paldhag projects. Water availability in Sapan project which is newly incorporated during the year 2009-10 was 42% of the total capacity.

CADA Aurangabad: Khelna, Gadhagad & Purna Nevapur, have received 100% yield in the current year (2009-10). Karpara & Galhati have received 98% & 86% yield. The rest of the projects had low yield, whereas Jivrekha & Dhamna were almost dry this year.

CADA Beed: Kundalika, Bindusara, Waghebabhulgaon, Mahasangvi & Sangmeshwar have received 100% yield for the current year. Saraswati, Wan, Bodhegaon have received yield 71% to 86%, Sindhphana & Borna have received 60% & 63% yield respectively. Sakol, Tiru, Whati, Gharni, Masalga & Devarjan have no availability this year which had 72 to 100% yield and Devarjan 23% last year. Tawarja, Raigavan & Belpara having low yield of 7%, 14% & 26% respectively this year against last years 91%, 100% and 28 % respectively.

BIPC Buldhana: Live storages during irrigation year 2009-10 were, Mun 42% (lower than last year), Torna 87% (similar to last year), Utawali 100% (similar to last two years storage)

CADA Nashik: All the three projects had 100% live storage since last three years. However, this year Haranbari, Kelzar & Nagyasakya projects are having 89, 75 & 11% availability respectively.

CADA Jalgaon: Last year 8 projects (out of total 10) had 100% availability. However, this year 6 projects are having 100% availability. Tondapur, Bhokarbari, Bori & Rangawali projects are having 14%, 4%, 53% & 92% availability respectively.

UWPC Amravati: Chandrabhaga & Purna projects were almost filled to full capacity.

NIPC Dhule: In Shivan and Prakasha Barrage, the availability of water is 59% & 100% respectively.

Normal Plangroup:

YIC Yeotmal: Adan project had very less storage i.e. 4% and Nawargaon project had 17% (very low as compared to previous year's storage of 99%)

BIPC Buldhana: Live storage in Pentakali was 16% (lowest value since 2007-08),

WIC Washim: Sonal & Ekburji projects had storages of 7 & 44% respectively.

AIC Akola: Live storages in Koradi, Borgaon, Lower Pus, Waghadi and Saikheda were less than 33%. It is lowest as compared to last two years' storage. Goki had 38% live storage (more than last year's storage of 24%).

NIPC Dhule: In Manikpunj project the yield received is 39%.

CADA Pune: Yield received in Visapur was only 23 % whereas it had 100% yield in last three years.

AIC Aurangabad: ShivanaTakli has 52% availability in this year against 96% last year.

CADA Aurangabad: Ambadi, Dheku & Tembhapuri have received the yield in range of 72% to 77% this year as compared to last year (78 to 99%). Kolhi has received 23%, whereas in Bordahegaon there was no yield this year. In the Year 2008-09 majority of projects under the circle had better yield.

CADA Nashik: The yield received in total 6 projects ranges from 14% to 89%.

NIC Nanded: Nagzari, Dongargaon & Loni have received the yield in the range of 73 54% to 73%. All these three projects had nearly 100% yield in the year 2008-09.

CIPC Chandrapur: Live storages in projects except Amalnalla (25%) are above 95% during this year.

NIC Nagpur: Live storages in projects except Dongargaon (Chandrapur) (22%) are above 99% during this year.

CADA Jalgaon: In five projects (out of total 7) the water availability is 100%. In Panzara & Sonwad projects the availability is 67% & 42% respectively.

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

PIC Pune: Kasarsai and Wadiwale received 100% yield consecutively for last four years except in 2008-09. In Nazare, 100% storage was available for four consecutive years. Shetphal, which is newly included this year, also received 100% storage in 2009-10.

Surplus Plan group:

CADA Nagpur: Live storages in projects in this plan group were varying from 5% to 100%. Betekar Bothli and Sorna projects had no live storage on 15th October.

GKLIC Bhandara: The live storage in Katangi Project on 15th October was 59%.

CIPC Chandrapur: Live storage in Labhansarad, Pakkadigudam, Chandai and Chargaon projects were 54, 18, 50 and 81% respectively.

Abundant Plangroup:

CIPC Chandrapur: Under this Plan group Naleshwar & Ghorazari projects had 11 and 8% live storage respectively.

NKIPC Thane: In Hetwane, there is continued improvement in availability of yield from 52 to 91% in last four years.

KIC Ratnagiri: Natuwadi is receiving almost full storage every year since 2006-07.

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

Highly Deficit Plangroup:

PIC Pune: In Nher project, the evaporation has almost doubled this year. With the same storage, its value in 2006-07 and 2007-08 was 3.77 and 3.59 Mcum. However, in Tisangi project, there is continual increase in evaporation over last four years (8.383 Mcum this year). The evaporation ranged between 6.15 to 8.27 Mcum in last three years.

CADA Beed: Turori has 654% evaporation to the available storage on 15th October (availability of water is only 2%, i.e.0.093Mcum and evaporation loss is 0.608Mcum). Ramganga, Kambli & Talwar have 99%, 93% & 79 % evaporation respectively, among these Ramganga had 100% availability and other two projects have lesser yield. The Project Authorities should plan according to the availability by utilizing maximum water in rabbi season and avoid such heavy losses in evaporation as these projects are in highly deficit plan group.

Deficit Plangroup:

NIPC Dhule: The percentage of actual evaporation in Shivan and Prakasha Barrage is 7% & 6% respectively.

CADA Nashik: In Nagyasakya project, the actual evaporation is 228% of live storage as the availability in reservoir is only 11%.

BIPC Buldhana: Evaporation percentages on Mun & Utavali were very high 25 & 36% respectively.

AIC Akola: Evaporation in Dnyanganga and Mas projects appears to be high because live storage in these projects was very low. Live storage was not available in Uma project, therefore evaporation percentage with live storage appears to be 0, but evaporation loss is certainly there in this project. Evaporation in Sapan project was 43% and appears to be very high.

CADA Jalgaon: In Tondapur & Bhokarbari projects, the actual evaporation seems to be 136% & 345% of the live storage as the availability in reservoirs in these projects is only 14% & 4% respectively. In rest of the projects the percentage of actual evaporation to live storage varies from 10% to 30%.

NIC Nanded: Pethwadaj had evaporation loss of 89%, it had yield of 9%.Karadkhed had 53% evaporation which had 41% yield.

CADA Aurangabad: Masoli, Upper Dudhana & Girija have evaporation losses 634%, 202% & 113% respectively since they have very less quantity of live storage on 15th October followed by inflow after 15th October hence the percentage goes very high. Khelna, Purna Nevpur, Jui, Galhati, Kalyan Girija & Karpara projects having evaporation losses ranging in between 24 to 48%, where as it is 79 & 80% in Lahuki and Sukhana project. The project authorities should be vigilant to utilize the water efficiently, measurement of evaporation losses are not carefully done. Pan Evaporimeter is to be installed in the periphery of the projects (50-60 sq km) for accurate measurements of evaporation losses instead of showing arbitrary evaluated figures in the Annual water accounts.

CADA Beed: Tawarja & Belpara projects having 410% and 126% evaporation as it has low yield by15th October, Raigavan, Sangameshwar, Terna, Waghe babhulgaon and Rui projects have 59% to 90% evaporation. The field officers should be vigilant

and utilize the water efficiently. The calculation of evaporation losses should be done by taking correct Mesh factor, seasonal factor and adopting correct capacity tables.

JIPC Jalgaon: The percent evaporation of Bahula project is 182 % of available live storage as the water availability was less (10%).

Normal Plangroup:

NIPC Dhule: In Manikpunj project, the actual evaporation is 10% of the available live storage.

CADA Nashik: The percentage of actual evaporation in total 6 projects varies from 12% to 36%.

JIPC Jalgaon: The percentage of evaporation in Bhokar & Mor projects are 21% & 13% respectively.

CIPC Chandrapur: Average evaporation percentage in all projects was 21%. In Amalnalla & Pothra projects the evaporation is exceptionally high i.e. 43 & 29% respectively.

NIC Nagpur: Evaporation percentage in Dongargaon (Chandrapur) project was 67% with respect to live storage on 15th October (22%). In Jam & Kar projects percentage evaporation was 25 and 17% respectively.

CADA Jalgaon: The percentage of actual evaporation in total 7 projects varies from 12% to 33%.

WIC Washim: The percentages of actual evaporation to live storage on Ekburji & Sonal project were 29 and 36% respectively.

AIC Aurangabad: Shivana Takli had 36% evaporation of available live storage.

NIC Nanded: In Nagzari project the evaporation losses are 44% which had 73% storage.

CADA Aurangabad: Kolhi project had 170% evaporation and in Dheku project the evaporation loss is 56%. Dheku had 77% live storage. Ambadi had 44% evaporation loss.

BIPC Buldhana: Live storage in Pentakli project was only 16%, therefore evaporation appears to be 62%.

AIC Akola: The evaporation percentage appears to be very high in Borgaon (78%), Lower Pus (107%), Waghadi (44%), Goki (64%), and Saikheda (97%), because available storage in the reservoir was low.

YIC Yeotmal: In Adan project even though evaporation percentage appears to be 282% it is normal. Because available storage was only 4% (2.52 Mcum), and actual evaporation is only 7.098 Mcum. In Navargaon project also similar situation is there.

Surplus Plan group:

CADA Nagpur: Evaporation percentage on all projects was on an average 26%. On Bagheda 115% (Live storage 9%), Chandpur 176% (Live storage 2%), Khairbanda 115% (Live storage 12%), Managad 142% (Live storage 5%) and Sangrampur 128% (Live storage 7%). All above percentages are more than 100% as evaporation losses were mainly from dead storage.

CIPC Chandrapur: Evaporation percentage on all projects was on an average 34 %. The same was exceptionally high on Chandai 117% (Live storage 50%) & Pakkdiguddam 43% (Live storage 18%).

GKLIC Bhandara: Evaporation percentage on Katangi project is 62%.

Abundant Plan group:

CIPC Chandrapur: On Naleshwar and Ghorazari, evaporation is on higher side i.e. 259 & 91%, as live storage in these projects was 11 & 8% respectively Overall evaporation is 130%.

Indicator III: Percentage Achievement of actual area irrigated as compared to area as per PIP

Highly Deficit Plangroup:

CADA Beed: As PIP is not done this year on all the projects the percentage of PIP is nil. Many of the projects have received good yield. The Project Authority is advised to prepare the PIP before the season starts and implement accordingly.

PIC Pune: In Andhali, Khairy, Mhaswad, Nher and Ranand, there is improvement in performance this year compared to last three years. However, in Tisangi, the achievement of irrigation potential this year is reduced by almost 35% compared to last year, availability being same, 100 percent, in both the years. Area irrigated in 2009-10 was 2088 Ha. against 2460 Ha in 2008-09.

Deficit Plangroup:

NIC Nanded: No project in this circle has PIP figures as the water available is reserved for non irrigation use.

UWPC Amrawati: In Chandrabhaga project though the achievement appears to be 0%, it is because of no target in PIP. An area of 2162 Ha. is irrigated which includes 1974 Ha. on wells, (created potential 6732 Ha.), Similarly in Purna project achievement seems to be 0 as no target was set in PIP. An area of 1134 Ha. is irrigated which includes 688 Ha on wells, (created potential 7530 Ha.), in spite of 100% availability in both the projects.

AIC Akola: Total actual area irrigated in Shahanoor project was appreciably less i.e. 23% of the target in PIP. As the available storage in Uma, Morna and Dnyanganga projects was less than 33% irrigation was not done. Achievement on Nirguna project against the target was 39%. In Mas & Paldhag projects achievements were 89 & 49%. Achievement on Sapan project was as low as 6% of PIP.

NIPC Dhule: In Shivan & Prakasha Barrage the achievement is 16% & 63% respectively. The water availability in these projects is 59% & 100% respectively. Field officers are required to improve utilization of available water.

JIPC Jalgaon: Bahula project achieved 88% target.

CADA Nashik: In Haranbari & Kelzar projects the planned target is fully achieved. However, in Nagyasakya the achievement was 63%.

CADA Jalgaon: Out of 10, 7 projects have achieved the planned target. In Bhokarbari project the achievement is 55%.

BIPC Buldana: In Torna and Utawali projects achievements were 48 and 58% respectively.

CADA Aurangabad: Khelna and Sukhana have 188 and 212% achievement in actual area irrigated and Planned PIP. In Khelna project even though actual water used (4.18Mcum) is less than the PIP provision (11.07Mcum) achievement to higher side shows that PIP prepared is not realistic. The rest of the projects have no PIP figures and hence achievement is zero.

CADA Beed: Bodhegaon, Saraswati, Belpara, Borna, & Waghebabulgaon have more than 100% achievement; especially Borna and Belpara have 257 and 190% achievement. The rest of the projects have no PIP figures and hence achievement is

zero. The Field officers are advised to prepare realistic PIP considering all sources of water use.

Normal Plangroup:

BIPC Buldana: Irrigation was not done on canals in Pentakali project as the available storage was very less.

NIC Nanded: None of the projects in this circle have PIP, as water is reserved for non irrigation use due to low availability.

YIC Yeotmal: In Adan and Nawargaon projects irrigation was not done as the storage was less.

JIPC Jalgaon: In Mor project, 29% target is achieved.

AIC Akola: Achievement in Borgaon and Goki projects was 110 and 95% respectively. In Lower Pus and Waghadi projects achievement was 33 and 15%. In Saikheda project no irrigation was done with 34% availability.

CADA Jalgaon: Out of 7 projects the target is nearly achieved in 4 projects. Improvement is required in the performance of Karwand, Aner & Malangaon Projects.

CIPC Chandrapur: The target achievement in respect of Dongargaon (Wardha), Pothra & Dham projects was 71, 52 & 148% respectively.

NIC Nagpur: The target achievement in respect of Jam and Kar projects was 92 and 103% respectively.

CADA Nashik: Mostly all the projects have achieved the target. In Ghatshil Pargaon and Adhala though the achievement seems to be higher it is because of lesser number of rotations.

PIC Pune: In Kasarsai and Wadiwale, there is improvement in performance.

However, in Nazare, the performance is considerably low this year as compared to past. In 2006-07 and 2007-08, the area irrigated was 2951 and 4189 Ha respectively but in 2009-10 only 2025 Ha is utilised in spite of 100% availability.

WIC Washim: In Sonal project irrigation was not done storage being very meager. In Ekburji project 486 Ha. (101 Ha. on wells) is irrigated out of the created potential of 2429 Ha. As the target set in PIP was low achievement appears to be 161%.

CADA Aurangabad: The achievement in project Kolhi is 241% and Dheku is 60%, where as in Ambadi project provision for irrigation use is not considered in PIP.

NIPC Dhule: In Manikpunj project, the achievement is 346% with a single rotation.

Surplus Plan group:

CIPC Chandrapur: The overall achievement of the projects is 76%. However, improvement is required in Labhansarad project. In respect of Chargaon project the provisions made in PIP need verification as the target achieved is more than that of PIP provisions.

CADA Nagpur: The overall achievement of the concerned projects is 97%. However, improvement is required in respect of Chorakhmara & Chandrabhaga (Nagpur) projects. The project authorities in respect of Kesarnalla, Khekranalla, Kolar & Wunna projects have not submitted the provisions of PIP. Also in respect of

Makardhokda Saiki complex project and Rengepar project the provisions made in PIP needs verifications as the target achieved is nearly twice of PIP provisions.

GKLIC Bhandara: In respect of Katangi project the achievement is 137% and the provisions made in PIP need verification as the target achieved is more than that of PIP provisions.

Abundant Plangroup:

NKIPC Thane: In Hetwane project, in spite of increase in availability in last four years, the improvement in irrigated area is very less (95 Ha in 2006-07 to 140 Ha in 2009-10). Moreover, the achievement is only 25% of target.

KIC Ratnagiri: In Natuwadi, in spite of reduction in N.I. use in last four years there is no improvement in utilisation of irrigation potential. It is decreased from 125 Ha in 2007-08 to 105 Ha in 2009-10.

CIPC Chandrapur: The target is fully achieved in respect of Ghorazari project however, for Naleshwar project authorities have not reported the PIP figures.

Indicator IV: Water use pattern.

Highly Deficit Plangroup:

CADA Beed: Kurnoor, Khasapur and Sakat are some the projects having utilization over canal in rabbi season. Rest of the projects has a little irrigation on canal. Kurnoor has maximum utilization in Hot Weather season for canal irrigation. Kurnoor, Benitura, Chandani and Khasapur have utilization on reservoir lifts. Kurnoor, Turori, Chandani and Khasapur have non irrigation utilization.

PIC Pune: In spite of 100% availability, the water use for irrigation is reduced to 1/3 and half of that compared to 2006-07 and 2007-08 respectively. In Andhali & Nher projects, the utilisation for irrigation is only 28% of available 100% storage. In Ranand and Sina, the water use is reduced this year compared to past three years.

Deficit Plangroup:

AIC Akola: In Shahanoor project 24% storage was used in Rabbi, 32% in Hot Weather season along with 1% on reservoir lifts. In Uma project, 0.453 Mcum storage was utilized for non irrigation use which appears to be from dead storage. In Morna project 11% water was utilized for reservoir lifts and rest was utilized for non irrigation use. In Nirguna project 59% water was utilized in rabbi season along with 1% on Reservoir lifts. Only 18% storage was used for non irrigation in Dnyanganga project. In Mas project 12% storage was utilized for reservoir lifts. In Paldhag project 18% water was utilized in Rabbi and 6 % in Hot Weather season with 4% on reservoir lifts. Major use was for non irrigation (37%) . Only 6% water utilization in rabbi season on Sapan project .

BIPC Buldhana: In Mun project 42% water was utilized in Rabbi Season with 59% for non irrigation. Utilization was 9 % in rabbi season with 4 % for reservoir lifts in Torna project. Water use on canal in Rabbi Season was 7 % in Utawali project with 27% in Hot Weather season and 63% for non irrigation use.

CADA Aurangabad: Karpara, Khelna and Sukhana are some of the projects which have canal utilization in rabbi season whereas most of the projects have utilization by reservoir lifts for irrigation and non irrigation use.

CADA Beed: Kundlika, Sindhphana and Bindusara are some the projects having canal irrigation during rabbi season. Kundlika Wan, Bodhegaon, Saraswati, Belpara, Borna, Mahasangvi, & Sangmeshwar have reservoir lifts. Sangmeshwar project has maximum reservoir lifts of 6.40 Mcum and it is the only project having river lifts. Sangmeshwar, Devarjan, Mahasangvi, Borna, Bindusara and Belpara projects due not have utilization for non-irrigation. In Chandani, Terna, Kundlika, Wan, Tawarja, Renapur there are maximum evaporation losses out of total utilisation.

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

CADA Nashik: In Haranbari & Kelzar projects, the major water use is on river lifts (66% & 59% respectively). In Nagayasakya project, the major water use on canals is in Hot Weather season.

JIPC Jalgaon: In Bahula project, the major water use (52%) is on reservoir lifts.

NIC Nanded: None of the projects in this plan group under this circle have canal irrigation. Kundrala & Kudala project has some irrigation through reservoir lift and some non irrigation use.

NIPC Dhule: In Shivan & Prakasha Barrage, the major water use is in rabbi season (flow irrigation) and on reservoir lifts respectively.

UWPC Amrawati: In Chandrabhaga project 39% water was predominantly used in Rabbi season for canal irrigation and 27% for Hot Weather season. In Purna project water use in Hot Weather season was nearly double (29%) than Rabbi Season (15%) through canal.

Normal Plan Group:

AIC Aurangabad: Shivana Takli has 35% of water use in rabbi & Hot Weather by canal and 10% non irrigation use out of total utilisation, rest is lost in evaporation.

AIC Akola: Only 6% water was used through canal in Rabbi Season in Borgaon project with major water use for non irrigation. Only 13% water was used for reservoir lifts in Lower Pus project. Water use in Rabbi Season through canal was 18% with 6% water utilization on reservoir lifts in Goki project. Only 5% water utilization was observed for reservoir lifts along with non irrigation use in Waghadi project. Only 34% storage was used for non irrigation in Saikheda project.

BIPC Buldhana: In Pentakli project 34% storage was utilized for reservoir lifts and 28% was utilised for non irrigation.

CADA Aurangabad: Tembhapuri and Ambadi projects have canal irrigation in rabbi season where as in Dheku it is in Hot Weather season. Bor Dahegaon is the only project having no utilization. Dheku and Tembhapuri have lost nearly 50 to 65% of water in evaporation out of total utilisation.

CADA Jalgaon: In Abhora, Malangaon, Panzara, Sonwad & Suki projects, the major water use (flow irrigation) is in rabbi season. However, in Aner & Karwand projects the major water use (flow irrigation) is in Hot Weather season.

CADA Nashik: In Adhala, Alandi & Bhojapur Projects, the major water use (flow irrigation) is in rabbi season. However, In Mandohol project, the major water use (flow irrigation) is in Hot Weather season. In Ghatshil Pargaon project 82% utilisation is on reservoir lifts.

CIPC Chandrapur: In Amalanalla project water is not utilized for irrigation. The available water is fully utilized for non irrigation. In Dham project major utilization (60%) is in rabbi season by flow irrigation. However, in Dongargaon (Wardha) project 98% water is utilized in rabbi by flow irrigation. In Pothra project also the major utilization is in rabbi season by flow irrigation.

JIPC Jalgaon: In Bhokar (Mangrul) project, there was no irrigation. As per field authorities the available water was released for canal testing.

NIC Nagpur: In Dongargaon (Chandrapur), Jam & Kar projects the major utilization of water is in Kharif and rabbi season by flow irrigation

NIC Nanded: All the projects of this plan group in this circle have no utilization over canal or reservoir lift. Nagzari is the only project having non irrigation use. Dongargaon project has lost most of its available water in evaporation. Planning & utilization of available water must be done judiciously.

NIPC Dhule: In Manikpunj project, 60% utilization is on reservoir lift.

WIC Washim: In Ekburji project, water utilization was 4% through canal in Rabbi Season and 24% for reservoir lifts. Major utilization was for non irrigation in this

project. In Sonal project, 9% utilization was for reservoir lifts with major utilization (44%) for non irrigation purpose

YIC Yeotmal: In Adan and Nawargaon project 37% and 61% of available water was used for non irrigation purpose.

Surplus Plan group:

CADA Nagpur: There are totally 22 projects under this circle in this plan group. The overall water utilization is 33% in Kharif season & 32% in rabbi season by flow irrigation.

Predominant use in Kharif was observed in respect of Bagheda, Betekar Bothli, Bodalkasa, Chandpur, Chorakhmara & Managad projects. Predominant use in rabbi season was observed in respect of Chandrabhaga (Nagpur), Kanholibara & Khekranalla projects.

NI use on Pandhrabodi & Wunna projects is 25 & 62% respectively.

CIPC Chandrapur: Panchadhra complex had utilized major portion of storage in rabbi season (6.8 out of 9.3 Mcum) whereas in Chargaon project non irrigation use was predominant (60%)

GKLIC Bhandara: In respect of Katangi project 50% water was utilized in rabbi season.

Abundant Plan group:

CIPC Chandrapur: In Ghorazari project, the available live storage is utilised in Kharif and rabbi Seasons. However, it is predominant in Kharif season. In Naleshwar project 94% of available storage is utilised for rabbi season.

NKIPC Thane: In Hetwane, there is continual improvement in water use for irrigation. The N.I. use is also increasing over last four years.

Indicator V: Irrigation System Performance (Canal)

Highly Deficit Plangroup:

CADA Beed: In Banganga, Ramganga, Khandeshwar, Kurnoor, Chandani, Khasapur, Harni and Sakat, have attained the State norms i.e., 150 ha/Mcum in rabbi season. Most of these projects had attained State Norms for the year 2008-09 too. Mehkari is the only project to have attained Hot Weather season ISP. Harni has almost attained Hot Weather season ISP. In the rest of the projects it has either attained ISP on lower side or either there is no irrigation on the canals

CADA Pune: In Yeralwadi with three rotations in Hot Weather the ISP observed is very low.

PIC Pune: In spite of 100% availability in all the seven medium projects a single rotation was given in Rabbi season in Andhali, Nher, Ranand and Sina projects.

Deficit Plangroup:

AIC Akola: ISP realised on Shahanoor project in Rabbi and Hot Weather season was 76 and 9 Ha/Mcum respectively. It is similar to the last year's performance and very low against the State norm.

Canal irrigation was not done in Uma, Morna, Dnyanganga and Mas projects.

ISP realized on Nirguna project was 87 Ha/Mcum with 4 rotations. It is very much less than the state norm. It was similar during the year 2008-09.

In Paldhag project ISP realized was 222 Ha/ Mcum. It appears to be above norm but area irrigated is meager. ISP attained on Sapan project was 64 Ha/Mcum in rabbi season.

BIPC Buldana: ISP attained on Utawali project in Hot Weather season was 103 Ha/Mcum. It was lower than State norm. ISP during previous year was 195 Ha/Mcum in rabbi season.

CADA Aurangabad: Galhati, Sukhana, Khelna, Gadadgad & Kalyan Girija are some of the projects which attained ISP of 150 ha/Mcum on canal in rabbi season. Galhati & Gadadgad have attained state norms for Hot Weather (110ha/Mcum). The rest of projects have no utilization of canal in rabbi & Hot Weather or lower ISP.

CADA Beed: Sindhphana & Bindusara are the only projects which have attained ISP up to State target for this year in rabbi, Sindhphana has attained 176ha/Mcum, this is because of two rotations given & Bindusara has attained 149ha/Mcum. Kundlika, Bodhegaon, Sindhphana, have attained State target of ISP on canal in Hot Weather. In fact Bodhegaon has attained 375ha/Mcum in Hot Weather due to single rotation. Rest of the projects has low ISP or no utilization in rabbi or Hot Weather. The field officers are advised to use the water judiciously on all the available system.

CADA Jalgaon: In Manyad project, the performance in rabbi & Hot Weather season was low (below 50% of the Govt. norms). As per field officers, the low performance was due to major leakages (63%) through canal in 0 to 8 Km.

In Bhokarbari project, in spite of 4 rotations in rabbi season the irrigation system performance is below 50% of the Government norms. (68 Ha/Mcum). Improvement is required duly minimizing the losses (leakages) through structures and disnet system.

In Bori project, in spite of 3 rotations in rabbi season the ISP is 85ha/Mcum. In

Hot Weather season the ISP is 175 ha/Mcum with one rotation. Improvement is required.

In Agnavati project, the ISP in rabbi season is 86 ha/Mcum with two rotations. As per field authorities, the low ISP is due to demand in scattered area and lack of land development works.

In Hivara project, the ISP in rabbi season is 86 ha/Mcum with two rotations. As per field authorities the low ISP is due to demand in scattered area, more transit losses in disnet system.

CADA Nashik: In Haranbari & Kelzar projects, the performance is quite good. The irrigation system performance in rabbi season is 347 ha/Mcum & 250 ha/Mcum with two rotations.

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

NIC Nanded: All the projects in this plan group under the circles have no irrigation on canal. Though some of the projects had more than 40% availability there is no utilization of water for irrigation as it is reserved for non irrigation

UWPC Amaravati: ISP realized on Chandrabhaga project in Rabbi Season was 25 Ha/ Mcum. It is very much lower than norms. On Purna project it was 167 Ha/Mcum in Rabbi Season, but only 15 Ha/Mcum in Hot Weather season. Therefore the performance of the system is poor.

Normal Plangroup:

AIC Aurangabad: Shivana Takli project have 80 & 76 ha/Mcum ISP for year 2009-10 in rabbi & Hot Weather .

AIC Akola: In Borgaon project data submitted is not factual, therefore calculated ISP value comes to 702 Ha/Mcum. Such a high value appears to be fictitious. In Goki project, ISP value is 61 Ha/Mcum in rabbi season. It is much below the required value.

CADA Aurangabad: Ambadi & Tembhapuri projects have attained ISP of State norm in Rabbi. Ambadi has ISP of 189 ha/Mcum. Dheku & Kolhi have attended ISP of State norm in Hot Weather.

CADA Jalgaon: In all the projects, the performance in quite good in rabbi season as the ISP achieved is more than 70% of the Government norms. In hot weather season, the performance is a good in all the projects except Panzara project. The ISP in Hot Weather season in respect of Panzara project is 86 ha/Mcum with one rotation. Field officers are required to give more attention to improve the performance.

CADA Nashik: In Mandohol project, the performance was as low as 104 ha/Mcum with 1 rotation in rabbi 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 rabbi.

In Bhojapur project, the irrigation system performance was 125 ha/Mcum with 1 rotation in rabbi season. The ISP is lower as compared to last year (98 ha/Mcum with 2 rotations).

The field officers are required to be more vigilant for improvement in the performance in above mentioned projects.

CIPC Chandrapur: ISP on Dham project is 69 Ha/Mcum in rabbi season. For Dongargaon (Wardha) project ISP observed is 112 Ha/Mcum in rabbi season. For Pothra project it is 75 and 80 Ha/Mcum in Kharif and rabbi season respectively.

JIPC Jalgaon: In Bhokar project, there is no flow irrigation on canals. However, in Mor project, the irrigation system performance in rabbi season is 47 ha/Mcum with 4 rotations and that of Hot Weather season is 18 ha/Mcum with 5 rotations .The ISP is too low as compared to Government norms. The field officers are required to be more vigilant for improvement in the performance.

NIC Nagpur: For Dongargaon (Chandrapur) project ISP observed is 123 and 114 Ha/Mcum for Kharif and rabbi season respectively. ISP observed for Jam & Kar projects was 77 and 53 Ha/Mcum in rabbi season. For Kar project ISP in Hot Weather season was 47 Ha/Mcum.

NIC Nanded: All the projects in this plan group under the circle have no irrigation on canal. Though some of the projects had more than 40% availability there is no utilization. In fact Nagzari project had 73% availability, but still canal irrigation is not taken up except reservoir lifts so 44% available water was lost in evaporation.

NIPC Dhule; In Manikapunj project, the ISP achieved in rabbi & Hot Weather season is 178 ha/Mcum & 158 ha/Mcum with one rotation in each season. As the ISP is less than 50% of the government norms field officers are required to be more vigilant to improve the performance.

PIC Pune: In Kasarsai, though there is 100% availability the water is used for irrigation through river and reservoir lifts and not through the canals.

WIC Washim: In Ekburji project ISP observed was 330 Ha/Mcum with 2 rotations in Rabbi season. High value is observed due to only two rotations.

Surplus Plan group:

CADA Nagpur: Over all performance in Ha/Mcum during Kharif season was 434, 138 in rabbi season and 111 in Hot Weather season. Performance is very good.

CIPC Chandrapur: Overall ISP on Chandai, Chargaon, Labhansarad, Pakkdigudam, Panchadhara complex was 361 Ha/Mcum in Kharif & 79 Ha/Mcum in rabbi. In H/W season it is 143 Ha/Mcum for Panchdhara complex.

GKLIC Bhandara: Irrigation in Kharif season only was done in Katangi project.

Abundant Plan group:

CIPC Chandrapur: Irrigation was done in Kharif season only in Ghorazari and Naleshwar projects.

NKIPC & KIC Ratnagiri: In both Hetwane and Natuwadi, the ISP is very low. Moreover, it is decreasing for last four years.

Indicator VI: Percentage of Actual to Projected Non-Irrigation Use

Highly Deficit

CADA Beed: Turori & Benitura have non irrigation use without the provision in the Planning. Chandani, Sakat, Khasapur, Khandala, Khandeshwar & Banganga have 100% utilization of planned use. This shows that the actual use is directly shown on PIP. Realistic figures are expected in framing of PIP.

Talwar & Kada have more utilization than planned.

PIC Pune: In Sina and Tisangi, the N.I. use is less than 30% and 10% respectively compared to PIP in last three years. Provision for N.I. use should be consistent with use in past in order to make more water available for irrigation.

Deficit Plangroup:

AIC Akola: Non irrigation use on Shahanoor project was 93% against the PIP provision. In Uma project it was 108% of PIP and 34% of project provisions which was higher than PIP provisions during last year also. In Nirguna project non irrigation use was too much higher than PIP and project provisions (305%). In Dnyanganga project non irrigation use was lower than PIP provision as in previous year. In Paldhag project non irrigation use was within the PIP provisions.

BIPC Buldhana: Non irrigation use in Mun, Torna & Utawali projects were 175, 7067, 1131% of PIP, due to very less provision & excessive non irrigation use. It was 1792% of project report in case of Mun Project.

CADA Aurangabad: Lahuki, Ajantha Andhari & Pir Kalyan had non irrigation use in spite of no provision in PIP. Khelna & Jui projects have non irrigation use more than PIP.

CADA Beed: Tiru, Tawarja, Gharni & Sakol have non irrigation use in spite of no provision in project report. Wan, Saraswati & Sindhphana have 100% utilization of PIP. This shows that the actual use is directly shown on PIP. Realistic figures are expected in framing of PIP. Kundlika has utilization more than PIP, its actual use is nearly 2.45 times more than PIP.

CADA Jalgaon: In Bhokarbri & Tondapur projects, the actual non irrigation use is 158% & 333% of that of PIP respectively. However, in Bori project, the actual non irrigation use is only 77% of that considered in PIP.

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

CADA Nashik: In Haranbari and Kelzar projects, the actual non irrigation use is 41% & 39% as compared to PIP provisions. Proper care should be taken while preparing PIP so that there will not be much difference in actual non irrigation use and that considered in PIP.

JIPC Jalgaon: The actual non irrigation use is more than 5 times than the provisions of PIP. Proper care should be taken by the field officers while making the provisions of non irrigation use in PIP.

NIPC Dhule: In Prakasha barrage there is no non irrigation use. However, in Shivan project provision of non irrigation use made in the PIP is fully utilized.

Normal Plangroup:

AIC Aurangabad: Shivana Takli has only 1% use of non irrigation against planned figure.

AIC Akola: Provision for non irrigation use in PIP was not done in Borgaon and Koradi projects, but actual use was 0.41 Mcum and 2.29 Mcum. In Lower Pus project non irrigation use was only 3% of provision in PIP. In Waghadi and Saikheda projects non irrigation use was within the provisions of PIP.

BIPC Buldhana: Actual non irrigation use on Pentakali project was 153% of the PIP provision as in the previous year.

CADA Aurangabad Tembhapuri is only project having non irrigation utilization in spite of no provision in project report. Kolhi has 100% utilization as planned.

CADA Jalgaon: In Suki project, the actual non irrigation use is 57% of that anticipated in PIP. Proper care should be taken in case of Suki project while preparing PIP so that there will not be much difference in actual non irrigation use and that considered in PIP.

CADA Nashik: In all the projects, the actual non irrigation use varies from 100% to 118% as compared to PIP provisions.

CADA Pune: The non irrigation use is less than 25% of PIP provision in Visapur project.

CIPC Chandrapur: Non irrigation use in Pothra was 8.02 Mcum, for Dham it was 8.63 Mcum and for Amalnalla 2.19 Mcum. It was 72 and 56% of the provisions in PIP of the Dham & Amalnalla projects. Low utilization of water against non irrigation reservation curtails the water availability for irrigation. Therefore, more attention is needed at project level while reserving water storages for non irrigation use.

JIPC Jalgaon: There is no non irrigation use in Bhokar (Mangrul) and Mor projects.

NIC Nagpur: For Jam & Kar project 108 and 92% water was utilized for non irrigation use against provisions in PIP.

NIC Nanded: Only Nagzari project has some non irrigation use. Other projects have no utilization of non irrigation even though it has been reserved for non irrigation use.

NIPC Dhule: There is meager quantum of non irrigation use (0.03 Mcum) in Manikpunj project.

WIC Washim: On Sonal project non irrigation use was 33% of PIP provision, which was 75% during previous year. In Ekburji project non irrigation use was 60% of the PIP provision.

YIC Yeotmal: In Nawargaon project non irrigation use was within the provisions of PIP.

Surplus Plan group:

CADA Nagpur: Out of 22 projects under this plan group, actual non irrigation use of 14.05 Mcum was under 8 projects only.

CIPC Chandrapur: non irrigation use of 11.99 Mcum was under 3 projects only.

Abundant Plan group:

NKIPC Thane: In Hetwane, there is continued increase in N.I. use for last four years.

Indicator VII: Percentage of Unutilized Water to Maximum Live Storage

Highly Deficit Plangroup:

CADA Beed: Ramganga, Banganga, Chandani, Khasapur, and Khandeshwar have 7% to 18% unutilized water. Sakat had 21% unutilized storage.

PIC Pune: Large quantity of water is remaining unutilised in Khairy, Mhaswad and Ranand projects since last four years.

Deficit Plangroup:

JIPC Jalgaon: In Bahula project, there is no unutilised water remained at June end.

CADA Beed: Kundlika & Wan are the only projects having 6 & 14% unutilized water. While the rest of the projects have no unutilized water.

CADA Aurangabad: Khelna, Anjana Palshi & Ajantha Andari have 12, 16, & 9% unutilized water left. Rest of projects do not have unutilized water.

AIC Akola: Unutilized storage in Morna, Nirguna and Mas was 48,18 and 39% respectively in spite of low availability. In Paldhag project unutilised storage is 1/3rd of the storage & in Sapan project it was 26%.

CADA Jalgaon: Generally in all the projects there is no unutilised water balance at June end except Rangawali & Jamkhedi project (6% & 8% respectively). In Bhokarbari project, though the percentage of unutilized water at June end seems to be 96% the water availability was too less. i.e. 4%. (0.284 Mcum).

CADA Nashik: In Kelzar project, the unutilised water was 3% at June end.

NIPC Dhule: In Shivan project, the percentage of unutilised water is 45%. (5.48 Mcum) Field authorities are required to take necessary actions to utilize water fully for irrigation.

NIC Nanded: Kundrala & Karadkhed have 26 & 13% unutilized water in the project. While the rest of the projects have no unutilized water.

UWPC Amrawati: In Chandrabhaga and Purna projects unutilised storages were 78 and 55% respectively as in last year. There is considerable under utilization of available storage in these projects.

Normal Plangroup:

NIPC Dhule: No unutilised water remained at June end in Manikpunj project.

AIC Akola: Borgaon 9%, Goki 29% and Waghadi 26% were the unutilised storages. These projects had less than 33% storage.

WIC Washim: Unutilised storage in Sonal project is remarkable as its initial storage was just 1.11Mcum.

CADA Nashik: In Alandi & Mandohol project, the unutilised water at June end was to the tune of 9% & 11%. Necessary care should be taken by the field officers to keep minimum balance of unutilised water at June end.

CIPC Chandrapur: Unutilized storages in case of Amalnalla, Dham & Dongargaon (Wardha) projects were 2.26, 6.59 and 0.63 Mcum respectively.

NIC Nagpur: On Jam and Kar projects 3.92 and 2.55 Mcum water had remained unutilized.

AIC Aurangabad: Shivana Takli has 18% i.e. 3.368Mcum water unutilized.

CADA Jalgaon: In Aner, Abhora, Karwand & Suki projects, the unutilised water at June end was to the tune of 19%, 41%, 12% & 54% respectively. All these projects had 100% availability. Necessary care should be taken by the field officers to keep minimum balance of unutilised water at June end.

CADA Aurangabad: Tembhapuri, Kolhi & Ambadi have 46, 59 & 24% unutilized water respectively.

JIPC Jalgaon: In Bhokar (Mangrul) and Mor projects, the unutilised water at June end was to the tune of 72% and 35 % respectively. These are on going project and disnet system is not developed fully.

NIC Nanded: Loni, Nagzari & Dongargaon have 69, 42 & 68% unutilized water respectively. Loni has 3.123Mcum, Dongargaon has 4.2Mcum & Nagzari has 2.04Mcum of unutilized water.

Surplus Plan group:

CIPC Chandrapur: Under Chargaon, Labhansarad, Pakkdigudam & Panchdhara complex total water to the tune of 1.93 Mcum had remained unutilized.

CADA Nagpur: Unutilized storages in Kanholibara, Khairbanda, Kolar and Wunna project was 2.84, 0.86, 3.19 & 1.54 Mcum respectively. Project authorities should explore the project wise reasons for under utilisation of storages.

Abundant Plan group:

NKIPC Thane: In Hetwane, more than 50% water is remaining unused for last three years. Quantitatively the unutilised water is 70.17, 66.29 and 77.66 Mcum.

Indicator IX: Percentage of irrigated crops.

Highly Deficit Plangroup:

CADA Beed: The most of the projects have maximum irrigation in rabbi season. Kada, Kambli, Khasapur, Chandani and Ramganga have 100, 98, 73 & 70% Rabbi Seasionals respectively. Most of the projects have no Kharif or Two Seasonal crops.

Deficit Plangroup:

NIC Nanded: Kundrala & Kudala have 37 & 33% rabbi crops. Kudala has 39% perennial crops. Kundrala & Kudala have 48 & 29% Two Seasonal crops. There was very less irrigation for the current year.

CADA Jalgaon: In all the projects except Tondapur, the major percentage of irrigated crops (33% to 98%) was under rabbi crops. In Tondapur project, the percentage in Kharif & Two Seasonal is 39% & 35% respectively.

UWPC Amrawati: On Chandrabhaga & Purna projects Rabbi seasonals were 97% & 53%. Perennials on Purna project were 45%.

NIPC Dhule: In Shivan project 100% utilization is in rabbi season by flow irrigation. However, in Prakasha barrage the percentage of Kharif, Two Seasonal & Rabbi crops is 21%, 39% & 40% respectively.

CADA Beed: Waghebabulgaon, Mahasangvi, Sindhphana, Bindusara & Sangmeshwar have 90, 86, 88, 73 & 52% rabbi crops were as Raigavan, Wan, Borna & Kundlika have 100, 92, 75 & 67% perennial crops. Most of the projects do not have Kharif crops. Bodhegaon has 48% Two Seasonal crops.

AIC Akola: On 6 projects under this circle, rabbi seasonals were predominant (58 to 95 %) except in Uma project, where it was zero. In Dnyanganga and Paldhag projects, perennials and two seasonals were 42 & 29% respectively. Perennials on Shahanoor project were 23%.

CADA Nashik: In Haranbari, Kelzar and Nagya Sakya projects, the percentage of irrigated crops under rabbi season varies from 49 to 89%.

JIPC Jalgaon: In Bahula project, the major water utilization (36%) is in rabbi season by flow irrigation.

CADA Aurangabad: Khelna, Karpara, Purna nevapur, Girija & Sukhana are the projects having more than 50% rabbi crops. Masoli has 58% & Gadadgad 34% perennial crops. Ajantha Andari has 100% Kharif crops. Jui has 56% Two Seasonal crops. Rest of the projects have varying crop pattern.

BIPC Buldana: Rabbi Seasonals on Mun, Torna and Utawali were more than 50% Hot Weather crops were 28% in Utawali project.

Normal Plangroup:

NIC Nagpur: Overall Rabbi seasonals were predominant and Kharif seasonals to some extent (8.37%).

BIPC Buldana: Rabbi Seasonals on Pentakli, was more than 50% & Two seasonals were 27%.

JIPC Jalgaon: In Mor project, 91% crops are perennials.

CADA Aurangabad: Ambadi, Dheku & Kolhi 84, 36 & 54% rabbi crops Kolhi has 31% Hot Weather. Tembhapuri has 35% Two Seasonal crops.

CADA Nashik: In all the projects except Alandi, the major percentage of irrigated crops (54% to 100%) is under rabbi season. In Alandi project, 57% are perennials.

AIC Akola: Rabbi Seasonal crops were dominant in Borgaon, Lower Pus, Waghadi and Goki projects.

WIC Washim: In Ekburji project rabbi seasonal crops were 89% whereas entire crops in the command of Sonal project were two seasonals.

CADA Jalgaon: In all the projects, the major percentage of irrigated crops (26% to 83%) is under rabbi season.

NIC Nanded: Dongargaon has 100% Two Seasonal crops & rest of the projects have very less irrigation.

NIPC Dhule: The percentage of crops in respect of Manikpunj project is 64% & 36% in rabbi & Hot Weather seasons respectively.

PIC Pune: In Shetfal project, the percentage of perennial crops is remarkably high (56%). Moreover, all the area is under sugarcane.

CADA Pune: In Visapur, though the percentage of perennial crops is high (i.e. 42%) nearly 37% of area is under fruit crops.

CIPC Chandrapur: Overall rabbi seasonals were predominant and perennial crops to some extent.

AIC Aurangabad: Shivana Takli has 63% rabbi crops & 37% Two Seasonal crops.

Surplus plan group

GKLIC Bhandara: Kharif season was predominant under Katangi project.

CIPC Chandrapur: The Kharif seasonals were predominant in Chandai and Chargaon projects. Rabbi Seasonals were predominant under Labhansarad and Pancharadhara complex.

CADA Nagpur: Average cropping pattern observed on projects under this circle was Kharif seasonals 78% and rabbi seasonals 20%.

Abundant plan group

CIPC Chandrapur: On Naleshwar & Ghorazari projects 100 % area was irrigated in Kharif season only.

Minor Projects

Indicator-I: Water Availability in Tanks

Highly Deficit Plan group:

CADA Beed: An average availability of water in reservoirs is 52% which has decreased over last years77%.

CADA Solapur: Over all percentage of availability in M.I. Tanks is 61%.

SIC Sangli: Over all percentage of availability in M.I. Tanks is 75%.

PIC Pune: Minor projects had 87% average availability. Last year it was 69%.

Deficit Plangroup:

WIC Washim: All Minor projects had 15% storages, lesser than last year (44%).

AIC Aurangabad: An average availability has decreased from 38%(2008-09) to 26% in this year.

NIC Nanded: The average availability has decreased to 31% over to last years 56%.

CADA Beed: An average availability of water has decreased by almost 50% i.e.36% against last years 72%.

BIPC Buldhana: Live storage in all the projects was 42%, which was less than previous year (51%).

AIC Akola: Average availability in minor projects was 45%, which was 44% last year.

CADA Jalgaon: The average water availability is reduced from 61% to 47% as compared to last year.

CADA Aurangabad: An average availability has decreased from 59 %(2008-09) to 50% in this year.

CADA Nashik: The average water availability is reduced from 91.5% to 75% as compared to last year.

NIPC Dhule: The availability of water is 100%.

Normal Plangroup:

WIC Washim: All projects had 19% storage, comparatively less than last year (23%).

BIPC Buldhana: Similar to the previous year the live storage in all the projects was 22%.

YIC Yavatmal: The availability in minor projects was 23%, very less compared to last year (61%).

NIC Nanded: An average availability of water is 28.50% for this year against 57% of last year i.e. decreased by 50%.

AIC Akola: Average availability in the projects was 48%, slightly more than last year's percentage (41%).

CIPC Chandrapur: During this year 54% average storage was observed under this circle.

CADA Nashik: Average water availability is reduced from 86% to 65% as compared to last year.

CADA Jalgaon: Average water availability is reduced from 70% to 67% as compared to last year.

NIC Nagpur: During this year 80% average storage was observed under this circle.

CADA Pune: The availability of water in minor projects is 81%.

PIC Pune: Minor projects had average 92% availability. Last year it was 83%.

NIPC Dhule: The availability of water is 100%.

UWPC Amaravati: Only Chargad, received 100% yield like last year.

Surplus Plan Group:

CADA Nagpur: Sixty one percent availability was observed under this circle.

CIPC Chandrapur: Ninety nine percent availability was observed under this circle.

Abundant Plan group:

NKIPC Thane: The average water availability is 73%.

KIC Ratnagiri: The average water availability is 92%.

CIPC Chandrapur: During this year 94% average storage was observed.

SIC Sangli and TIC Thane: Over all percentage of availability are 97 & 100 respectively.

CADA Pune: The water availability is 98%.

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

Highly Deficit Plan group:

PIC Pune: The percentage of evaporation is 20 which is more than last year.

CADA Solapur: The percentage of evaporation is 30.

SIC Sangli : The percentage of evaporation is 24.

CADA Beed: An average evaporation of the Minor projects is nearly same i.e.29% as last year.

Deficit Plangroup:

NIPC Dhule: The percentage of evaporation to live storage is 9%.

CADA Nashik: The average percentage evaporation to live storage is 18%.

CADA Jalgaon: The percentage of evaporation to live storage is 28%.

AIC Akola, BIPC Buldhana & WIC Washim: In minor projects under these circles, the rate of evaporation was high similar to last year i.e. 33, 26 and 32% respectively.

CADA Beed: An average evaporation of the Minor project is 33 % which is slightly increased by 4% compared to last year.

AIC Aurangabad: An average evaporation of the Minor project is 35% which is increased by 15% compared to last year.

NIC Nanded: An average evaporation of the Minor projects is 37% which is increased by 13% compared to last year.

CADA Aurangabad: An average evaporation of the Minor project is 40 % which is slightly increased by 3% compared to last year.

Normal Plangroup:

CADA Nashik: The percentage of evaporation to live storage is 14%.

AIC Akola, BIPC Buldhana, WIC Washim, YIC Yeotmal & UWPC Amaravati: The rate of evaporation in minor projects under these circles was very high 29, 35, 31, 46 and 18% respectively.

NIC Nagpur: During this year average percentage of 22 was observed.

CIPC Chandrapur: During this year average percentage of 24 was observed.

CADA Jalgaon: The percentage of evaporation to live storage is 27%.

NIPC Dhule: The percentage of evaporation to live storage is 27%.

CADA Pune: The projects are having evaporation losses of 28.6%.

NIC Nanded: An average evaporation of the Minor projects is 32% which is increased by 8% compared to last year

Surplus Plan Group:

CIPC Chandrapur: Percentage of evaporation in this circle was as high as 59%.

CADA Nagpur: During this year average percentage of 20 was observed.

Abundant Plan group:

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

same.

SIC Sangli & TIC Thane: Average percentage evaporation is 16 and 12% respectively.

NKIPC Thane: The minor projects are having percentage of evaporation losses 12%.

CADA Pune: The projects are having percentage of evaporation as 21%.

CIPC Chandrapur: Evaporation percentage on projects under this circle was very high i.e. 55%.

Indicator-III: Water Use Pattern

Highly Deficit Plan group:

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

CADA Beed: Nearly 50% of available water was used for irrigation on reservoir lifts as it consists of storage tanks, where water use by lifts only is proposed.

CADA Solapur: Water use for irrigation in Rabbi season and Hot Weather season is on canal and on reservoir lifts.

SIC Sangli: Water use for irrigation in Rabbi season and Hot Weather season is on canal and on reservoir and river lifts.

Deficit Plangroup:

NIPC Dhule: The prominent use is on reservoir lifts.

CADA Beed: Major water utilization on reservoir lift is (38%) & by canal flow is just 9%.

CADA Aurangabad: Water use for irrigation is nearly 28% of total utilization in which 18% is by reservoir lifts, non irrigation use is 5% and rest 67% is lost in evaporation & leakage. Project authorities are required to be more careful in measuring & reporting these heavy losses and accordingly remedies to minimize these losses should be taken up.

NIC Nanded: Water use for irrigation & non irrigation use is just 16% of total utilization in which maximum by reservoir lift and rest 84% is in evaporation & leakage. Project authorities are required to be more careful in measuring & reporting these heavy losses and accordingly special measures to be taken up to minimize these losses so as to increase irrigation potential.

CADA Jalgaon: The prominent use is in Rabbi season on canal and on reservoir lifts.

CADA Nashik: The prominent use is in Hot Weather season on canal and on reservoir lifts.

AIC Aurangabad: Water use for irrigation is 32% & non irrigation use is 15% out of total utilization for irrigation maximum is on reservoir lifts. Rest 53% is losses in evaporation & leakage. Project authorities are required to be more careful in measuring & reporting these heavy losses and accordingly remedies to minimize these losses should be taken up.

AIC Akola: Water use was predominantly in Rabbi season (21%), with 15% reservoir lifts and 4% non irrigation use. Major quantity of water is lost in evaporation and leakages i.e. 57%.

BIPC Buldhana: Utilisation in Rabbi season was 44% with nominal water use in Hot Weather and non irrigation purpose. Utilisation was 22% through reservoir lifts and 32% was lost in evaporation & leakages.

WIC Washim: Utilisation for lift irrigation on reservoirs was 6% with 54% non irrigation use. Losses were 40%.

Normal Plangroup:

WIC Washim: Utilization on Reservoir lifts was 21%, 34% for non irrigation use and 42% was lost in evaporation & leakages.

CADA Pune: Water use is predominant in Rabbi season through reservoir lifts and canals.

PIC Pune: Most of water use is in Rabbi and Hot Weather season through canal and reservoir lifts.

AIC Akola: Water utilization was 19% for rabbi crops, 12% for lifts on reservoir, 5% for non irrigation use with 41% evaporation losses and 22% leakages.

YIC Yeotmal: In minor projects of this circle, major water use of 19% was for non irrigation purpose and 75% water was lost in either evaporation or leakages.

UWPC Amravati: Utilisation in rabbi season was 50% and 22% in Hot Weather season through canals. Storage lost in evaporation was 27%.

BIPC Buldhana: Water utilization through reservoir lifts was 38% with 5% utilization for non irrigation purpose.

CADA Nashik: The prominent use is in Rabbi season on canal and on reservoir lifts.

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

NIC Nanded: Water use for irrigation & non irrigation use is nearly 35% of total utilization in which maximum is on reservoir lift and rest 65% is losses in evaporation & leakage. This shows that Project authorities are not worried about these losses to minimize them so that it can be utilized for irrigation purpose.

NIPC Dhule: The prominent water use is in Rabbi season by flow irrigation and for non irrigation use.

CIPC Chandrapur: Under this circle water use was 38% in rabbi season through canals.

NIC Nagpur: Water use is predominantly through canals in rabbi season.

Surplus Plan Group:
CIPC Chandrapur: Water use is 33% in Kharif and 6% in rabbi season through canals.
CADA Nagpur: Water use in Kharif was predominant i.e. 48%. In Rabbi season it was about 20%.
Abundant Plan group:
CIPC Chandrapur: Projects under this circle had utilised 43% water for crops in Kharif season.
SIC Sangli: Water use for irrigation in Kharif, Rabbi & Hot Weather seasons is on canals and mostly on reservoir lifts.
TIC Thane: Water is used for irrigation in Konkan season only on canals as well as on reservoir lifts.
NKIPC Thane: For minor projects maximum water use is through reservoir lifts and canals in Konkan and Hot Weather season.
KIC Ratnagiri: Maximum water use through canal in Konkan season.
CADA Pune: Maximum water use is through canals in Rabbi season.

Indicator IV: Irrigation System Performance

Highly Deficit Plan group:

CADA Beed: Performance of indicator though reduced (150 & 126 ha /Mcum) it hasstill tallied with the state norms in both Rabbi & Hot Weather seasons as compared to last years (154 & 283 ha/Mcum).

CADA Solapur:- ISP in Rabbi season is 116 and in Hot Weather season it is 12.

PIC Pune: The projects are having good ISP in Rabbi and Hot Weather Season.

SIC Sangli: Water use for irrigation is in Kharif, Rabbi & Hot Weather seasons by canal/river lifts; mostly on reservoir lifts.

Deficit Plangroup:

AIC Akola & BIPC Buldana: ISP observed on canals in rabbi season was 128Ha/Mcum. However in Hot Weather season it was too low i.e. 44 Ha/Mcum.

AIC Aurangabad: Performance of indicator in Rabbi season is reduced from 186 ha/Mcum (2008-09) to 144 ha/Mcum in this year though it nearby to state norms.

CADA Aurangabad: The performance in Rabbi is 230 ha/Mcum. It is more than the state target it means there is some lacuna in correct measurement of water utilization and irrigated area, where as it is tally in Hot Weather (125 ha/Mcum) with the state norms.

CADA Beed: Performance of indicator is slightly improved (128 & 58 ha /Mcum) in both Rabbi & Hot Weather seasons as compared to last years (118 & 55 ha/Mcum).

CADA Jalgaon: The irrigation system performance in Rabbi & Hot Weather season is 198 Ha/Mcum & 265 Ha/Mcum respectively.

CADA Nashik: The Irrigation system performance in Rabbi and Hot Weather season is 252 Ha/Mcum and 70 Ha/Mcum respectively.

NIC Nanded: Performance of indicator in Rabbi season is reduced from 163 ha/Mcum (2008-09) to 117 ha/Mcum in this year which is below state norms.

NIPC Dhule: The Irrigation system performance in Rabbi season is 170 Ha/Mcum. There is no irrigation in Hot Weather season.

Normal Plangroup:

AIC Akola, BIPC Buldana, YIC Yeotmal, UWPC Amravati & WIC Washim: Average ISP observed on canals in Rabbi and Hot Weather season were 107 and 94 Ha/Mcum respectively.

CADA Jalgaon: The Irrigation system performance in Rabbi and Hot Weather season are 108 & 84 ha/Mcum respectively.

CADA Nashik: The system performance in Rabbi and Hot Weather season are 285 ha/Mcum & 161 ha/Mcum.

CADA Pune: The ISP in Rabbi and Hot Weather season is good.

CIPC Chandrapur: The performance indicator in Rabbi season is 131 Ha/Mcum and in Hot Weather season it is 21 ha/Mcum.

NIC Nagpur: The performance indicator in Rabbi season is 138 Ha/Mcum.

NIC Nanded: Performance of indicator in Rabbi season is improved from 124 ha/Mcum (2008-09) to 158 ha/Mcum in this year.

NIPC Dhule: The Irrigation system performance in Rabbi and Hot Weather season is 72 Ha/Mcum and 200 Ha/Mcum respectively.

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

Surplus Plan Group:

CADA Nagpur: ISP in Kharif, Rabbi & Hot Weather seasons are 373,122 & 52 Ha/Mcum respectively.

CIPC Chandrapur: The irrigation system performance in Rabbi season was very low (65Ha/Mcum) as compared to State norm and it is 299 Ha/Mcum in Kharif season.

Abundant Plan group:

TIC Thane: ISP in Kharif, Rabbi and Hot Weather seasons are 83, 59 and 60 respectively.

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

SIC Sangli: ISP in Kharif season is 100, in Rabbi 118 & in Hot Weather it is 99 Ha/Mcum

CADA Pune: The projects under this circle are having good ISP in Rabbi season.

CIPC Chandrapur: The Irrigation system performance on the projects under this circle in Kharif season was 443 Ha/Mcum.

Chapter 4

Water Auditing of Irrigation Projects – A State Preview

4.1 Conventional method of Water Audit

In the State Water Policy as well as 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.

Conventially, water accounting system in the State was in vogue since 1930. Preliminary irrigation programmes were prepared depending upon availability of water. These programmes were followed for the year and at the end of irrigation year, completion irrigation reports were prepared at project level.

Different accounting systems were in practice in different regions of the State. In order to bring uniformity in accounting system and to audit the accounts at state level, new proformae were devised and water auditing was initiated in the State since 2003-04. This is in conformity with clause 2.6 of State Water Policy 2003.

Publication of water audit report of the State was initiated in 2003-04. Initially the water accounts were analyzed circle wise, referring a project in particular wherever necessary. State's 25 sub basins are classified in to five Plan groups in accordance with the availability of water per unit Ha of CCA. There are 24 circles which deal with the Irrigation Water Management. Number of circles, depending upon the location of a project under their jurisdiction, is 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 did not 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 present 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 performance of irrigation projects.

4.2 Water Auditing at Administrative levels

In addition to the present conventional method of water audit analysis, an attempt has been made to consolidate, analyse and evaluate the water account circle wise. The results thus obtained give the project categorywise (major/medium/minor), region as well as circle wise information about water availability, water use in different sectors, water losses along with area planned in PIP, area actually irrigated & 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 4.1 to 4.6 appended here with.

4.3 State level preview

4.3.1 Water Use:

From the information shown in above mentioned tables it appears that, at state level during the irrigation year 2009-10, actual live storage of 19149 Mcum was available against total design live storage of 29750 Mcum on 15th October 2009. On

57 major, 203 medium & 1974 minor projects considered together (9833+1496+1049), 12378 Mcum of water was used on canals; Reservoir & River lifts for irrigation purpose. Total Non Irrigation water use was (2679+329+133) 3141 Mcum, which is 16% of the actual live storage. The total irrigation use is 65% of the actual live storage.

Water use on reservoir of all types of projects was (782+323+540) 1645 Mcum which is 13% of the total irrigation water use.

Total evaporation loss on major projects is 2133 Mcum (16%), on medium 742 Mcum (24%) & on minor 621 Mcum (25%) of the actual live storage.

4.3.2 Area Planned and Irrigated

Data collected from 57 major & 203 medium projects shows that, a gross Preliminary Irrigation Programme of (1057938 + 230948) 1288886 Ha. was framed during the irrigation year. Against the target, actual area irrigated was 1366717 Ha (106 %).

4.3.3 System Performance

Annual average ISP observed at the state level (excluding MI projects) was 121 Ha/Mcum.

4.3.4 UnUtilised storages

Unutilized storages at the end of irrigation year (excluding inflow in HW & design carry over), on major and medium projects were 1498 Mcum and 487 Mcum respectively. Project wise details are given in Table 4.1 to 4.3. The total unutilized storage as compared to 15th October 2009 live storage was 10.36 %.

4.3.5 Water Auditing at Region/ Circle Administrative Level

Region, circle wise and project wise data attached in enclosed tables 4.1 to 4.6 and charts I to XVI attached herewith are self sufficient to explain the irrigation performance of any revenue region or irrigation Circle in particular. The Analysis also can be extended to respective Chief Engineer'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 4.1: Project Wise Details Of Water Availability, Water Use On Major Projects (2009-10) - 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 (Ha/Mcum
									PIP	Actual	
CADA Nagpur	Bagh Complex	268.96	96.79	179.82	7.11	16.97	2.30	14.80	0.00	22993.00	128
CADA Nagpur	Itiadoh	318.85	116.70	126.20	3.75	64.93	0.00	42.21	17500.00	17416.00	138
CADA Nagpur	Lower Wunna Complex	187.18	168.74	98.06	8.19	44.08	2.51	28.00	700.00	5806.34	59
CADA Nagpur	Pench Complex	1375.26	836.00	960.53	244.61	78.71	0.41	35.83	77400.00	80190.54	83
CIPC Chandrapur	Asolamendha	56.38	8.08	24.77	0.00	8.06	0.00	0.00	11500.00	8990.00	363
CIPC Chandrapur	Bor	127.42	102.64	64.79	1.05	8.05	0.00	14.50	8850.00	4057.00	63
CIPC Chandrapur	Dina	67.54	30.36	54.20	0.00	19.89	0.00	0.00	0.00	10925.00	202
AIC Akola	Katepurna	86.35	13.51	0.00	12.14	3.03	0.00	1.81	0.00	0.00	0
AIC Akola	Nalganga	69.32	15.83	9.18	1.27	4.69	3.58	0.00	2020.00	1446.00	157
AIC Akola	Pus	91.27	27.93	2.52	10.60	10.26	2.52	0.26	850.00	418.00	166
BIPC Buldhana	Wan	81.96	28.32	12.28	8.48	2.07	0.00	5.74	6000.00	1058.00	86
UWPC Amravati	Upper Wardha	548.14	507.90	270.78	32.10	75.68	8.26	151.92	36200.00	22940.00	85
YIC Yavatmal	Arunawati	169.92	17.32	1.64	1.10	18.57	1.64	0.00	0.00	670.00	409
CADA Pune	Dhom	331.05	256.06	267.46	4.21	25.06	1.37	0.00	36688.00	20313.00	76
CADA Pune	Ghod	154.80	80.19	124.69	7.66	35.77	22.18	0.00	16842.00	14902.48	120
CADA Pune	Kanher	271.68	271.99	224.30	1.21	25.76	0.79	38.57	22790.00	13210.00	59
CADA Pune	Kukadi Complex	864.39	535.16	426.06	28.16	137.01	20.78	0.00	41500.00	41498.00	97
CADA Solapur	Bhima (Ujjani)	1517.20	1519.59	1609.48	85.50	358.00	282.40	134.79	204390.00	200827.80	125
CADA Solapur	Sina Kolegaon LIS	76.19	72.65	5.43	0.34	18.81	5.43	0.00	1000.00	1013.32	187
CADA Solapur	Sina Madha LIS	0.00	0.00	28.97	1.01	0.00	0.00	0.00	0.00	2910.55	100
PIC Pune	Bhama Askhed	217.10	139.32	32.18	0.31	9.09	2.59	14.81	0.00	4906.00	152
PIC Pune	Chaskaman	214.50	209.72	95.44	4.60	12.35	6.54	28.64	14050.00	15747.00	165
PIC Pune	Khadakwasla Complex	822.80	677.08	242.24	626.79	60.70	4.99	13.46	24550.00	49724.82	205
PIC Pune	Neera Complex	931.93	931.93	1177.22	66.27	76.41	30.10	104.38	139926.00	145913.00	124
PIC Pune	Neera Devdhar	332.13	316.44	0.00	0.00	15.06	0.00	0.00	0.00	0.00	0
PIC Pune	Pawana	240.97	240.97	18.36	149.61	15.45	3.65	64.47	1090.00	2818.01	153
SIC Sangli	Dudhaganga	679.11	663.51	305.15	7.81	27.04	0.00	178.34	26700.00	26220.00	86
SIC Sangli	Krishna LIS Complex	0.00	0.00	470.56	59.96	0.00	0.00	0.00	119500.00	117853.00	250
SIC Sangli	Radhanagari	219.97	217.81	311.67	18.47	14.06	0.00	0.00	42000.00	40079.00	129
SIC Sangli	Tulshi	91.92	96.33	35.74	6.40	4.83	0.00	4.80	4150.00	4445.00	124

Table 4.1: Project Wise Details Of Water Availability, Water Use On Major Projects (2009-10) - 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 (Ha/Mcum
									PIP	Actual	
SIC Sangli	Warana	779.35	783.41	355.78	8.57	22.96	0.00	207.41	44910.00	39536.00	111
KIC Ratnagiri	Tillari	447.37	444.53	3.90	0.28	24.58	0.00	249.60	0.00	248.00	64
TIC Thane	Bhatsa	942.10	624.86	53.94	276.28	25.98	0.00	0.00	3000.00	2279.51	42
TIC Thane	Kal-Amba	528.13	402.96	63.83	69.29	14.38	0.00	0.00	4167.00	2127.00	33
TIC Thane	Surya	286.31	216.41	153.19	5.36	22.01	5.40	51.52	4500.00	2609.00	17
CADA Jalgaon	Girna+Panzan	525.06	127.18	75.70	30.52	71.06	3.47	0.00	7410.00	8828.00	117
CADA Jalgaon	Hatnur	255.00	255.00	72.99	89.38	91.71	24.21	28.61	5000.00	7618.00	104
CADA Nashik	Bhandardara	304.10	332.18	343.08	36.64	15.74	0.34	33.17	22681.00	29700.00	87
CADA Nashik	Chankapur	76.85	76.85	13.57	25.98	13.35	0.72	12.25	1568.00	2277.00	168
CADA Nashik	Darna	202.43	181.48	7.94	28.03	20.13	3.00	0.00	0.00	2107.51	266
CADA Nashik	Gangapur	159.42	125.65	27.21	127.56	18.35	2.94	0.00	3380.00	9966.99	366
CADA Nashik	Gautami	53.34	30.69	1.02	0.00	2.09	1.02	4.88	0.00	208.41	204
CADA Nashik	Kadwa	52.91	52.91	52.19	0.00	4.04	4.53	1.02	1600.00	2216.00	42
CADA Nashik	Kashyapi	52.43	26.27	0.74	0.00	1.53	0.74	0.00	0.00	107.62	145
CADA Nashik	Mukane	125.33	75.21	4.64	2.49	10.82	2.24	0.00	0.00	646.50	139
CADA Nashik	Mula	608.80	338.10	445.47	45.07	55.70	3.70	0.00	30154.00	49324.00	111
CADA Nashik	NMWeir	7.28	6.12	184.47	55.50	0.00	0.00	0.00	0.00	12863.52	70
CADA Nashik	Upper Godavari Compl	336.18	205.87	145.64	48.12	29.22	17.20	18.73	15032.00	25277.57	174
AIC Abad	NMC Express Mukane	0.00	0.00	13.93	13.00	0.00	0.00	0.00	2790.00	807.00	58
CADA Abad	Jayakwadi Stage I	2170.94	528.61	271.20	194.75	213.35	230.75	0.00	41200.00	32502.00	120
CADA Beed	Jayakwadi Stage II (Ma	312.00	112.00	52.85	17.61	81.47	11.71	0.00	5700.00	4719.00	89
CADA Beed	Lower Terna	91.22	27.62	13.81	4.28	21.81	8.83	0.00	2250.00	3436.12	249
CADA Beed	Manjra	176.96	106.15	66.09	27.46	40.84	10.48	0.00	6400.00	7170.13	108
NIC Nanded	Manar	138.21	7.63	0.00	0.61	7.58	0.00	0.03	0.00	0.00	0
NIC Nanded	Purna Complex	890.22	119.59	196.33	81.54	39.75	16.15	0.00	0.00	11834.00	60
NIC Nanded	Upper Penganga	964.10	53.98	1.36	65.88	76.74	0.74	0.00	0.00	256.00	188
NIC Nanded	Vishnupuri	80.79	80.79	32.15	26.33	17.14	32.15	13.85	0.00	4108.00	128
Grand Total:		**20981**	**13541**	**9833**	**2679**	**2133**	**782**	**1498**	**1057938**	**1142064**	**116**

Table 4.2: Circlewise Details of Water availability, Water Use and Losses on Major Project (2009-10) - Page 1 of 1

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	2150.25	1218.22	1364.60	263.66	204.69	5.23	120.84	95600.00	126405.88	
CIPC Chandrapur	251.34	141.08	143.76	1.05	36.01	0.00	14.50	20350.00	23972.00	
AIC Akola	246.94	57.27	11.70	24.00	17.97	6.10	2.07	2870.00	1864.00	
BIPC Buldhana	81.95	28.32	12.28	8.48	2.07	0.00	5.74	6000.00	1058.00	
UWPC Amravati	548.14	507.90	270.78	32.10	75.68	8.26	151.92	36200.00	22940.00	
YIC Yavatmal	169.92	17.32	1.64	1.10	18.57	1.64	0.00	0.00	670.00	
CADA Pune	1621.92	1143.40	1042.50	41.24	223.60	45.12	38.57	117820.00	89923.48	
CADA Solapur	1593.39	1592.24	1643.88	86.85	376.81	287.83	134.79	205390.00	204751.67	
PIC Pune	2759.43	2515.46	1565.43	847.58	189.05	47.86	225.74	179616.00	219108.83	
SIC Sangli	1770.35	1761.06	1478.89	101.22	68.88	0.00	390.55	237260.00	228133.00	
KIC Ratnagiri	447.37	444.53	3.90	0.28	24.58	0.00	249.60	0.00	248.00	
TIC Thane	1756.54	1244.23	270.96	350.94	62.36	5.40	51.52	11667.00	7015.51	
CADA Jalgaon	780.06	382.18	148.69	119.90	162.77	27.68	28.61	12410.00	16446.00	
CADA Nashik	1979.07	1451.33	1225.97	369.38	170.96	36.41	70.05	74415.00	134695.12	
AIC Abad	0.00	0.00	13.93	13.00	0.00	0.00	0.00	2790.00	807.00	
CADA Abad	2170.93	528.61	271.20	194.75	213.35	230.75	0.00	41200.00	32502.00	
CADA Beed	580.18	245.77	132.74	49.35	144.12	31.02	0.00	14350.00	15325.25	
NIC Nanded	2073.32	261.99	229.84	174.36	141.21	49.04	13.88	0.00	16198.00	
Grand Total:	**20981**	**13541**	**9833**	**2679**	**2133**	**782**	**1498**	**1057938**	**1142064**	

Table 4.3: Region wise Abstract of Water availability, Water use and Losses on Major Project (2009-10) -

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	2401.59	1359.30	1508.36	264.72	240.70	5.23	135.34	115950.00	150377.88	100
Amravati	1046.95	610.81	296.40	65.69	114.29	16.00	159.73	45070.00	26532.00	90
Pune	7745.08	7012.16	5730.71	1076.89	858.35	380.82	789.65	740086.00	741916.98	129
Konkan	2203.91	1688.76	274.86	351.21	86.94	5.40	301.12	11667.00	7263.51	26
Nashik	2759.13	1833.51	1374.67	489.28	333.73	64.09	98.66	86825.00	151141.12	110
Aurangabad	4824.44	1036.37	647.70	431.47	498.68	310.80	13.88	58340.00	64832.25	100
Grand Total:	**20981**	**13541**	**9833**	**2679**	**2133**	**782**	**1498**	**1057938**	**1142064**	**116**

Note: Actual live storage is of Oct 15 & utilisation is for the period July 1 to June 30

Table 4.4: Details Of Water Availability, Water Use And Losses On Medium Project (2009-10) - Page 1 of 1

Water: Mcu

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/Mcur
									PIP	Actual	
Nagpur	CADA Nagpur	290.54	134.10	163.09	14.05	35.39	39.62	9.87	40287.00	39077.56	
Nagpur	CIPC Chandrapu	239.64	145.99	93.99	30.83	41.09	5.96	11.40	14455.00	15306.00	
Nagpur	GKLIC Bhandara	9.40	5.59	2.03	0.89	3.44	0.00	0.00	500.00	686.00	
Nagpur	NIC Nagpur	57.80	47.93	29.59	4.65	11.48	2.98	6.47	1920.00	2257.42	
Amravati	AIC Akola	422.31	137.18	28.27	27.29	58.76	4.56	22.30	7434.00	2316.09	
Amravati	BIPC Buldhana	124.50	51.70	6.40	30.25	15.12	5.68	4.90	2650.00	3721.00	
Amravati	UWPC Amravati	76.62	65.43	15.74	0.97	11.53	0.03	44.29	0.00	634.86	
Amravati	WIC Washim	28.89	6.35	1.49	2.43	1.93	1.29	0.40	239.00	395.00	
Amravati	YIC Yavatmal	79.72	4.59	0.00	6.09	8.33	0.00	0.00	0.00	0.00	
Pune	PIC Pune	242.25	243.40	163.75	11.07	51.76	54.34	41.48	31866.36	26640.52	
Pune	SIC Sangli	554.32	543.10	395.97	20.39	66.72	30.32	76.04	60010.00	53240.00	
Pune	CADA Pune	69.82	42.86	27.93	2.92	12.88	5.37	0.13	4240.00	6138.15	
Pune	CADA Solapur	222.94	112.35	62.80	26.16	45.47	36.85	11.10	10172.90	13295.90	
Konkan	KIC Ratnagiri	27.23	26.86	21.70	0.35	0.99	0.00	3.85	99.00	104.51	
Konkan	NKIPC Thane	227.88	147.06	9.54	37.33	10.56	0.00	77.66	0.00	140.00	
Konkan	SKIPC oros	98.02	63.89	1.30	0.00	5.96	0.00	43.57	2201.00	60.00	
Konkan	TIC Thane	432.44	479.45	44.91	1.43	53.25	0.00	35.93	3400.00	2765.10	
Nashik	NIPC Dhule	94.52	78.71	14.75	1.93	5.03	9.42	5.49	4179.00	2425.57	
Nashik	JIPC Jalgaon	30.50	15.92	5.23	3.09	5.33	3.41	7.38	664.00	494.62	
Nashik	CADA Nashik	175.13	112.87	89.41	8.49	20.99	19.60	5.22	12003.00	13497.51	
Nashik	CADA Jalgaon	323.97	280.67	168.27	28.37	80.78	16.89	40.58	25236.00	20564.00	
Aurangabad	CADA Beed	448.51	249.95	103.11	42.86	121.02	61.86	12.82	3616.00	12549.46	
Aurangabad	CADA Abad	251.20	111.77	39.96	21.17	56.47	22.38	11.83	4989.00	7666.00	
Aurangabad	AIC Abad	36.45	19.10	5.45	0.02	6.97	1.24	3.37	787.00	432.00	
Aurangabad	NIC Nanded	58.57	24.80	1.10	5.71	10.49	1.10	10.61	0.00	246.00	
	Grand Total:	**4623**	**3152**	**1496**	**329**	**742**	**323**	**487**	**230948**	**224653**	

Table 4.4 A: Details Of Water Availability, Water Use And Losses On Medium Project (2009-10) - Page 1 of 1

Water: Mcu

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/Mcur
								PIP	Actual	
Nagpur	597.38	333.61	288.70	50.42	91.40	48.56	27.75	57162.00	57326.98	
Amravati	732.04	265.25	51.91	67.02	95.66	11.56	71.89	10323.00	7066.95	
Pune	1089.33	941.71	650.44	60.54	176.84	126.88	128.75	106289.26	99314.57	
Konkan	785.57	717.26	77.45	39.11	70.76	0.00	161.02	5700.00	3069.61	
Nashik	624.11	488.16	277.65	41.88	112.13	49.31	58.67	42082.00	36981.70	
Aurangabad	794.73	405.62	149.62	69.75	194.95	86.58	38.63	9392.00	20893.46	
Grand Total:	**4623**	**3152**	**1496**	**329**	**742**	**323**	**487**	**230948**	**224653**	

Table 4.5: Statement Showing Water Availability, Water Uses And Losses Observed On Minor Projects (2009-10) - Page 1 of 1

Water: Mcur

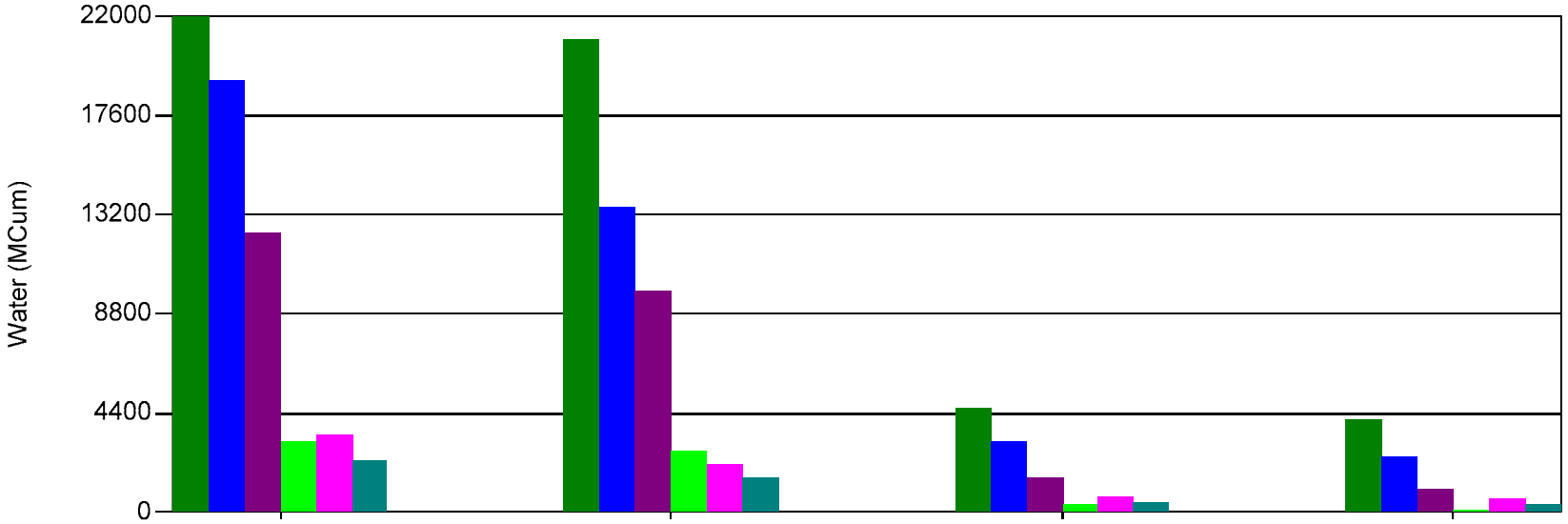
Region	Circle	Design Live Storage	Actual Live Storage	Total Irrigation Use	Evaporation	Reservior Use Irrigation	Leakages	NI Water Use
Nagpur	CADA Nagpur	261.41	159.13	114.09	32.75	4.03	6.89	
Nagpur	CIPC Chandrapur	156.63	137.05	56.04	72.01	0.80	5.26	
Nagpur	GLIC Bhandara	16.35	11.39	7.18	2.22	0.00	0.52	
Nagpur	NIC Nagpur	30.15	24.37	10.86	5.46	1.85	0.00	
Amravati	AIC Akola	434.38	202.64	58.91	61.82	22.53	38.40	
Amravati	BIPC Buldhana	94.23	34.98	23.26	9.62	8.48	2.84	
Amravati	UWPC Amravati	9.88	9.88	4.83	1.78	0.05	0.01	
Amravati	WIC Washim	164.19	30.62	5.23	9.48	4.73	1.15	
Amravati	YIC Yavatmal	87.81	20.20	1.05	9.29	0.57	3.10	
Pune	CADA Pune	64.10	53.96	39.10	14.51	32.97	13.36	
Pune	CADA Solapur	109.17	88.71	38.61	28.78	28.78	15.80	
Pune	PIC Pune	226.45	205.75	93.58	38.49	75.13	30.11	
Pune	SIC Sangli	307.85	281.32	135.27	47.64	93.15	28.08	
Konkan	KIC Ratnagiri	100.90	92.82	16.31	7.95	0.20	50.68	
Konkan	NKIPC Thane	97.65	71.25	5.03	8.49	0.48	25.98	
Konkan	TIC Thane	184.65	176.66	64.46	22.41	2.80	20.20	
Nashik	CADA Jalgaon	304.51	188.15	89.97	50.75	18.24	21.25	
Nashik	CADA Nashik	196.85	139.00	81.00	22.33	69.48	17.04	
Nashik	NIPC Dhule	15.91	15.77	2.10	3.97	0.21	2.04	
Aurangabad	AIC Abad	156.74	41.51	9.35	14.46	7.27	1.50	
Aurangabad	CADA Abad	183.16	92.25	22.25	36.81	13.84	14.80	
Aurangabad	CADA Beed	725.33	314.52	158.25	97.45	144.72	32.96	
Aurangabad	NIC Nanded	217.26	63.97	12.36	22.09	9.58	16.00	
	Grand Total:	**4146**	**2456**	**1049**	**621**	**540**	**348**	

Table 4.5 A: Statement Showing Water Availability, Water Uses And Losses Observed On Minor Projects (2009-10) - Page 1 of 1

Water: Mcum

Region	Design Live Storage	Actual Live Storage	Total Irrigation Use	Evaporation	Reservior Use Irrigation	Leakages	NI Water Use
Nagpur	464.54	331.94	188.16	112.43	6.67	12.67	7.77
Amravati	790.49	298.32	93.28	91.98	36.36	45.49	20.51
Pune	707.57	629.74	306.55	129.41	230.02	87.35	21.20
Konkan	383.20	340.73	85.79	38.85	3.47	96.87	22.57
Nashik	517.27	342.92	173.06	77.05	87.92	40.32	25.98
Aurangabad	1282.49	512.25	202.22	170.81	175.42	65.26	35.10
Grand Total:	**4146**	**2456**	**1049**	**621**	**540**	**348**	**133**

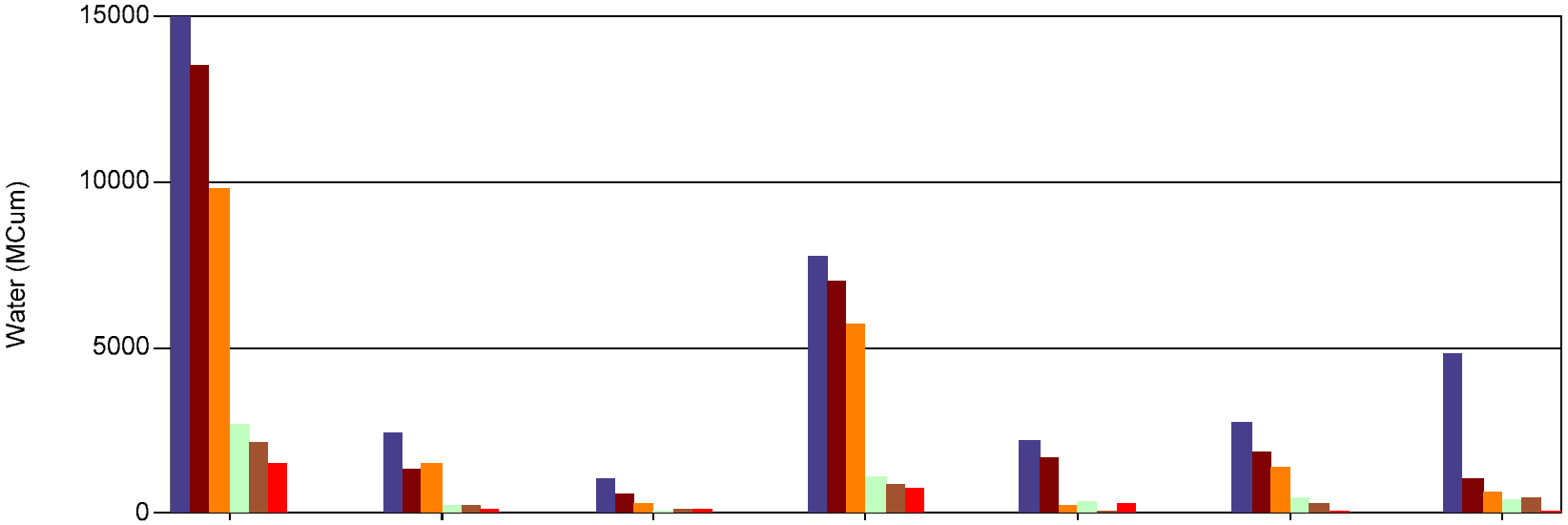
Chart 1 - Water Availability & Water use at State Level



	State	Major	Medium	Minor
Design LS	29750	20981	4623	4146
Actual Live Storage	19148	13541	3152	2456
Total Irrigation Use	12378	9833	1496	1049
NI Water Use	3141	2679	329	133
Evaporation Losses	3495	2133	742	621
Unutilised Storage	2321	1498	487	336

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 Projects)



	State	Nagpur	Amravati	Pune	Konkan	Nashik	Aurangabad
Design LS	20981	2402	1047	7745	2204	2759	4824
Actual Live Storage	13541	1359	611	7012	1689	1834	1036
Total Irrigation Use	9833	1508	296	5731	275	1375	648
NI Water Use	2679	265	66	1077	351	489	431
Evaporation Losses	2133	241	114	858	87	334	499
Unutilised Storage	1498	135	160	790	301	99	14

Chart III - Circle Wise Water Availability, Water Use (Major Projects)

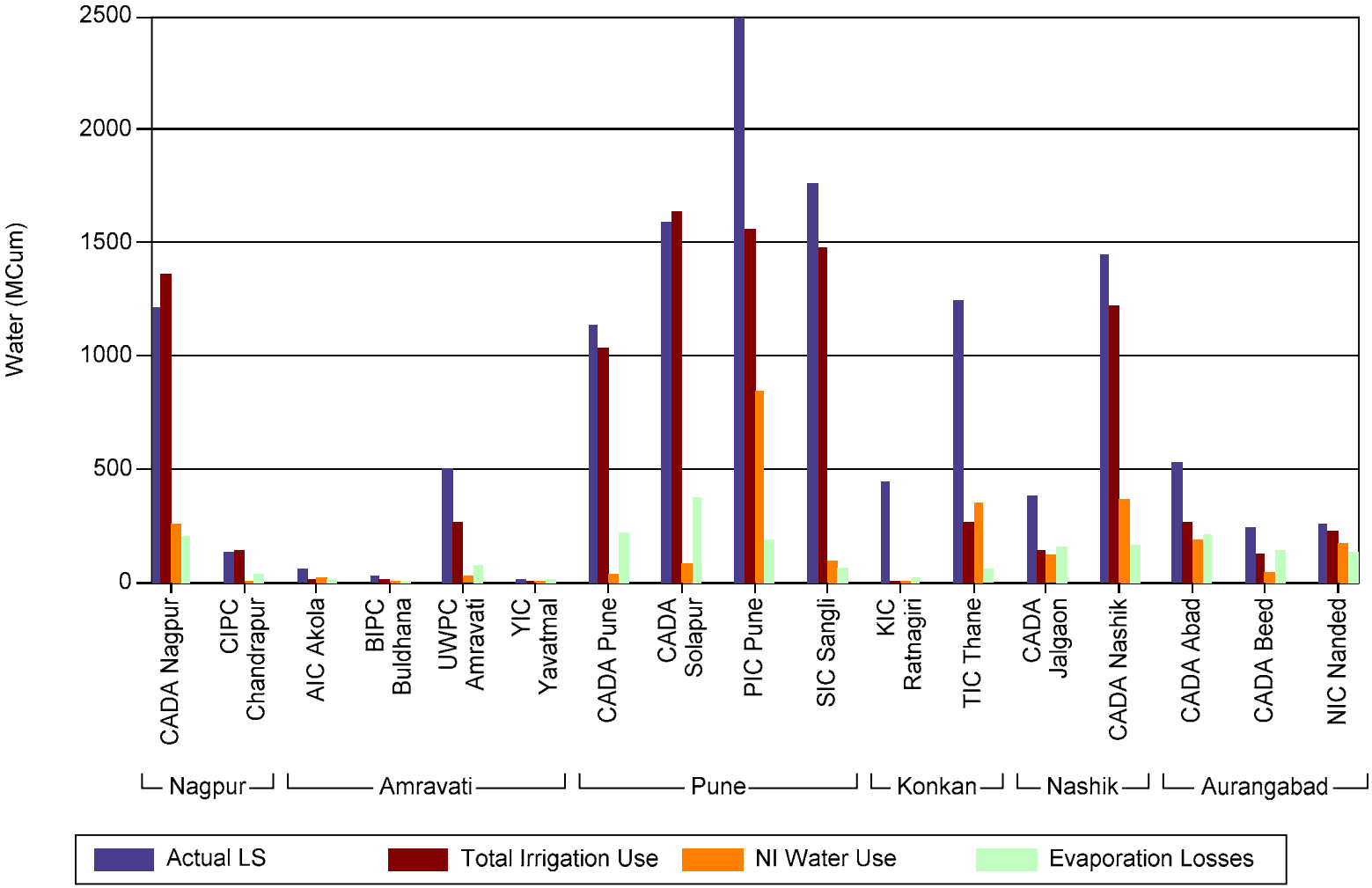
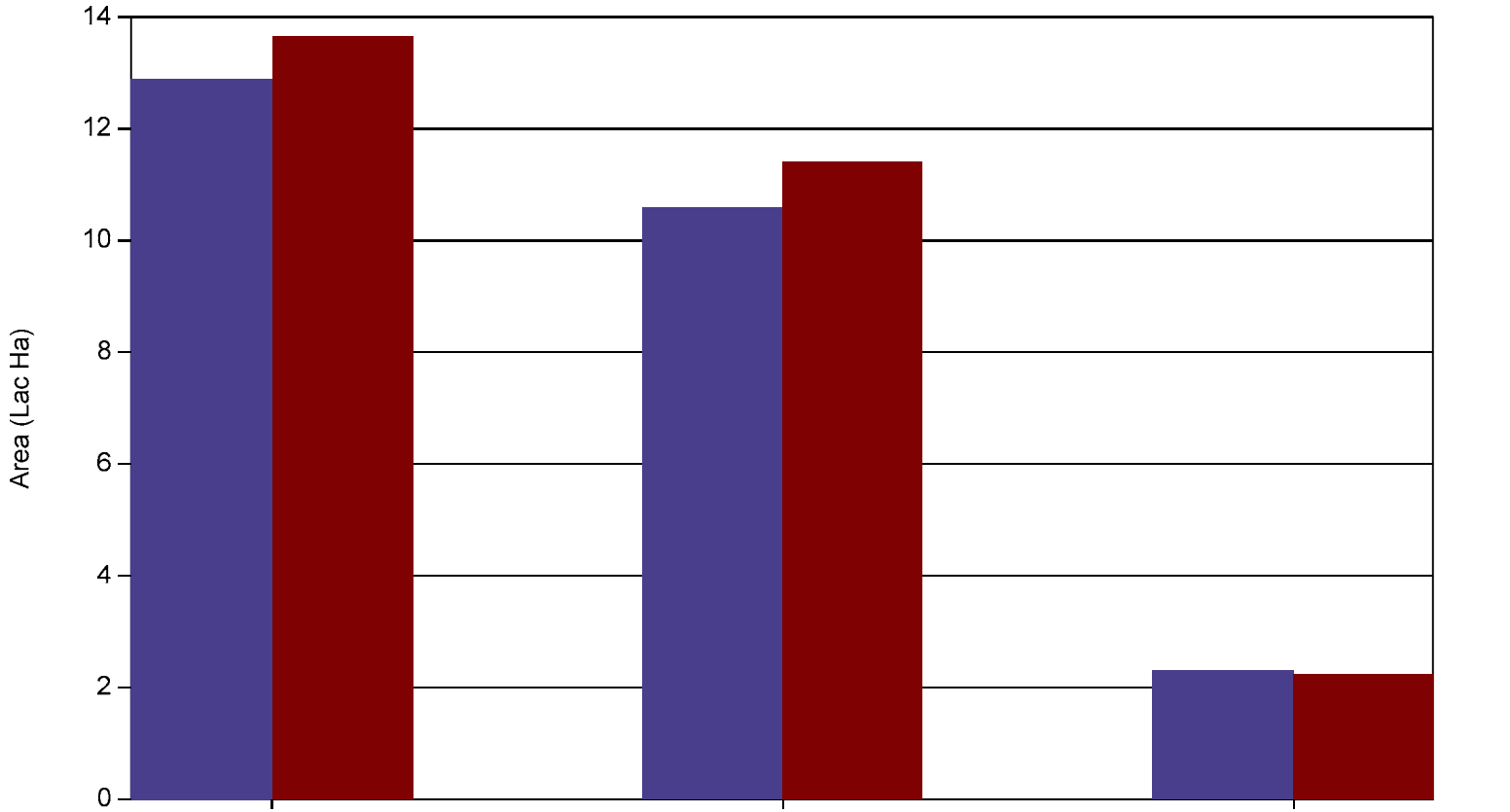
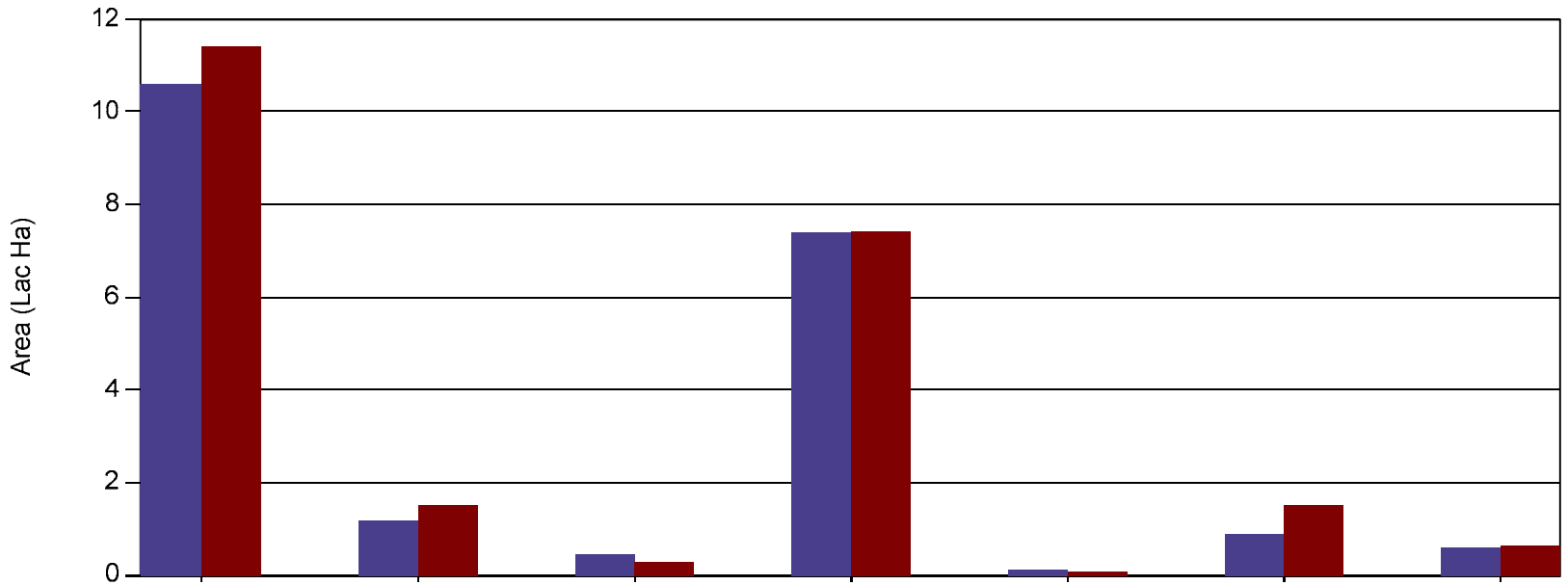


Chart IV - Details of Area Planned & Actually Irrigated (Major & Medium Projects)



	State	Major	Medium
Irrigated Area Actual	1366717	1142064	224653
Irrigated Area PIP	1288886	1057938	230948

Chart V - Region Wise Area Planned & Actual Irrigated (Major Projects)



	State	Nagpur	Amravati	Pune	Konkan	Nashik	Aurangabad
Irrigation Area (ha) Actual	1142064	150378	26532	741917	7264	151141	64832
Irrigation Area (ha) PIP	1057938	115950	45070	740086	11667	86825	58340

Chart VI - Circle Wise Area Planned in PIP And Actual Area Irrigated (Major Projects)

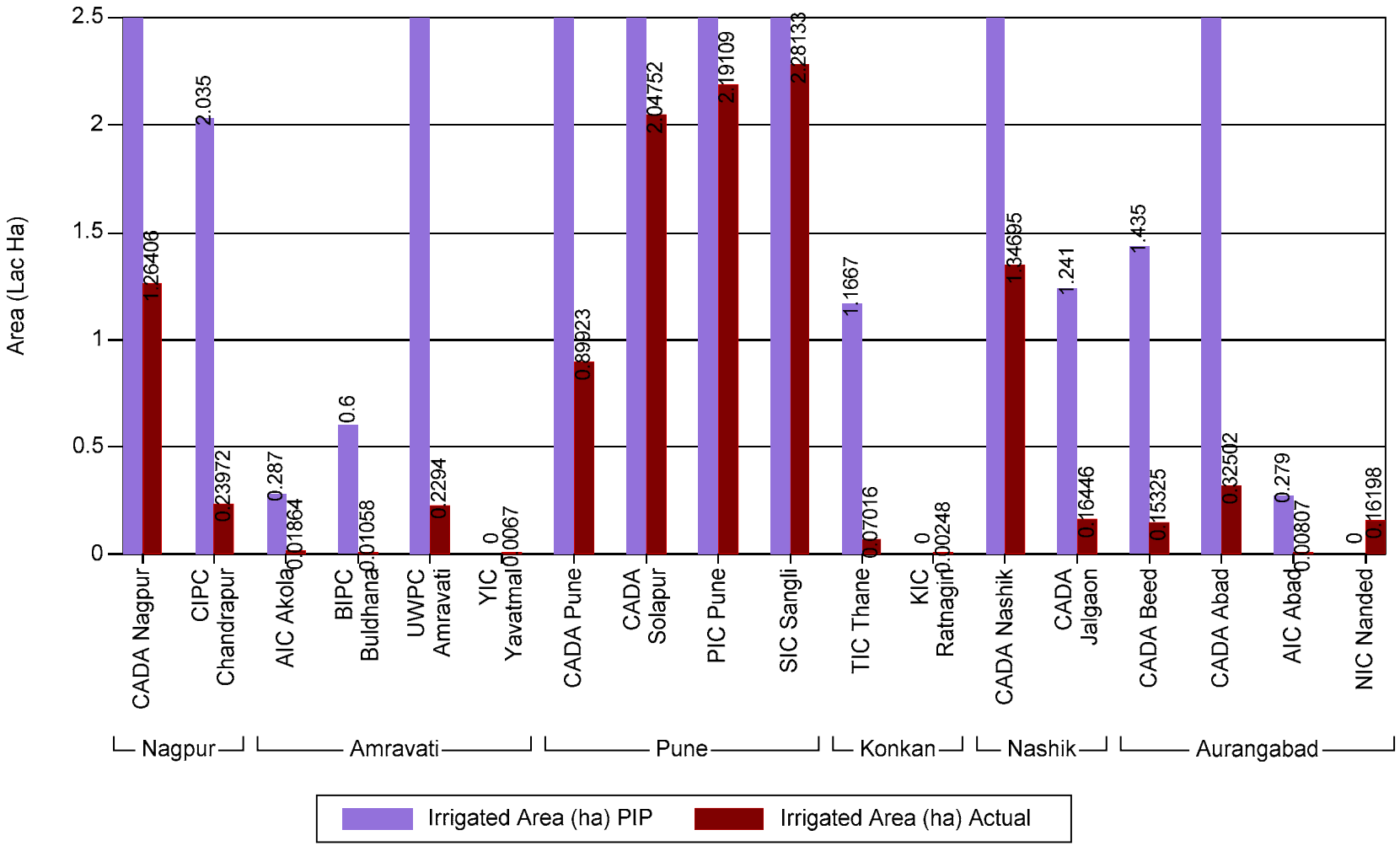


Chart VII - Region wise Annual Average Irrigation System Performance (ISP) Observed (Major Projects)

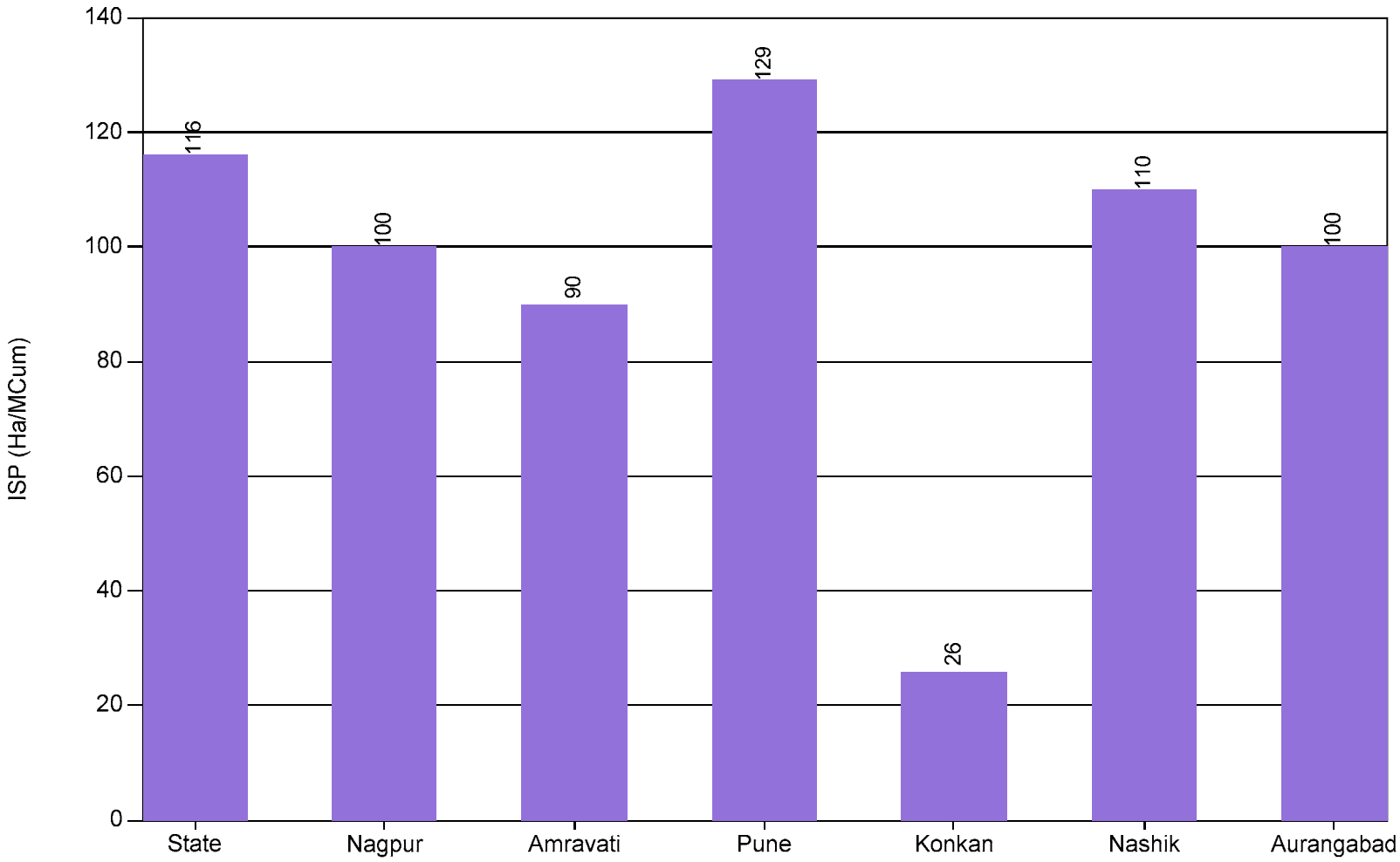


Chart VIII - Circle Wise Annual Average Irrigation System Performance (ISP) Observed (Major Projects)

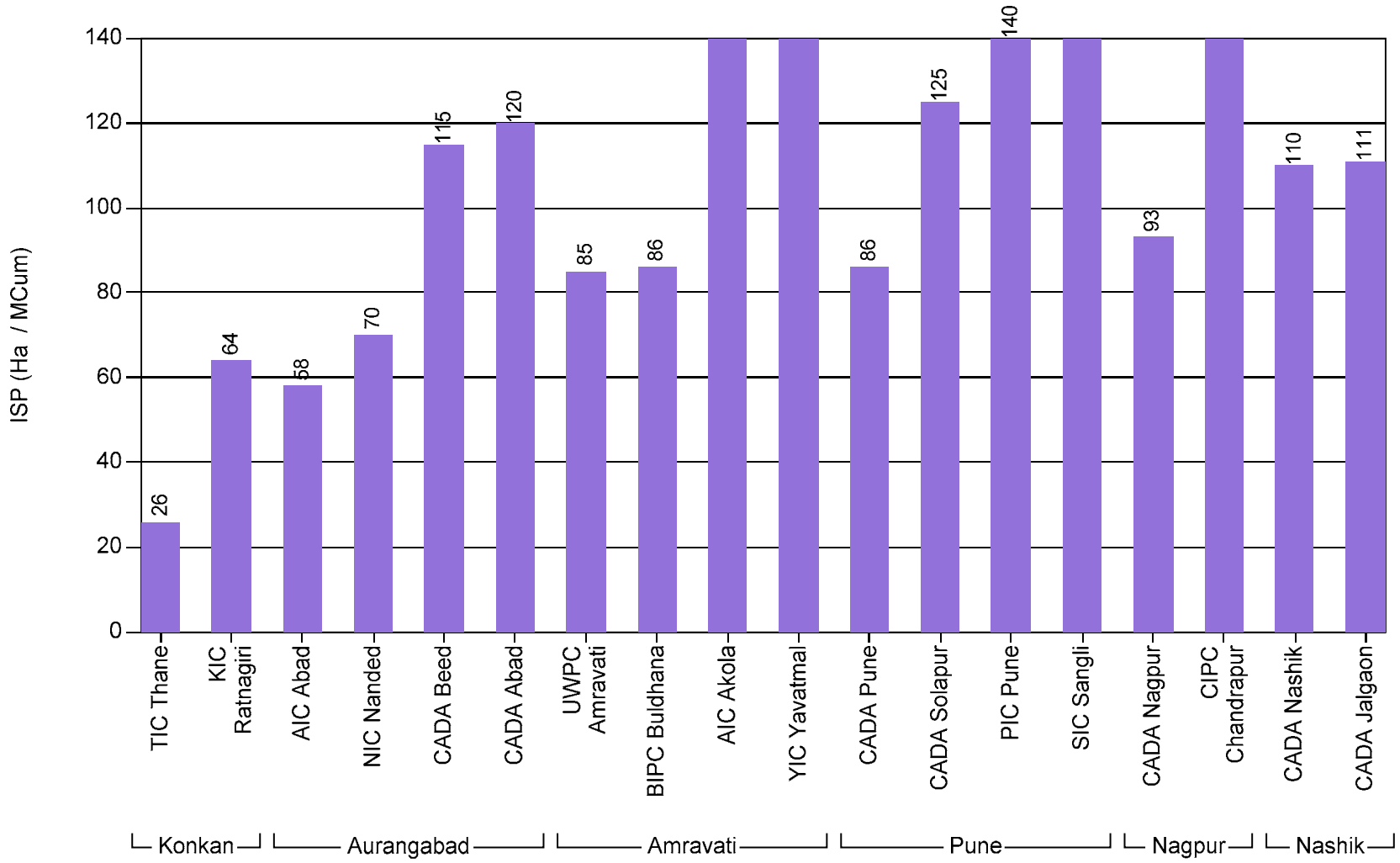


Chart IX - Water Use On Reservoir Lifts (Major Projects)

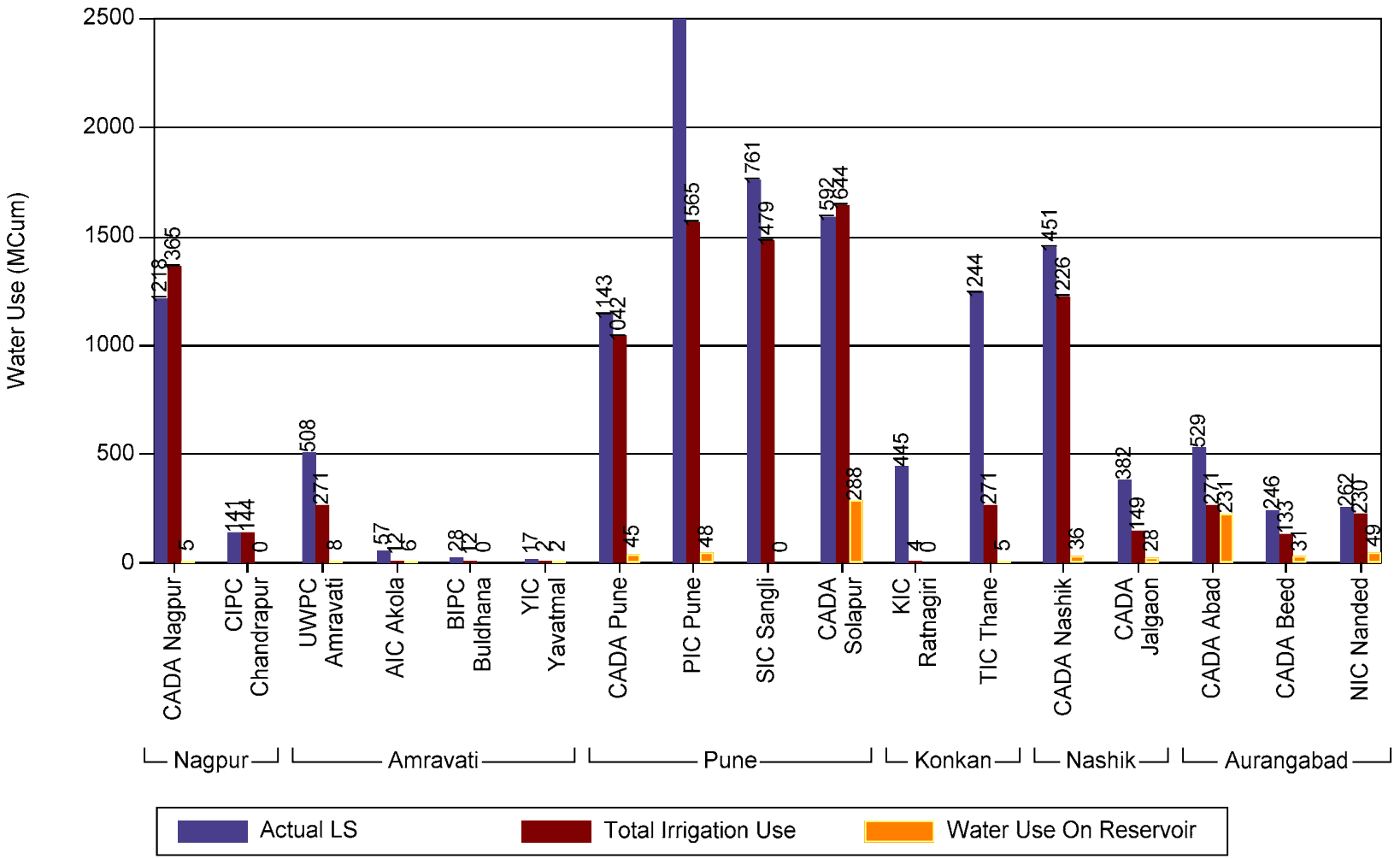


Chart X - Major Projects Having Unutilised Storage More Than 5 (%)

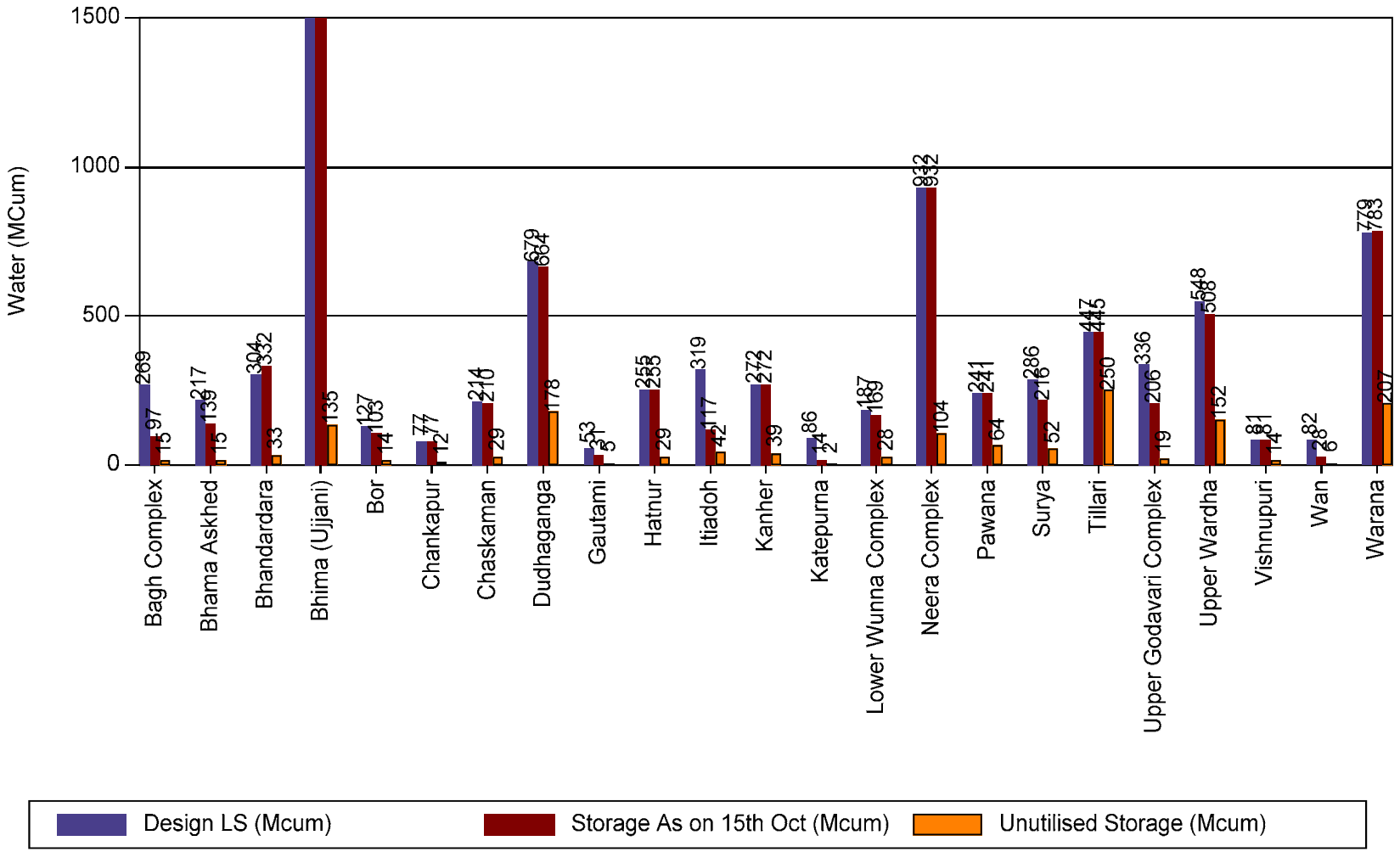
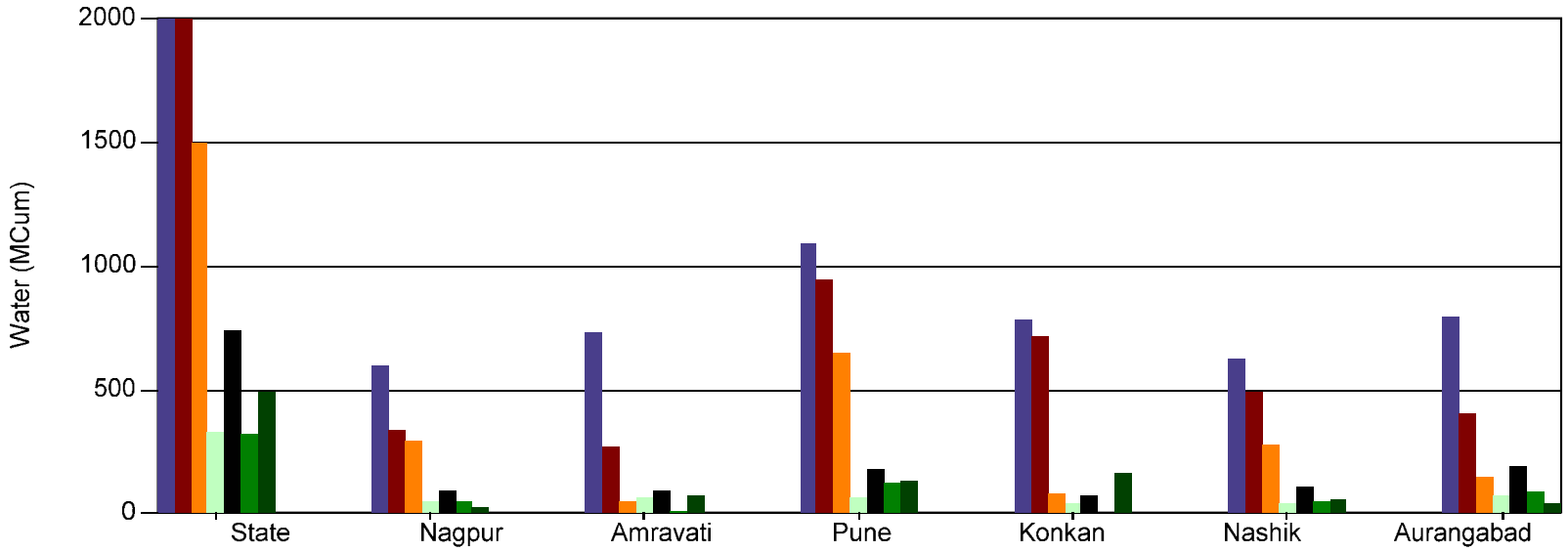


Chart XI - Region Wise Water Use (Medium Projects)



	State	Nagpur	Amravati	Pune	Konkan	Nashik	Aurangabad
Design LS	4623	597	732	1089	786	624	795
Actual Live Storage	3152	334	265	942	717	488	406
Total Irrigation Use	1496	289	52	650	77	278	150
NI Water Use	329	50	67	61	39	42	70
Evaporation	742	91	96	177	71	112	195
Water Use on Reservoir	323	49	12	127	0	49	87
Unutilized Storage	487	28	72	129	161	59	39

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 Projects)

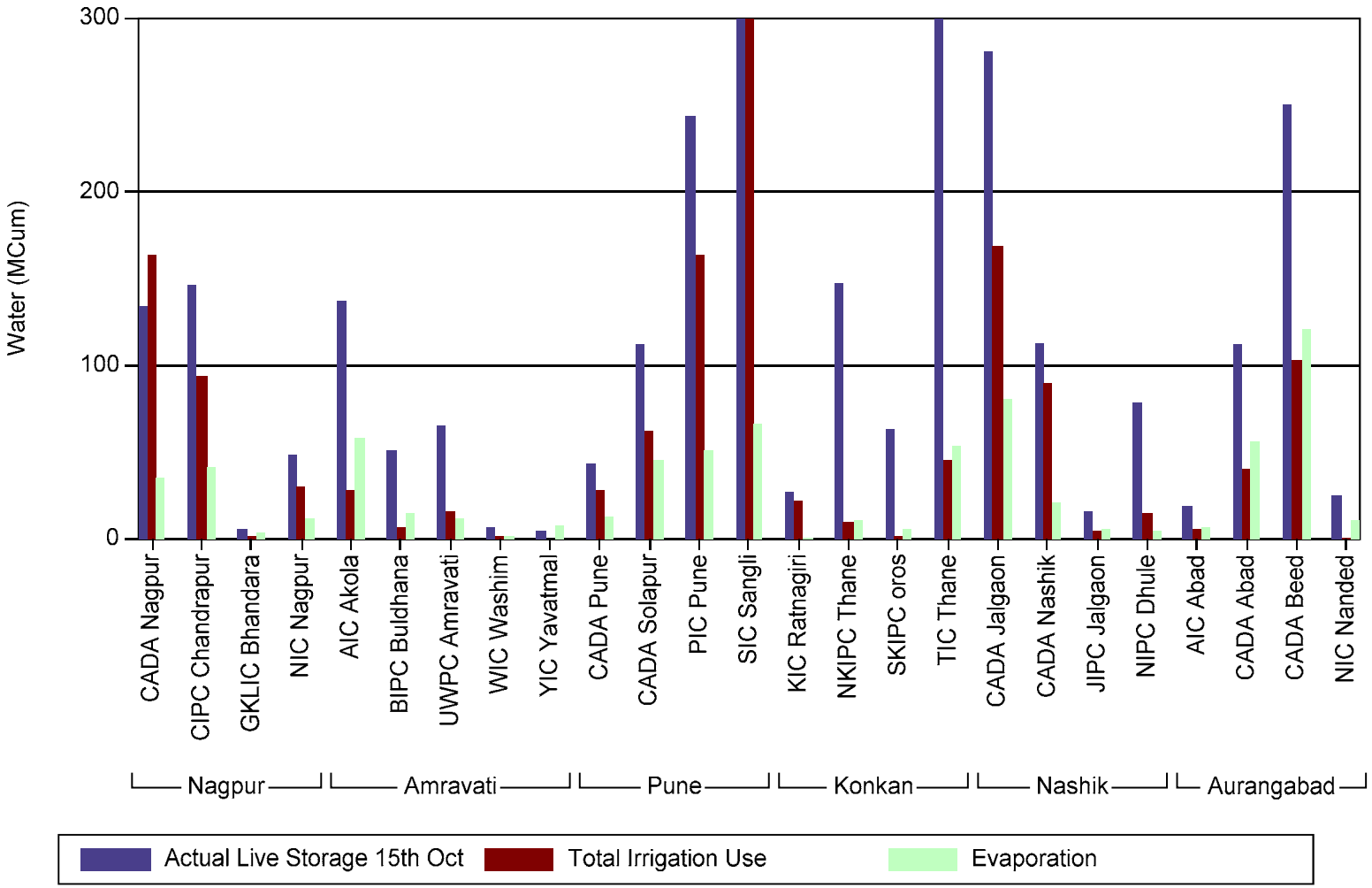


Chart XIII - Circle Wise Area Planned In PIP & Actual Area Irrigated (Medium Projects)

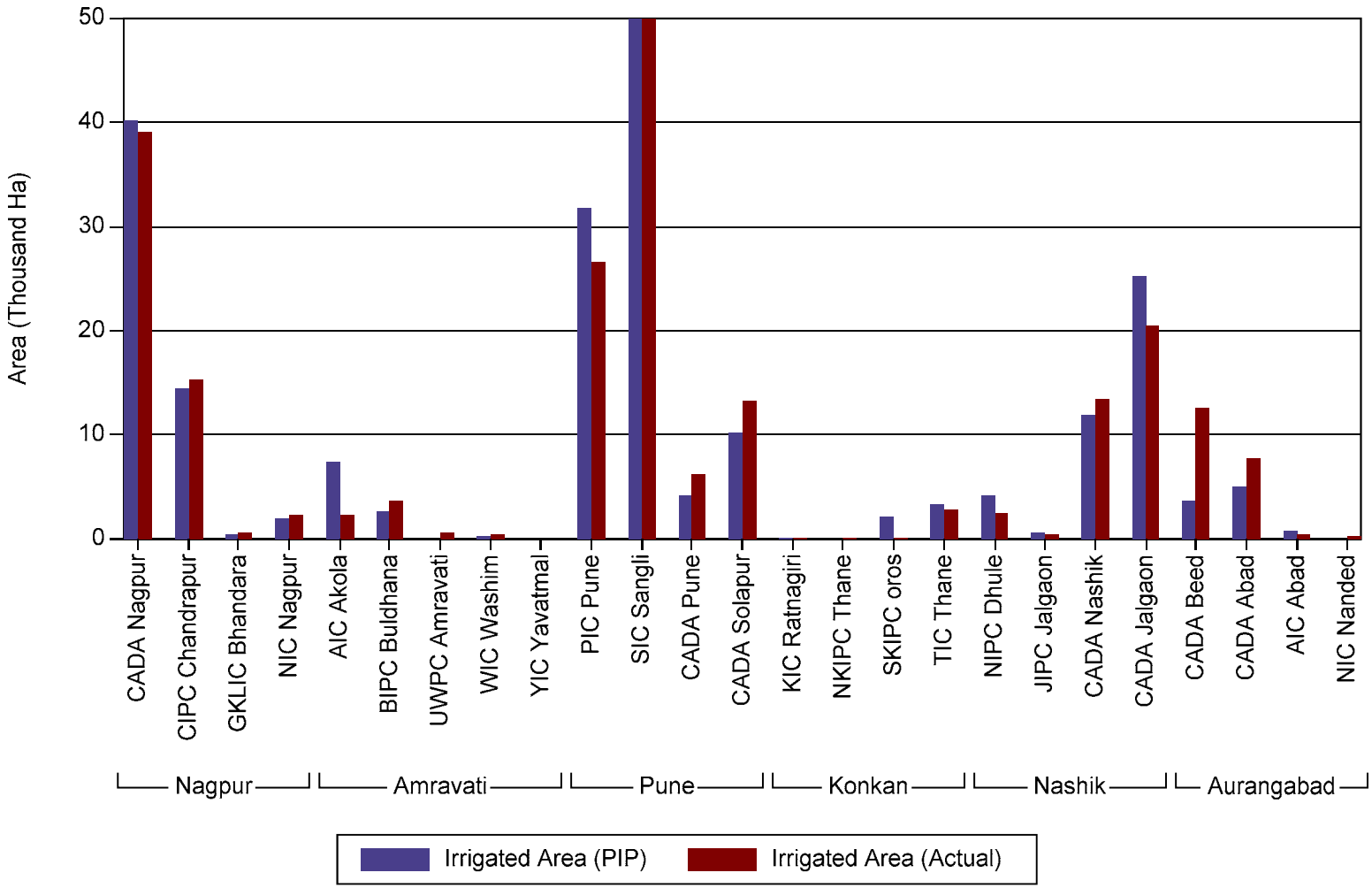


Chart XIV - Region Wise Annual Irrigation System Performance (ISP) Observed (Medium Projects)

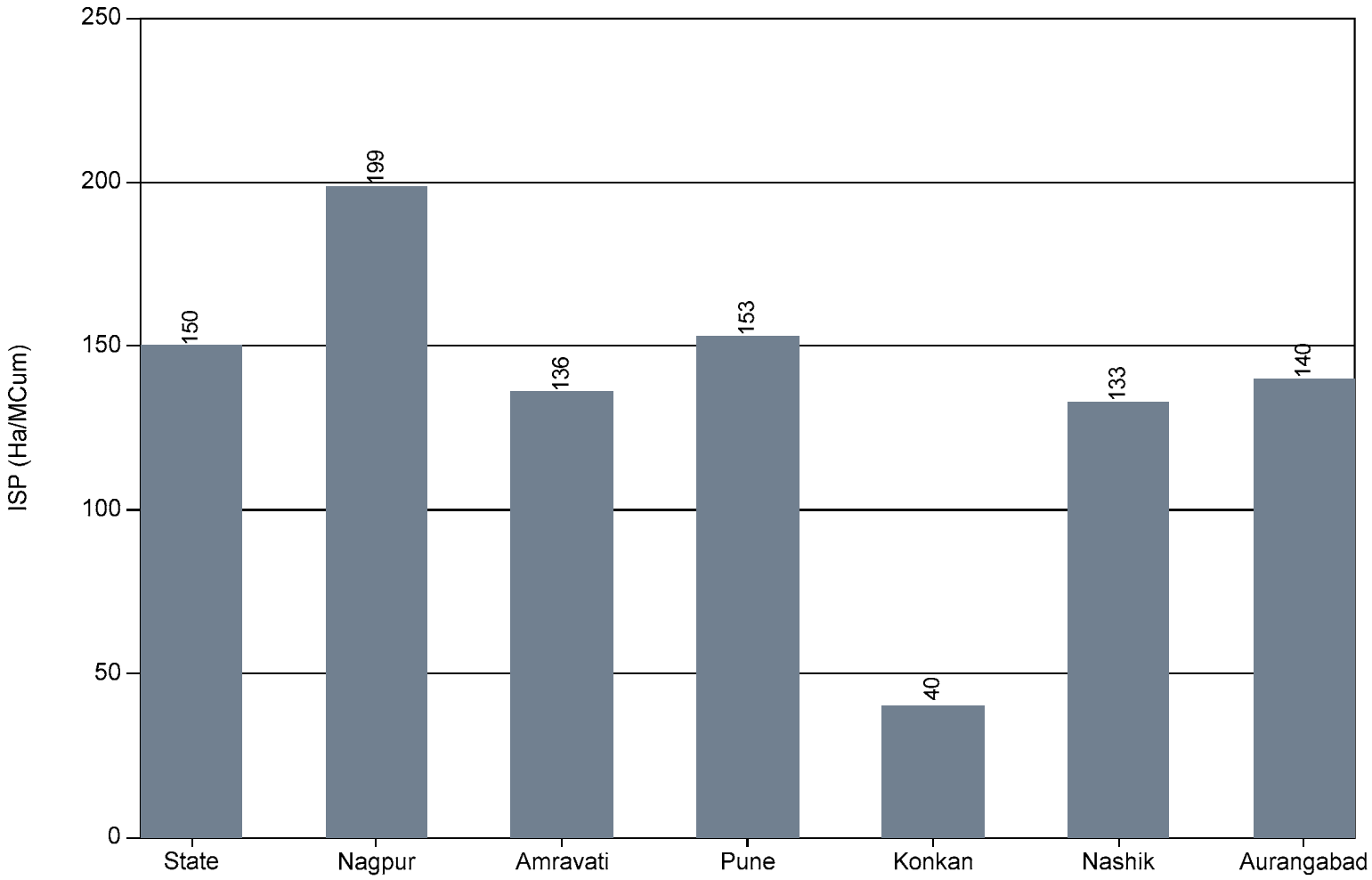


Chart XV - Circle Wise Annual Irrigation System Performance (ISP) Observed (Medium Projects)

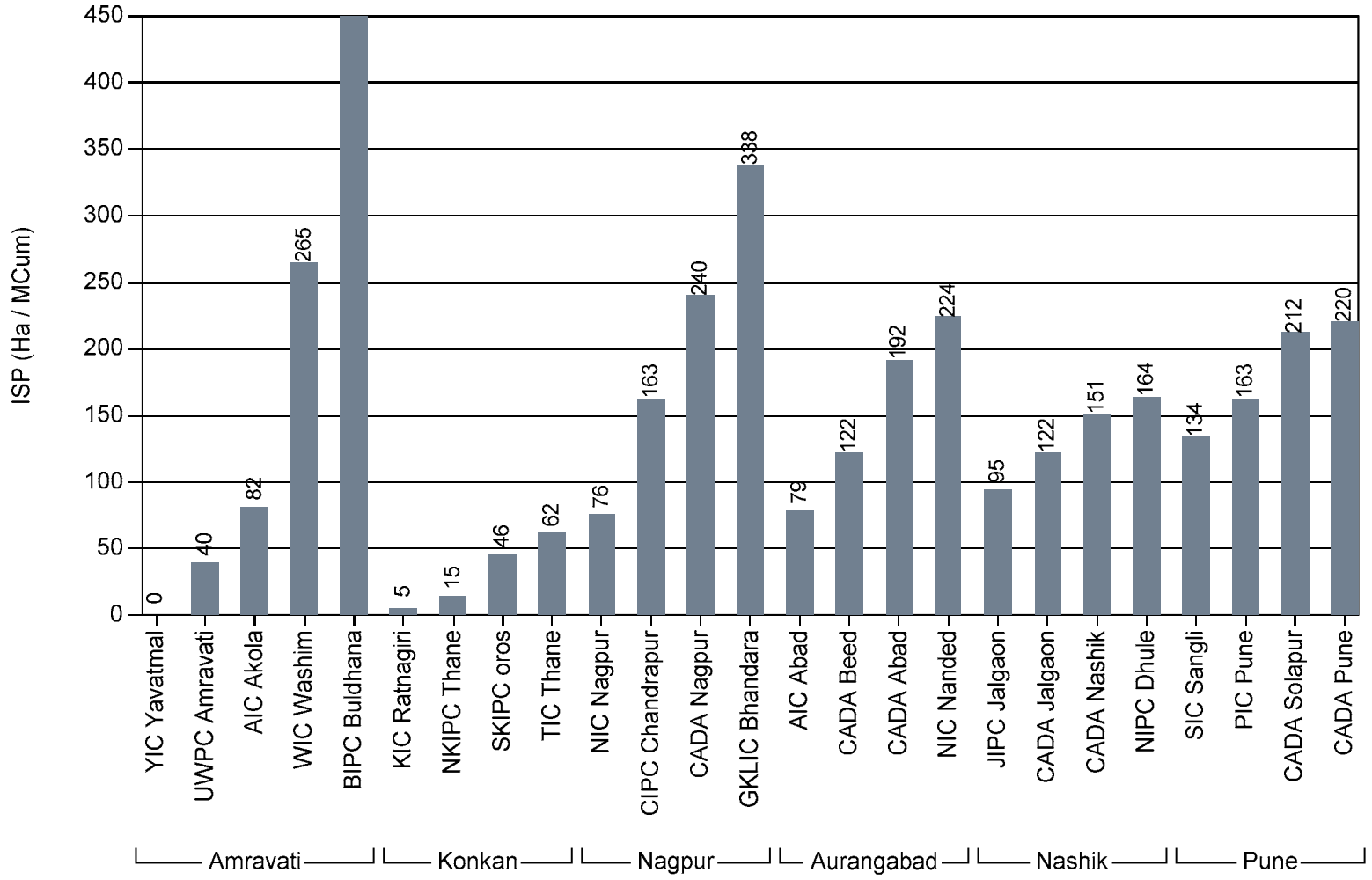
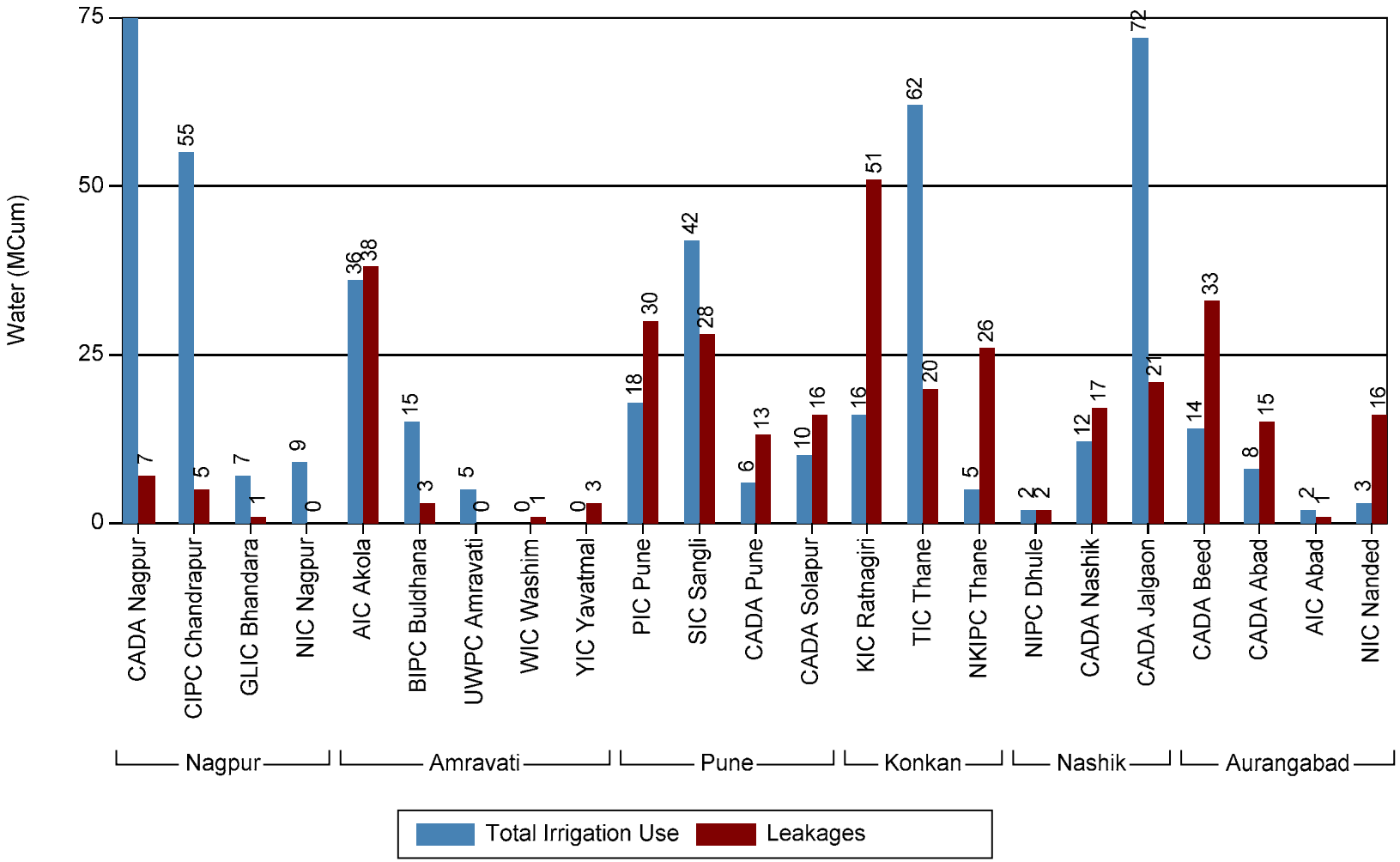


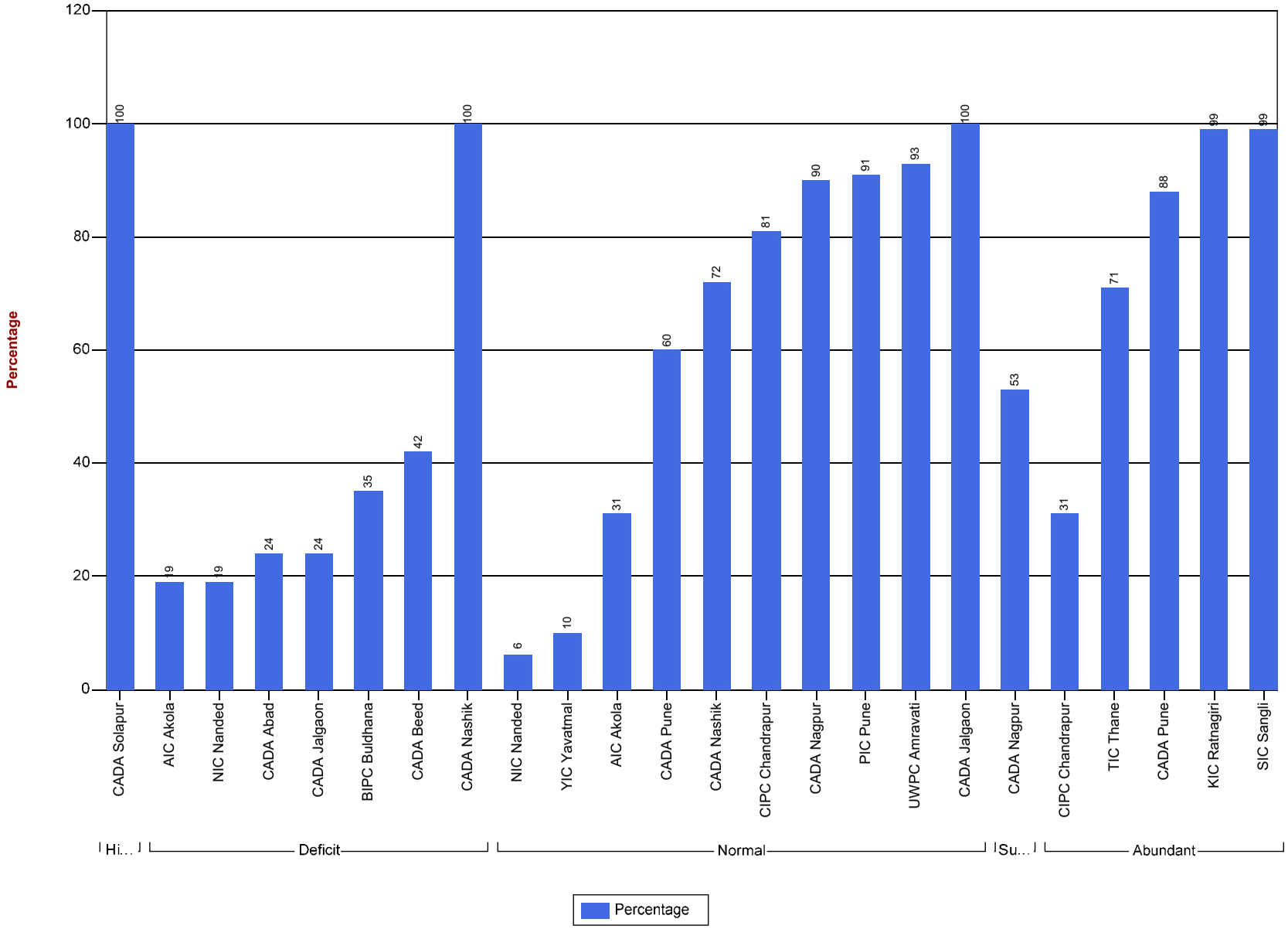
Chart XVI - Region & Circle wise Annual Irrigation Use And Leakages (Minor Projects)



Annex I
Indicators of Major Projects

Indicator I: Major Projects - Water Availability in Reservoirs On 15th Oct
Percentage
0
20
40
60
80
100
120
Highly...
Deficit
Normal
Surplus
Abundant
Sina Madha Link Canal 0
Sina Madha LIS 0
Sina Kolegaon LIS 95
Bhima (Ujjani) 100
Waghur 0
Manar 6
Purna Complex 13
Katepurna 16
Nalganga 23
Girna+Panzan 24
Jayakwadi Stage I 24
Lower Terna 30
Wan 35
Jayakwadi Stage II 36
Manjra 60
Vishnupuri 100
Chankapur 100
NMC Express Mukane 0
Upper Penganga 6
Arunawati 10
Pus 31
Kashyapi 50
Ghod 52
Mula 56
Gautami 58
Mukane 60
Upper Godavari Complex 61
Kukadi Complex 62
Bhama Askhed 64
Gangapur 79
Bor 81
Khadakwasla Complex 82
NMWeir 84
Lower Wunna Complex 90
Darna 90
Upper Wardha 93
Neera Devdhar 95
Chaskaman 98
Hatnur 100
Kadwa 100
Neera Complex 100
Pawana 100
Bhandardara 109
Bagh Complex 36
Itiadoh 37
Pench Complex 61
Krishna LIS Complex 0
Asolamendha 14
Dina 45
Bhatsa 66
Kal-Amba 76
Surya 76
Dhom 77
Dudhaganga 98
Radhanagari 99
Tillari 99
Kanher 100
Warana 101
Tulshi 105

Indicator I - Major Projects - Water Availability in Reservoirs On 15th Oct



Indicator I: Water Availability in Reservoirs on 15th Oct - Page 1 of 3

(Major / 2009-10) 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)	1,519.59	1,517.20	100
	Sina Kolegaon LIS	72.65	76.19	95
	Sina Madha LIS	0.00	0.00	0
	CADA Solapur	**1592.240**	**1593.390**	**100**
Highly Deficit		**1592.240**	**1593.390**	**100**
Deficit				
Purna (Tapi)	Wan	28.32	81.96	35
	BIPC Buldhana	**28.320**	**81.955**	**35**
Purna (Tapi)	Katepurna	13.51	86.35	16
	Nalganga	15.83	69.32	23
	AIC Akola	**29.340**	**155.670**	**19**
Girna	Chankapur	76.85	76.85	100
	CADA Nashik	**76.850**	**76.850**	**100**
Girna	Girna+Panzan	127.18	525.06	24
	CADA Jalgaon	**127.180**	**525.060**	**24**
Manjra	Manar	7.63	138.21	6
	Purna Complex	133.50	890.22	15
	Vishnupuri	80.79	80.79	100
	NIC Nanded	**221.919**	**1109.223**	**20**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	112.00	312.00	36
	Lower Terna	27.62	91.22	30
	Manjra	106.15	176.96	60
	CADA Beed	**245.770**	**580.184**	**42**
Lower Godavari	Jayakwadi Stage I	528.61	2,170.94	24
	CADA Abad	**528.611**	**2170.935**	**24**
Deficit		**1257.990**	**4699.877**	**27**
Normal				
Upper Godavari	NMC Express Mukane	0.00	0.00	0
	AIC Abad	**0.000**	**0.000**	**0**
Painganga	Arunawati	17.32	169.92	10
	YIC Yavatmal	**17.320**	**169.920**	**10**
Painganga	Pus	27.93	91.27	31
	AIC Akola	**27.928**	**91.265**	**31**
Painganga	Upper Penganga	53.98	964.10	6
	NIC Nanded	**53.981**	**964.099**	**6**
Wardha	Bor	102.64	127.42	81
	CIPC Chandrapur	**102.640**	**127.420**	**81**
Wardha	Lower Wunna Complex	168.74	187.18	90
	CADA Nagpur	**168.736**	**187.182**	**90**
Middle Tapi (Satpuda)	Hatnur	255.00	255.00	100
	CADA Jalgaon	**255.000**	**255.000**	**100**
Wardha	Upper Wardha	507.90	548.14	93
	UWPC Amravati	**507.900**	**548.140**	**93**

Indicator I: Water Availability in Reservoirs on 15th Oct - Page 2 of 3

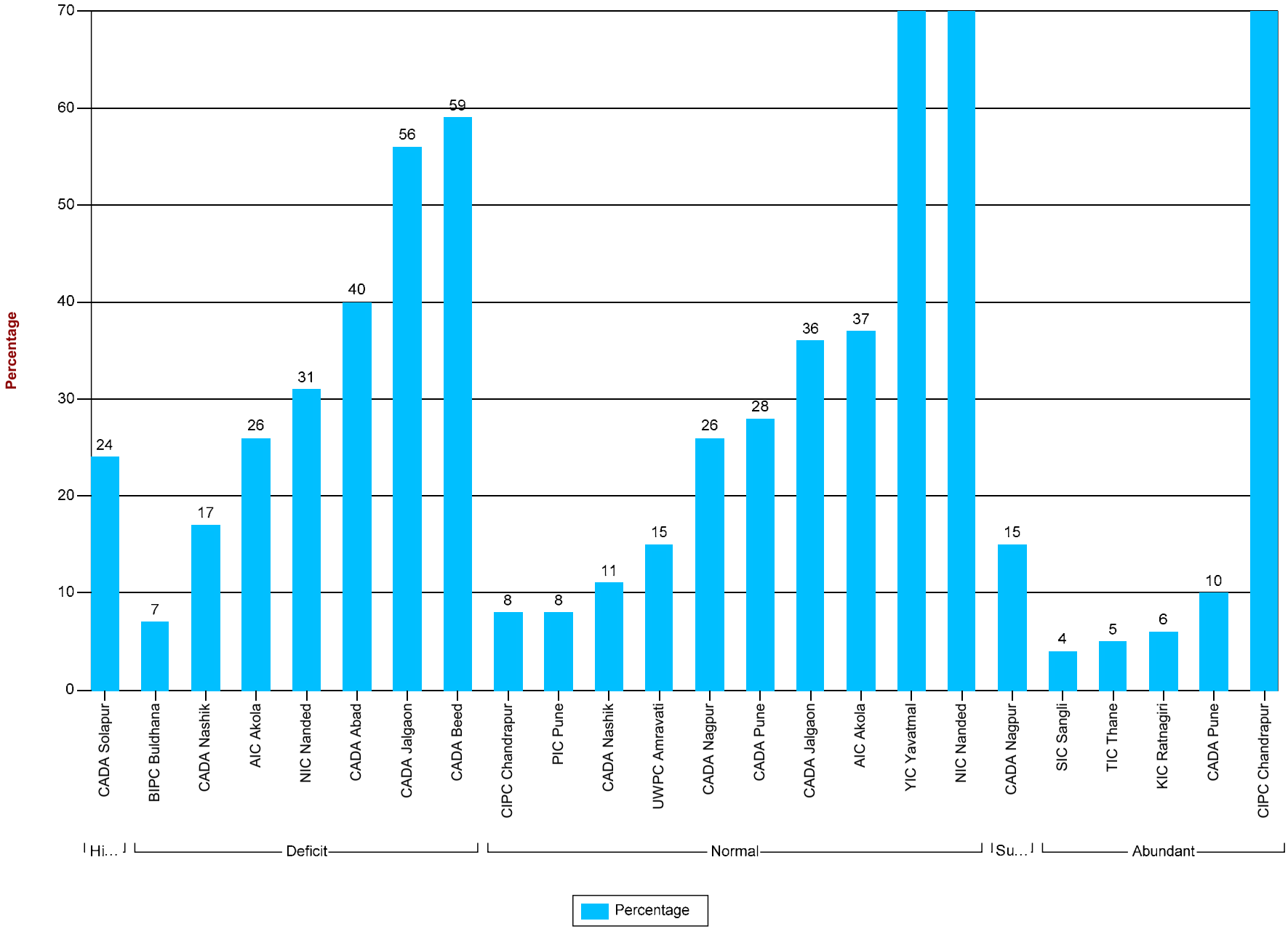
(Major / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Upper Bhima	Ghod	80.19	154.80	52
	Kukadi Complex	535.16	864.39	62
	CADA Pune	**615.352**	**1019.190**	**60**
Upper Godavari	Bhandardara	332.18	304.10	109
	Darna	181.48	202.43	90
	Gangapur	125.65	159.42	79
	Gautami	30.69	53.34	58
	Kadwa	52.91	52.91	100
	Kashyapi	26.27	52.43	50
	Mukane	75.21	125.33	60
	Mula	338.10	608.80	56
	NMWeir	6.12	7.28	84
	Upper Godavari Complex	205.87	336.18	61
	CADA Nashik	**1374.484**	**1902.217**	**72**
Upper Bhima	Bhama Askhed	139.32	217.10	64
	Chaskaman	209.72	214.50	98
	Khadakwasla Complex	677.08	822.80	82
	Neera Complex	931.93	931.93	100
	Neera Devdhar	316.44	332.13	95
	Pawana	240.97	240.97	100
	PIC Pune	**2515.456**	**2759.426**	**91**
Normal		**5638.797**	**8023.859**	**70**
Surplus				
Middle Wainganga	Bagh Complex	96.79	268.96	36
	Itiadoh	116.70	318.85	37
	Pench Complex	836.00	1,375.26	61
	CADA Nagpur	**1049.486**	**1963.070**	**53**
Surplus		**1049.486**	**1963.070**	**53**
Abundant				
Lower Wainganga	Asolamendha	8.08	56.38	14
	Dina	30.36	67.54	45
	CIPC Chandrapur	**38.440**	**123.915**	**31**
Telekhol- Tillari	Tillari	444.53	447.37	99
	KIC Ratnagiri	**444.531**	**447.369**	**99**
Upper Krishna (W)	Dhom	256.06	331.05	77
	Kanher	271.99	271.68	100
	CADA Pune	**528.050**	**602.730**	**88**
North Konkan	Bhatsa	624.86	942.10	66
	Kal-Amba	402.96	528.13	76
	Surya	216.41	286.31	76
	TIC Thane	**1244.229**	**1756.540**	**71**
Upper Krishna (W)	Dudhaganga	663.51	679.11	98
	Krishna LIS Complex	0.00	0.00	0
	Radhanagari	217.81	219.97	99
	Tulshi	96.33	91.92	105
	Warana	783.41	779.35	101

(Major / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	SIC Sangli	**1761.059**	**1770.348**	**99**
Abundant		**4016.309**	**4700.902**	**85**
Major		**13554.822**	**20981.098**	**65**

Indicator II : Major Projects - Percentage of Actual Evaporation to Live Storage



Indicator II: Percentage of Actual Evaporation to Live Storage - Page 1 of 3

(Major Project / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	358.00	1519.59	24.00
	Sina Kolegaon LIS	18.81	72.65	26.00
	Sina Madha Link Canal	0.00	0.00	0.00
	Sina Madha LIS	0.00	0.00	0.00
	CADA Solapur	**376.81**	**1,592.24**	**24.00**
Highly Deficit		**376.81**	**1592.24**	**24.00**
Deficit				
Purna (Tapi)	Katepurna	3.03	13.51	22.00
	Nalganga	4.69	15.83	30.00
	AIC Akola	**7.71**	**29.34**	**26.00**
Purna (Tapi)	Wan	2.07	28.32	7.00
	BIPC Buldhana	**2.07**	**28.32**	**7.00**
Lower Godavari	Jayakwadi Stage I	213.35	528.61	40.00
	CADA Abad	**213.35**	**528.61**	**40.00**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	81.47	112.00	73.00
	Lower Terna	21.81	27.62	79.00
	Manjra	40.84	106.15	38.00
	CADA Beed	**144.12**	**245.77**	**59.00**
Girna	Girna+Panzan	71.06	127.18	56.00
	CADA Jalgaon	**71.06**	**127.18**	**56.00**
Girna	Chankapur	13.35	76.85	17.00
	CADA Nashik	**13.35**	**76.85**	**17.00**
Middle Tapi (South)	Waghur	0.00	0.00	0.00
	JIPC Jalgaon	**0.00**	**0.00**	**0.00**
Manjra	Manar	7.58	7.63	99.00
	Purna Complex	39.75	133.50	30.00
	Vishnupuri	17.14	80.79	21.00
	NIC Nanded	**64.47**	**221.92**	**29.00**
Deficit		**516.13**	**1257.99**	**41.00**
Normal				
Upper Godavari	NMC Express Mukane	0.00	0.00	0.00
	AIC Abad	**0.00**	**0.00**	**0.00**
Painganga	Pus	10.26	27.93	37.00
	AIC Akola	**10.26**	**27.93**	**37.00**
Middle Tapi (Satpuda)	Hatnur	91.71	255.00	36.00
	CADA Jalgaon	**91.71**	**255.00**	**36.00**
Wardha	Lower Wunna Complex	44.08	168.74	26.00
	CADA Nagpur	**44.08**	**168.74**	**26.00**
Upper Godavari	Bhandardara	15.74	332.18	5.00

Indicator II: Percentage of Actual Evaporation to Live Storage - Page 2 of 3

(Major Project / 2009-10) Unit: MCum

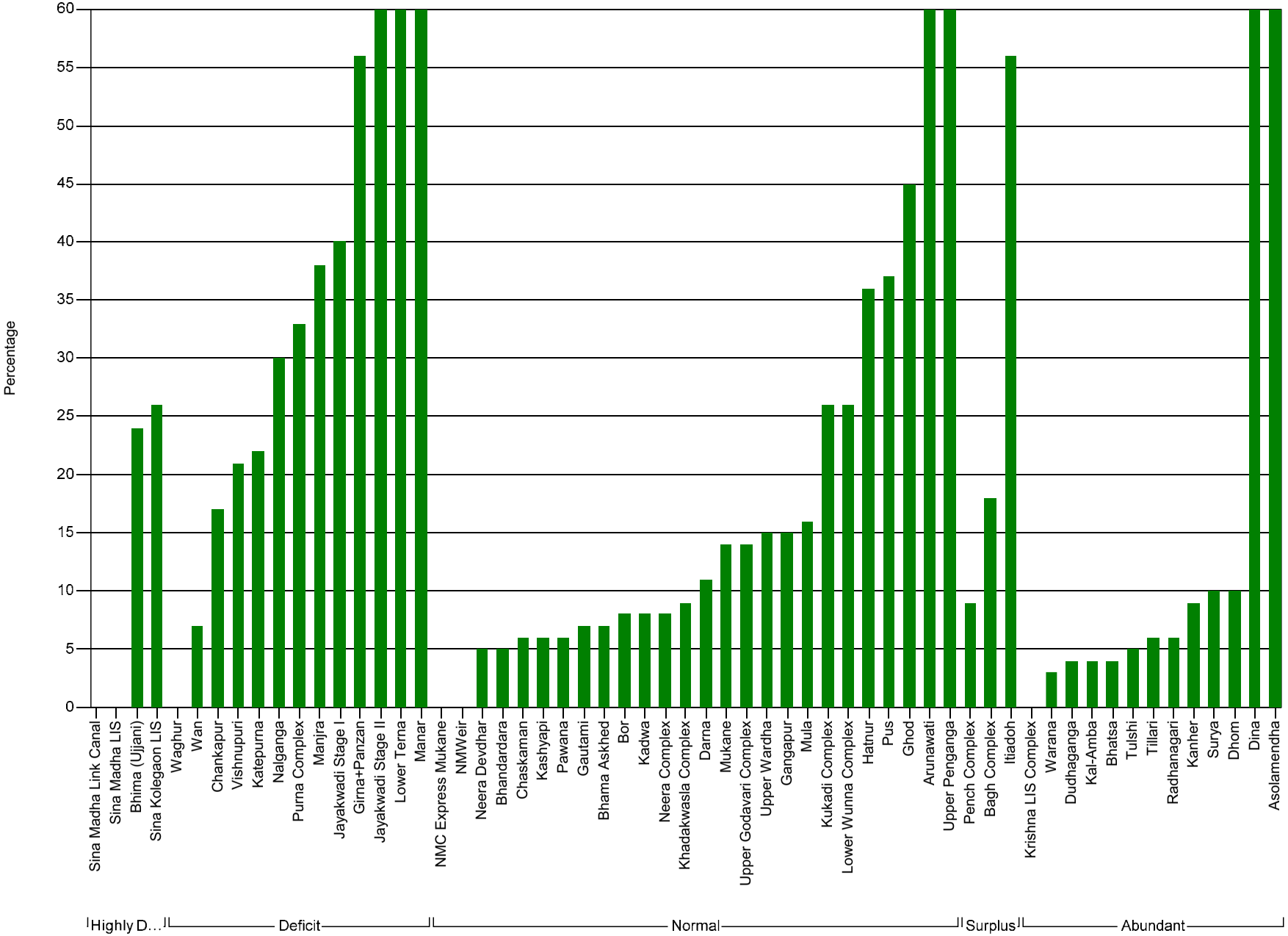
Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Darna	20.13	181.48	11.00
	Gangapur	18.35	125.65	15.00
	Gautami	2.09	30.69	7.00
	Kadwa	4.04	52.91	8.00
	Kashyapi	1.53	26.27	6.00
	Mukane	10.82	75.21	14.00
	Mula	55.70	338.10	16.00
	NMWeir	0.00	6.12	0.00
	Upper Godavari Complex	29.22	205.87	14.00
	CADA Nashik	**157.61**	**1,374.48**	**11.00**
Upper Bhima	Ghod	35.77	80.19	45.00
	Kukadi Complex	137.01	535.16	26.00
	CADA Pune	**172.78**	**615.35**	**28.00**
Wardha	Bor	8.05	102.64	8.00
	CIPC Chandrapur	**8.05**	**102.64**	**8.00**
Painganga	Upper Penganga	76.74	53.98	142.00
	NIC Nanded	**76.74**	**53.98**	**142.00**
Upper Bhima	Bhama Askhed	9.09	139.32	7.00
	Chaskaman	12.35	209.72	6.00
	Khadakwasla Complex	60.70	677.08	9.00
	Neera Complex	76.41	931.93	8.00
	Neera Devdhar	15.06	316.44	5.00
	Pawana	15.45	240.97	6.00
	PIC Pune	**189.05**	**2,515.46**	**8.00**
Wardha	Upper Wardha	75.68	507.90	15.00
	UWPC Amravati	**75.68**	**507.90**	**15.00**
Painganga	Arunawati	18.57	17.32	107.00
	YIC Yavatmal	**18.57**	**17.32**	**107.00**
Normal		**844.53**	**5638.80**	**15.00**
Surplus				
Middle Wainganga	Bagh Complex	16.97	96.79	18.00
	Itiadoh	64.93	116.70	56.00
	Pench Complex	78.71	836.00	9.00
	CADA Nagpur	**160.61**	**1,049.49**	**15.00**
Surplus		**160.61**	**1049.49**	**15.00**
Abundant				
Upper Krishna (W)	Dhom	25.07	256.06	10.00
	Kanher	25.76	271.99	9.00
	CADA Pune	**50.82**	**528.05**	**10.00**
Lower Wainganga	Asolamendha	8.06	8.08	100.00
	Dina	19.89	30.36	66.00

Indicator II: Percentage of Actual Evaporation to Live Storage - Page 3 of 3

(Major Project / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	CIPC Chandrapur	**27.96**	**38.44**	**73.00**
Telekhol- Tillari	Tillari	24.58	444.53	6.00
	KIC Ratnagiri	**24.58**	**444.53**	**6.00**
Upper Krishna (W)	Dudhaganga	27.04	663.51	4.00
	Krishna LIS Complex	0.00	0.00	0.00
	Radhanagari	14.06	217.81	6.00
	Tulshi	4.83	96.33	5.00
	Warana	22.96	783.41	3.00
	SIC Sangli	**68.88**	**1,761.06**	**4.00**
North Konkan	Bhatsa	25.98	624.86	4.00
	Kal-Amba	14.38	402.96	4.00
	Surya	22.01	216.41	10.00
	TIC Thane	**62.36**	**1,244.23**	**5.00**
Abundant		**234.60**	**4016.31**	**6.00**
Major Project - Grand Total:		**2132.69**	**13554.82**	**16.00**

Indicator-II: Major Projects - Percentage of Actual Evaporation to Live Storage



Indicator No. II (A): Percentage of Actual Evaporation to Projected Evaporation
Major Projects (2009-10) - Page 1 of 3

Unit: Mcum

Subbasin/ PlanGroup	Circle/Project	Actual Evaporation	Projected Evaporation	Percentage of Evaporation
Highly Deficit				
Remaining Bhima+ Man				
	Bhima (Ujjani)	358.00	453.20	79
Sina				
	Sina Kolegaon LIS	18.81	23.35	81
	Sina Madha LIS	0.00	0.00	0
	CADA Solapur	**376.81**	**476.55**	**79**
Highly Deficit		**376.81**	**476.55**	**79**
Deficit				
Purna (Tapi)				
	Katepurna	3.03	0.00	0
	Nalganga	4.69	8.50	55
	AIC Akola	**7.71**	**8.50**	**91**
Purna (Tapi)				
	Wan	2.07	4.46	46
	BIPC Buldhana	**2.07**	**4.46**	**46**
Lower Godavari				
	Jayakwadi Stage I	213.35	664.83	32
	CADA Abad	**213.35**	**664.83**	**32**
Lower Godavari				
	Jayakwadi Stage II (Majalgao	81.47	128.76	63
Manjra				
	Lower Terna	21.81	52.66	41
	Manjra	40.84	69.94	58
	CADA Beed	**144.12**	**251.36**	**57**
Girna				
	Girna+Panzan	71.06	82.91	86
	CADA Jalgaon	**71.06**	**82.91**	**86**
Girna				
	Chankapur	13.35	14.30	93
	CADA Nashik	**13.35**	**14.30**	**93**
Lower Godavari				
	Vishnupuri	17.14	38.54	44
Manjra				
	Manar	7.58	31.40	24
Purna+Dudhana				
	Purna Complex	39.75	174.94	23
	NIC Nanded	**64.47**	**244.88**	**26**
Deficit		**516.13**	**1271.24**	**41**
Normal				
Upper Godavari				
	NMC Express Mukane	0.00	0.00	0
	AIC Abad	**0.00**	**0.00**	**0**
Painganga				
	Pus	10.26	15.00	68
	AIC Akola	**10.26**	**15.00**	**68**
Middle Tapi (Satpuda)				
	Hatnur	91.71	107.60	85

Indicator No. II (A): Percentage of Actual Evaporation to Projected Evaporation
Major Projects (2009-10) - Page 2 of 3

Unit: Mcum

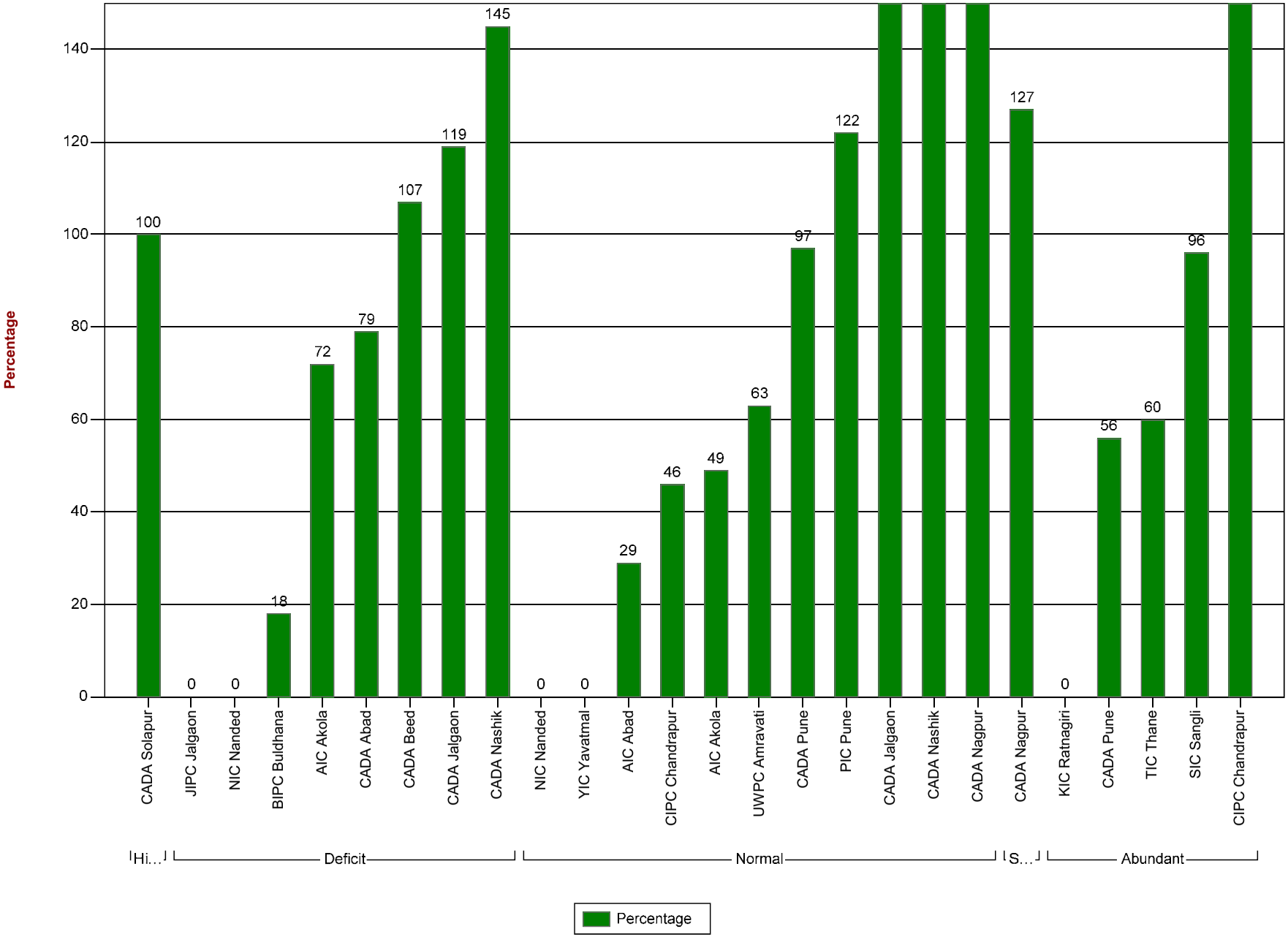
Subbasin/ PlanGroup	Circle/Project	Actual Evaporation	Projected Evaporation	Percentage of Evaporation
	CADA Jalgaon	**91.71**	**107.60**	**85**
Wardha	Lower Wunna Complex	44.08	35.79	123
	CADA Nagpur	**44.08**	**35.79**	**123**
Upper Godavari	Bhandardara	15.74	12.74	124
	Darna	20.13	21.67	93
	Gangapur	18.35	17.81	103
	Gautami	2.09	0.00	0
	Kadwa	4.04	10.27	39
	Kashyapi	1.53	0.00	0
	Mukane	10.82	28.06	39
	Mula	55.70	76.45	73
	NMWeir	0.00	0.00	0
	Upper Godavari Complex	29.22	42.93	68
	CADA Nashik	**157.61**	**209.93**	**75**
Upper Bhima	Ghod	35.77	35.89	100
	Kukadi Complex	137.01	131.34	104
	CADA Pune	**172.78**	**167.23**	**103**
Wardha	Bor	8.05	16.48	49
	CIPC Chandrapur	**8.05**	**16.48**	**49**
Painganga	Upper Penganga	76.74	147.25	52
	NIC Nanded	**76.74**	**147.25**	**52**
Remaining Bhima (Neera)	Neera Complex	76.41	85.15	90
	Neera Devdhar	15.06	0.00	0
Upper Bhima	Bhama Askhed	9.09	12.09	75
	Chaskaman	12.35	23.47	53
	Khadakwasla Complex	60.70	77.07	79
	Pawana	15.45	24.01	64
	PIC Pune	**189.05**	**221.79**	**85**
Wardha	Upper Wardha	75.68	93.26	81
	UWPC Amravati	**75.68**	**93.26**	**81**
Painganga	Arunawati	18.57	52.80	35
	YIC Yavatmal	**18.57**	**52.80**	**35**
Normal		**844.53**	**1067.13**	**79**
Surplus				
Middle Wainganga	Bagh Complex	16.97	24.29	70
	Itiadoh	64.93	67.82	96
	Pench Complex	78.71	44.00	179
	CADA Nagpur	**160.61**	**136.11**	**118**

Indicator No. II (A): Percentage of Actual Evaporation to Projected Evaporation
Major Projects (2009-10) - Page 3 of 3

Unit: Mcum

Subbasin/ PlanGroup	Circle/Project	Actual Evaporation	Projected Evaporation	Percentage of Evaporation
Surplus		**160.61**	**136.11**	**118**
Abundant				
Upper Krishna (W)				
	Dhom	25.06	36.24	69
	Kanher	25.76	26.05	99
	CADA Pune	**50.82**	**62.29**	**82**
Lower Wainganga				
	Asolamendha	8.06	21.52	37
	Dina	19.89	6.97	286
	CIPC Chandrapur	**27.96**	**28.49**	**98**
Telekhol- Tillari				
	Tillari	24.58	25.14	98
	KIC Ratnagiri	**24.58**	**25.14**	**98**
Upper Krishna (W)				
	Dudhaganga	27.04	0.00	0
	Krishna LIS Complex	0.00	0.00	0
	Radhanagari	14.06	0.00	0
	Tulshi	4.83	0.00	0
	Warana	22.96	0.00	0
	SIC Sangli	**68.88**	**0.00**	**0**
Middle Konkan				
	Kal-Amba	14.38	24.00	60
North Konkan				
	Bhatsa	25.98	24.00	108
	Surya	22.01	0.00	0
	TIC Thane	**62.36**	**48.00**	**130**
Abundant		**234.60**	**163.92**	**143**
	Grand Total:	**2133**	**3115**	**68**

Indicator III : Major Projects - Target and Achievement of Irrigation Potential Utlisation



(Major / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
Highly Deficit				
Remaining Bhima+ Man				
	Bhima (Ujjani)	204390	200828	98
	Sina Kolegaon LIS	1000	1013	101
	Sina Madha Link Canal			
	Sina Madha LIS	0	2911	0
	CADA Solapur	**205390**	**204752**	**100**
Highly Deficit		**205390**	**204752**	**100**
Deficit				
Purna (Tapi)				
	Katepurna	0	0	0
	Nalganga	2020	1446	72
	AIC Akola	**2020**	**1446**	**72**
Purna (Tapi)				
	Wan	6000	1058	18
	BIPC Buldhana	**6000**	**1058**	**18**
Lower Godavari				
	Jayakwadi Stage I	41200	32502	79
	CADA Abad	**41200**	**32502**	**79**
Lower Godavari				
	Jayakwadi Stage II (Majalgaon)	5700	4719	83
	Lower Terna	2250	3436	153
	Manjra	6400	7170	112
	CADA Beed	**14350**	**15325**	**107**
Girna				
	Girna+Panzan	7410	8828	119
	CADA Jalgaon	**7410**	**8828**	**119**
Girna				
	Chankapur	1568	2277	145
	CADA Nashik	**1568**	**2277**	**145**
Middle Tapi (South)				
	Waghur			
	JIPC Jalgaon			
Manjra				
	Manar	0	0	0
	Purna Complex	0	11834	0
	Vishnupuri	0	4108	0
	NIC Nanded	**0**	**15942**	**0**
Deficit		**72548**	**77378**	**107**
Normal				
Upper Godavari				
	NMC Express Mukane	2790	807	29
	AIC Abad	**2790**	**807**	**29**
Painganga				
	Pus	850	418	49

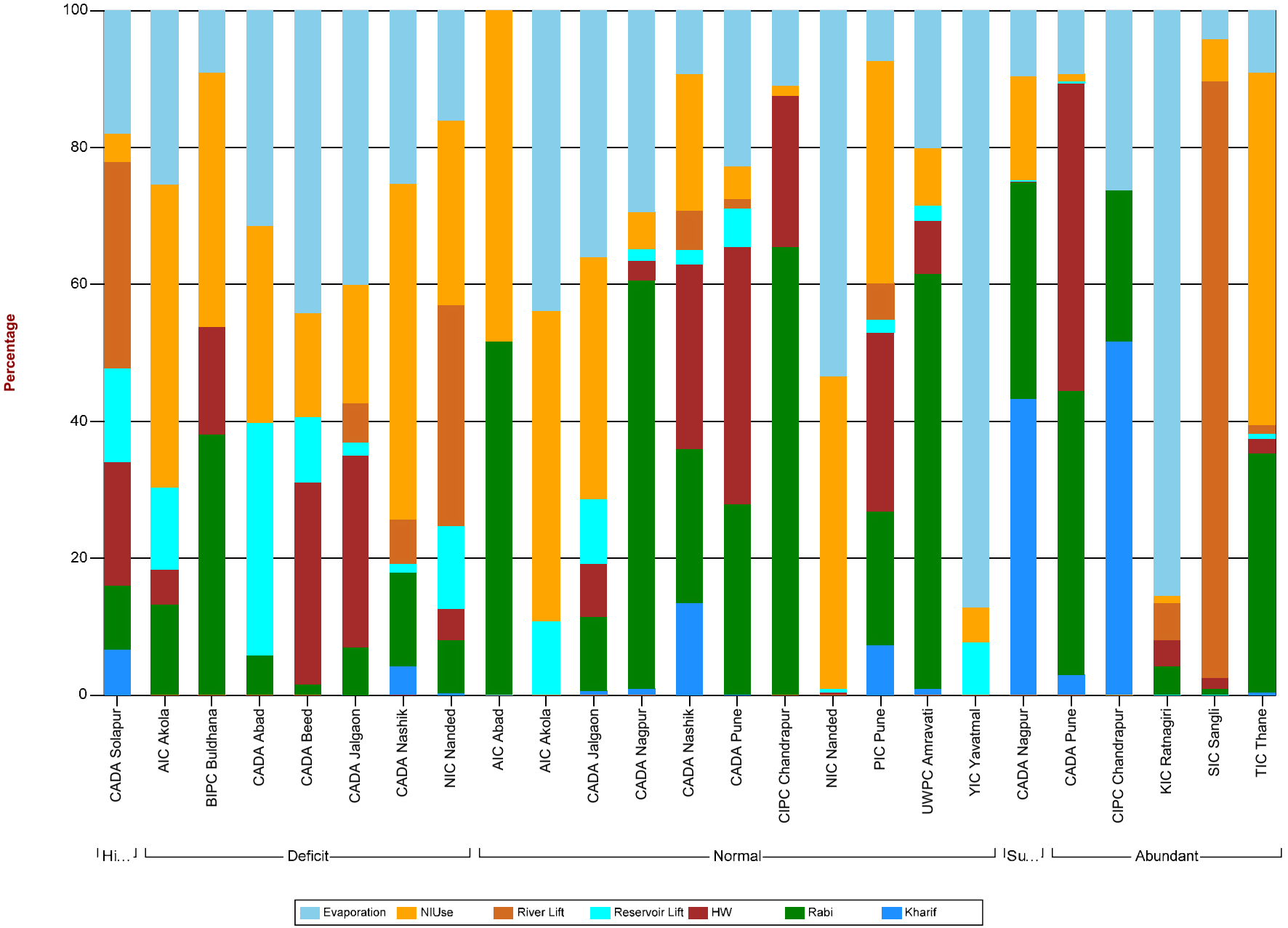
(Major / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	AIC Akola	**850**	**418**	**49**
Middle Tapi (Satpuda)				
	Hatnur	5000	7618	152
	CADA Jalgaon	**5000**	**7618**	**152**
Wardha				
	Lower Wunna Complex	700	5806	829
	CADA Nagpur	**700**	**5806**	**829**
Upper Godavari				
	Bhandardara	22681	29700	131
	Darna	0	2108	0
	Gangapur	3380	9967	295
	Gautami	0	208	0
	Kadwa	1600	2216	139
	Kashyapi	0	108	0
	Mukane	0	647	0
	Mula	30154	49324	164
	NMWeir	0	12864	0
	Upper Godavari Complex	15032	25278	168
	CADA Nashik	**72847**	**132418**	**182**
Upper Bhima				
	Ghod	16842	14902	88
	Kukadi Complex	41500	41498	100
	CADA Pune	**58342**	**56400**	**97**
Wardha				
	Bor	8850	4057	46
	CIPC Chandrapur	**8850**	**4057**	**46**
Painganga				
	Upper Penganga	0	256	0
	NIC Nanded	**0**	**256**	**0**
Upper Bhima				
	Bhama Askhed	0	4906	0
	Chaskaman	14050	15747	112
	Khadakwasla Complex	24550	49725	203
	Neera Complex	139926	145913	104
	Neera Devdhar	0	0	0
	Pawana	1090	2818	259
	PIC Pune	**179616**	**219109**	**122**
Wardha				
	Upper Wardha	36200	22940	63
	UWPC Amravati	**36200**	**22940**	**63**
Painganga				
	Arunawati	0	670	0
	YIC Yavatmal	**0**	**670**	**0**
Normal		**365195**	**450500**	**123**
Surplus				

(Major / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
Middle Wainganga				
	Bagh Complex	0	22993	0
	Itiadoh	17500	17416	100
	Pench Complex	77400	80191	104
	CADA Nagpur	**94900**	**120600**	**127**
Surplus		**94900**	**120600**	**127**
Abundant				
Upper Krishna (W)				
	Dhom	36688	20313	55
	Kanher	22790	13210	58
	CADA Pune	**59478**	**33523**	**56**
Lower Wainganga				
	Asolamendha	11500	8990	78
	Dina	0	10925	0
	CIPC Chandrapur	**11500**	**19915**	**173**
Telekhol- Tillari				
	Tillari	0	248	0
	KIC Ratnagiri	**0**	**248**	**0**
Upper Krishna (W)				
	Dudhaganga	26700	26220	98
	Krishna LIS Complex	119500	117853	99
	Radhanagari	42000	40079	95
	Tulshi	4150	4445	107
	Warana	44910	39536	88
	SIC Sangli	**237260**	**228133**	**96**
North Konkan				
	Bhatsa	3000	2280	76
	Kal-Amba	4167	2127	51
	Surya	4500	2609	58
	TIC Thane	**11667**	**7016**	**60**
Abundant		**319905**	**288835**	**90**
Major		**1057938**	**1142064**	**108**

Indicator IV : Major Projects - Water Use Pattern



(Major / 2009-10) 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)	139.597	198.646	379.459	282.400	609.380	85.503	358.000	2052.985
	Sina Kolegaon LIS	0.000	0.000	0.000	5.429	0.000	0.336	18.810	24.575
	Sina Madha Link Canal								
	Sina Madha LIS	0.000	0.000	0.000	0.000	28.972	1.010	0.000	29.982
	CADA Solapur	**139.597**	**198.646**	**379.459**	**287.829**	**638.352**	**86.849**	**376.810**	**2107.542**
Highly Deficit		**139.597**	**198.646**	**379.459**	**287.829**	**638.352**	**86.849**	**376.810**	**2107.542**
Deficit									
Purna (Tapi)	Katepurna	0.000	0.000	0.000	0.000	0.000	12.138	3.025	15.163
	Nalganga	0.000	4.040	1.562	3.582	0.000	1.268	4.686	15.138
	AIC Akola	**0.000**	**4.040**	**1.562**	**3.582**	**0.000**	**13.406**	**7.711**	**30.301**
Purna (Tapi)	Wan	0.000	8.680	3.602	0.000	0.000	8.481	2.068	22.831
	BIPC	**0.000**	**8.680**	**3.602**	**0.000**	**0.000**	**8.481**	**2.068**	**22.831**
	Buldhana								
Lower Godavari	Jayakwadi Stage I	0.000	40.451	0.000	230.745	0.000	194.750	213.353	679.299
	CADA Abad	**0.000**	**40.451**	**0.000**	**230.745**	**0.000**	**194.750**	**213.353**	**679.299**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	0.000	0.000	41.137	11.710	0.000	17.612	81.473	151.932
	Lower Terna	0.000	4.980	0.000	8.825	0.000	4.283	21.812	39.900
	Manjra	0.000	0.000	55.607	10.480	0.000	27.458	40.836	134.381
	CADA Beed	**0.000**	**4.980**	**96.744**	**31.015**	**0.000**	**49.353**	**144.121**	**326.213**
Girna	Girna+Panzan	0.000	12.432	49.723	3.469	10.078	30.521	71.060	177.283
	CADA Jalgaon	**0.000**	**12.432**	**49.723**	**3.469**	**10.078**	**30.521**	**71.060**	**177.283**
Girna	Chankapur	2.240	7.230	0.000	0.720	3.380	25.980	13.350	52.900
	CADA Nashik	**2.240**	**7.230**	**0.000**	**0.720**	**3.380**	**25.980**	**13.350**	**52.900**
Middle Tapi (South)	Waghur								
	JIPC Jalgaon								
Manjra	Manar	0.000	0.000	0.000	0.000	0.000	0.614	7.577	8.191
	Purna Complex	1.009	31.605	18.500	16.152	129.059	81.537	39.754	317.616
	Vishnupuri	0.000	0.000	0.000	32.151	0.000	26.332	17.135	75.618

(Major / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	NIC Nanded	**1.009**	**31.605**	**18.500**	**48.303**	**129.059**	**108.483**	**64.466**	**401.425**
Deficit		**3.249**	**109.418**	**170.131**	**317.834**	**142.517**	**430.975**	**516.129**	**1690.253**
Normal									
Upper Godavari	NMC Express Mukane	0.000	13.930	0.000	0.000	0.000	13.000	0.000	26.930
	AIC Abad	**0.000**	**13.930**	**0.000**	**0.000**	**0.000**	**13.000**	**0.000**	**26.930**
Painganga	Pus	0.000	0.000	0.000	2.519	0.000	10.597	10.263	23.379
	AIC Akola	**0.000**	**0.000**	**0.000**	**2.519**	**0.000**	**10.597**	**10.263**	**23.379**
Middle Tapi (Satpuda)	Hatnur	1.670	27.240	19.870	24.210	0.000	89.380	91.710	254.080
	CADA Jalgaon	**1.670**	**27.240**	**19.870**	**24.210**	**0.000**	**89.380**	**91.710**	**254.080**
Wardha	Lower Wunna Complex	1.451	89.667	4.427	2.514	0.000	8.194	44.075	150.329
	CADA Nagpur	**1.451**	**89.667**	**4.427**	**2.514**	**0.000**	**8.194**	**44.075**	**150.329**
Upper Godavari	Bhandardara	62.604	87.533	107.713	0.340	84.892	36.638	15.738	395.458
	Darna	0.000	0.000	0.000	3.002	4.937	28.030	20.134	56.103
	Gangapur	0.000	12.240	9.531	2.937	2.503	127.557	18.349	173.117
	Gautami	0.000	0.000	0.000	1.016	0.000	0.000	2.086	3.102
	Kadwa	3.808	34.810	7.552	4.526	1.494	0.000	4.038	56.228
	Kashyapi	0.000	0.000	0.000	0.737	0.000	0.000	1.526	2.263
	Mukane	0.000	0.000	0.000	2.240	2.400	2.488	10.820	17.948
	Mula	76.351	124.760	240.665	3.695	0.000	45.072	55.697	546.240
	NMWeir	55.234	66.914	62.324	0.000	0.000	55.499	0.000	239.971
	Upper Godavari Complex	32.681	61.026	32.942	17.197	1.798	48.118	29.222	222.985
	CADA Nashik	**230.678**	**387.283**	**460.727**	**35.690**	**98.024**	**343.402**	**157.610**	**1713.415**
Upper Bhima	Ghod	1.742	35.910	64.853	22.180	0.000	7.659	35.770	168.114
	Kukadi Complex	0.000	174.338	220.437	20.782	10.500	28.158	137.014	591.229
	CADA Pune	**1.742**	**210.248**	**285.290**	**42.962**	**10.500**	**35.817**	**172.784**	**759.343**
Wardha	Bor	0.000	48.410	16.380	0.000	0.000	1.054	8.050	73.894
	CIPC	**0.000**	**48.410**	**16.380**	**0.000**	**0.000**	**1.054**	**8.050**	**73.894**
	Chandrapur								
Painganga	Upper Penganga	0.000	0.000	0.622	0.740	0.000	65.882	76.740	143.984
	NIC Nanded	**0.000**	**0.000**	**0.622**	**0.740**	**0.000**	**65.882**	**76.740**	**143.984**
Upper Bhima	Bhama Askhed	0.000	0.000	0.000	2.590	29.590	0.310	9.086	41.576

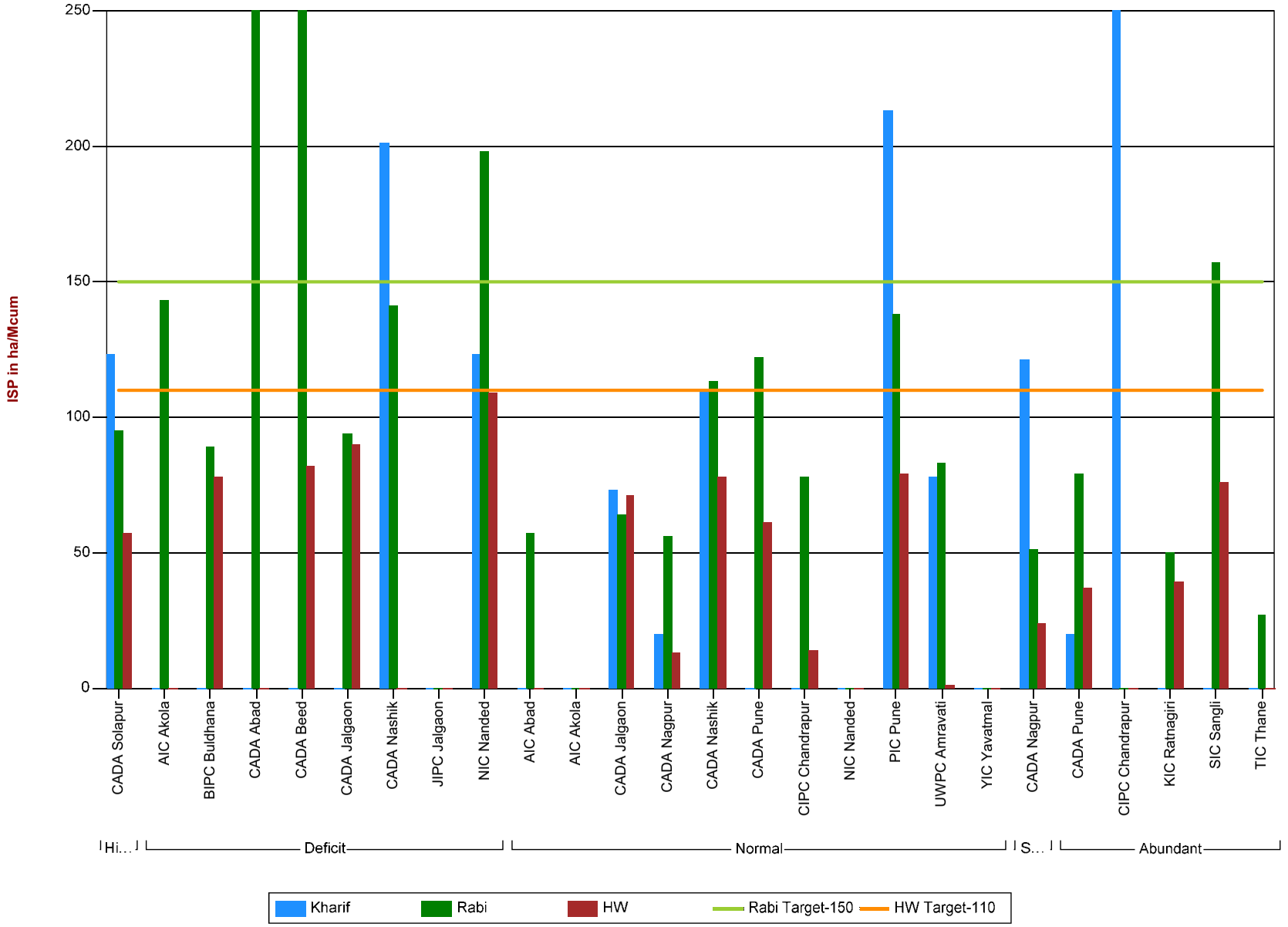
(Major / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Chaskaman	14.560	34.510	38.446	6.536	1.390	4.596	12.353	112.390
	Khadakwasla Complex	15.091	60.860	73.172	4.989	88.124	526.793	60.698	929.727
	Neera Complex	159.747	415.152	568.771	30.099	3.450	66.266	76.410	1319.895
	Neera Devdhar	0.000	0.000	0.000	0.000	0.000	0.000	15.060	15.060
	Pawana	0.000	0.000	0.000	3.650	14.710	149.613	15.446	183.419
	PIC Pune	**189.398**	**510.522**	**680.389**	**47.864**	**137.264**	**847.578**	**189.053**	**2602.068**
Wardha									
	Upper Wardha	3.850	229.352	29.315	8.259	0.000	32.098	75.678	378.552
	UWPC	**3.850**	**229.352**	**29.315**	**8.259**	**0.000**	**32.098**	**75.678**	**378.552**
	Amravati								
Painganga									
	Arunawati	0.000	0.000	0.000	1.635	0.000	1.103	18.571	21.309
	YIC Yavatmal	**0.000**	**0.000**	**0.000**	**1.635**	**0.000**	**1.103**	**18.571**	**21.309**
Normal		**428.789**	**1516.653**	**1497.020**	**166.393**	**245.788**	**448.105**	**844.534**	**6147.282**
Surplus									
Middle Wainganga									
	Bagh Complex	131.063	46.455	0.000	2.300	0.000	7.109	16.971	203.898
	Itiadoh	103.095	23.105	0.000	0.000	0.000	3.750	64.934	194.884
	Pench Complex	494.053	464.228	1.831	0.414	0.000	244.612	78.707	1283.845
	CADA Nagpur	**728.211**	**533.788**	**1.831**	**2.714**	**0.000**	**255.471**	**160.612**	**1682.627**
Surplus		**728.211**	**533.788**	**1.831**	**2.714**	**0.000**	**255.471**	**160.612**	**1682.627**
Abundant									
Upper Krishna (W)									
	Dhom	0.666	139.639	125.786	1.372	0.000	4.214	25.065	296.742
	Kanher	15.432	87.791	120.285	0.790	0.000	1.212	25.756	251.266
	CADA Pune	**16.098**	**227.430**	**246.071**	**2.162**	**0.000**	**5.426**	**50.821**	**548.008**
Lower Wainganga									
	Asolamendha	21.444	3.324	0.000	0.000	0.000	0.000	8.064	32.832
	Dina	33.868	20.334	0.000	0.000	0.000	0.000	19.894	74.096
	CIPC	**55.312**	**23.658**	**0.000**	**0.000**	**0.000**	**0.000**	**27.958**	**106.928**
	Chandrapur								
Telekhol- Tillari									
	Tillari	0.000	1.250	1.100	0.000	1.550	0.275	24.580	28.755
	KIC Ratnagiri	**0.000**	**1.250**	**1.100**	**0.000**	**1.550**	**0.275**	**24.580**	**28.755**
Upper Krishna (W)									
	Dudhaganga	0.000	12.565	22.725	0.000	269.856	7.813	27.040	339.999
	Krishna LIS Complex	0.000	0.000	0.000	0.000	470.559	59.963	0.000	530.522
	Radhanagari	0.000	0.000	0.000	0.000	311.667	18.471	14.060	344.198
	Tulshi	0.000	0.000	0.000	0.000	35.738	6.401	4.826	46.965
	Warana	0.000	3.003	3.993	0.000	348.782	8.571	22.955	387.304

(Major / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
North Konkan	**SIC Sangli**	**0.000**	**15.568**	**26.718**	**0.000**	**1436.602**	**101.219**	**68.881**	**1648.988**
	Bhatsa	0.000	44.613	0.672	0.000	8.650	276.282	25.978	356.195
	Kal-Amba	3.013	57.825	2.993	0.000	0.000	69.293	14.375	147.499
	Surya	0.000	136.727	11.064	5.402	0.000	5.364	22.010	180.567
	TIC Thane	**3.013**	**239.165**	**14.729**	**5.402**	**8.650**	**350.939**	**62.363**	**684.261**
Abundant		**74.423**	**507.071**	**288.618**	**7.564**	**1446.802**	**457.859**	**234.603**	**3016.940**
Major		**1374.269**	**2865.576**	**2337.058**	**782.334**	**2473.459**	**2679.259**	**2132.688**	**4644.644**

Indicator V : Major Projects - Irrigation System Performance (Canals)



Indicator V: Irrigation System Performance (Canals) - Page 1 of 3

(Major Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	124	96	57
	Sina Kolegaon LIS	0	0	0
	Sina Madha Link Canal			
	Sina Madha LIS	0	0	0
	CADA Solapur	**124**	**32**	**57**
Highly Deficit		**124**	**96**	**57**
Deficit				
Purna (Tapi)	Katepurna	0	0	0
	Nalganga	0	143	0
	AIC Akola	**0**	**72**	**0**
Purna (Tapi)	Wan	0	89	79
	BIPC Buldhana	**0**	**89**	**79**
Lower Godavari	Jayakwadi Stage I	0	375	0
	CADA Abad	**0**	**375**	**0**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	0	0	69
	Lower Terna	0	254	0
	Manjra	0	0	92
	CADA Beed	**0**	**85**	**83**
Girna	Girna+Panzan	0	94	90
	CADA Jalgaon	**0**	**94**	**90**
Girna	Chankapur	202	142	0
	CADA Nashik	**202**	**142**	**0**
Middle Tapi (South)	Waghur			
	JIPC Jalgaon			
Manjra	Manar	0	0	0
	Purna Complex	124	198	109
	Vishnupuri	0	0	0
	NIC Nanded	**124**	**66**	**109**
Deficit		**178**	**240**	**87**
Normal				
Upper Godavari	NMC Express Mukane	0	58	0
	AIC Abad	**0**	**58**	**0**
Painganga	Pus	0	0	0
	AIC Akola	**0**	**0**	**0**
Middle Tapi (Satpuda)	Hatnur	74	65	71

Indicator V: Irrigation System Performance (Canals) - Page 2 of 3

(Major Projects / 2009-10) Unit: Ha/Mcum

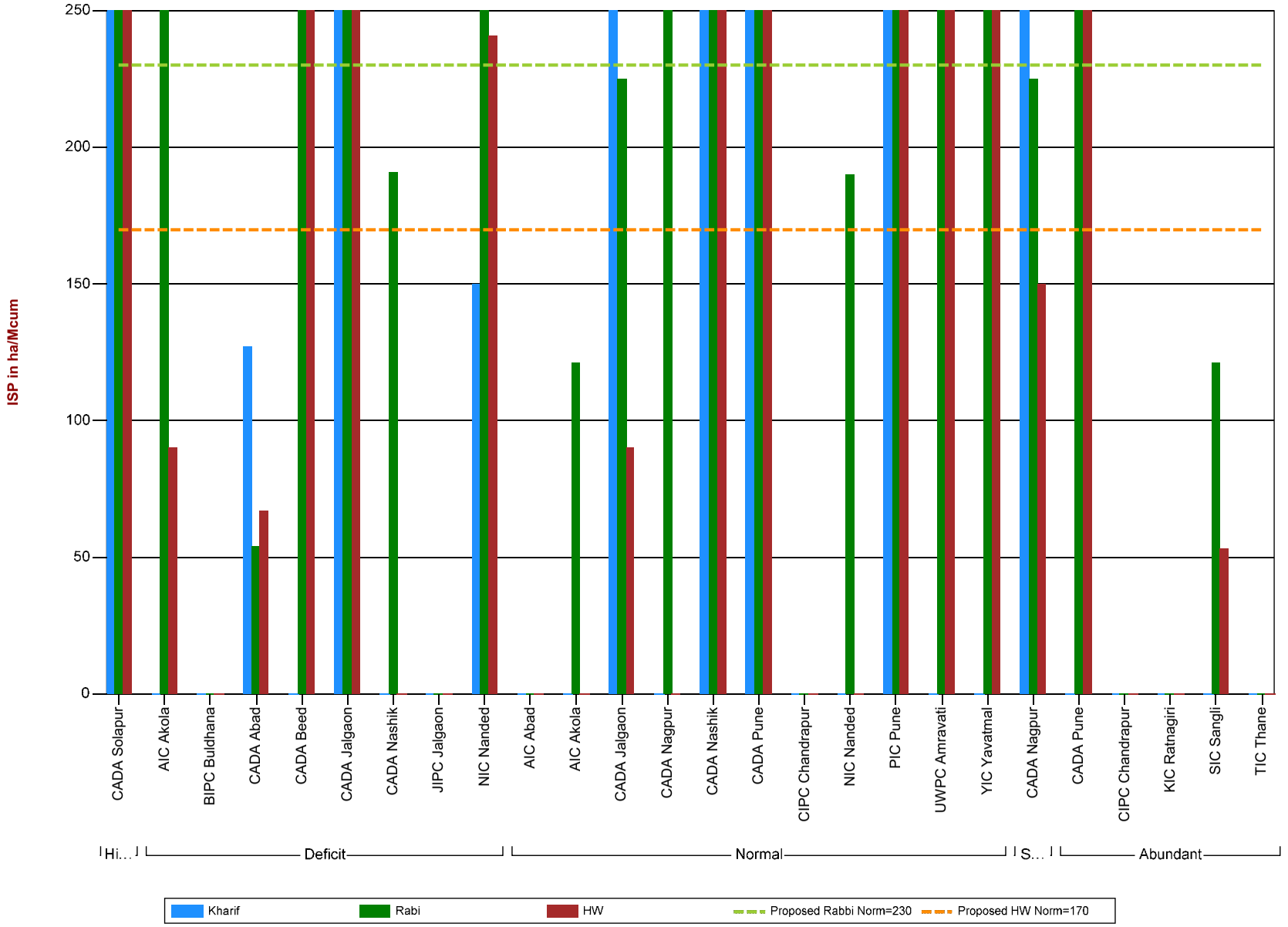
Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	CADA Jalgaon	**74**	**65**	**71**
Wardha	Lower Wunna Complex	20	56	13
	CADA Nagpur	**20**	**56**	**13**
Upper Godavari	Bhandardara	143	77	55
	Darna	0	0	0
	Gangapur	0	140	120
	Gautami	0	0	0
	Kadwa	35	28	31
	Kashyapi	0	0	0
	Mukane	0	0	0
	Mula	105	152	88
	NMWeir	77	99	32
	Upper Godavari Complex	125	145	163
	CADA Nashik	**110**	**64**	**78**
Upper Bhima	Ghod	0	146	80
	Kukadi Complex	0	118	56
	CADA Pune	**0**	**132**	**61**
Wardha	Bor	0	79	14
	CIPC Chandrapur	**0**	**79**	**14**
Painganga	Upper Penganga	0	0	185
	NIC Nanded	**0**	**0**	**185**
Upper Bhima	Bhama Askhed	0	0	0
	Chaskaman	103	135	97
	Khadakwasla Complex	217	110	72
	Neera Complex	223	143	79
	Neera Devdhar	0	0	0
	Pawana	0	0	0
	PIC Pune	**213**	**65**	**80**
Wardha	Upper Wardha	79	83	2
	UWPC Amravati	**79**	**83**	**2**
Painganga	Arunawati	0	0	0
	YIC Yavatmal	**0**	**0**	**0**
Normal		**155**	**113**	**73**
Surplus				
Middle Wainganga	Bagh Complex	174	0	0
	Itiadoh	169	0	0
	Pench Complex	98	59	25

Indicator V: Irrigation System Performance (Canals) - Page 3 of 3

(Major Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	CADA Nagpur	**122**	**20**	**25**
Surplus		**122**	**52**	**25**
Abundant				
Upper Krishna (W)	Dhom	299	87	44
	Kanher	8	67	30
	CADA Pune	**20**	**77**	**37**
Lower Wainganga	Asolamendha	419	0	0
	Dina	323	0	0
	CIPC Chandrapur	**360**	**0**	**0**
Telekhol- Tillari	Tillari	0	50	39
	KIC Ratnagiri	**0**	**50**	**39**
Upper Krishna (W)	Dudhaganga	0	147	77
	Krishna LIS Complex	0	0	0
	Radhanagari	0	0	0
	Tulshi	0	0	0
	Warana	0	200	70
	SIC Sangli	**0**	**69**	**76**
North Konkan	Bhatsa	0	39	0
	Kal-Amba	0	37	0
	Surya	0	19	0
	TIC Thane	**0**	**32**	**0**
Abundant		**272**	**53**	**39**
		140	**94**	**67**

Indicator V : Major Projects - Irrigation System Performance (Reservoir Lifts)



Indicator V: Irrigation System Performance (Reservoir Lifts) - Page 1 of 3

(Major Projects / 2009-10) Unit: Ha/Mcum

Subbasin/ PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	**291**	**192**	**162**
	Sina Kolegaon LIS	**249**	**169**	**220**
	Sina Madha Link Canal			
	Sina Madha LIS	**0**	**0**	**0**
	CADA Solapur	**291**	**191**	**163**
Highly Deficit		**291**	**191**	**163**
Deficit				
Purna (Tapi)	Katepurna	**0**	**0**	**0**
	Nalganga	**0**	**372**	**91**
	AIC Akola	**0**	**372**	**91**
Purna (Tapi)	Wan	**0**	**0**	**0**
	BIPC Buldhana	**0**	**0**	**0**
Lower Godavari	Jayakwadi Stage I	**128**	**55**	**67**
	CADA Abad	**128**	**55**	**67**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	**0**	**157**	**164**
	Lower Terna	**0**	**230**	**280**
	Manjra	**0**	**280**	**132**
	CADA Beed	**0**	**215**	**174**
Girna	Girna+Panzan	**297**	**450**	**176**
	CADA Jalgaon	**297**	**450**	**176**
Girna	Chankapur	**0**	**192**	**0**
	CADA Nashik	**0**	**192**	**0**
Middle Tapi (South)	Waghur			
	JIPC Jalgaon			
Manjra	Manar	**0**	**0**	**0**
	Purna Complex	**150**	**278**	**65**
	Vishnupuri	**0**	**186**	**78**
	NIC Nanded	**150**	**204**	**73**
Deficit		**130**	**107**	**81**
Normal				
Upper Godavari	NMC Express Mukane	**0**	**0**	**0**
	AIC Abad	**0**	**0**	**0**
Painganga	Pus	**0**	**122**	**0**
	AIC Akola	**0**	**122**	**0**

Indicator V: Irrigation System Performance (Reservoir Lifts) - Page 2 of 3

(Major Projects / 2009-10) Unit: Ha/Mcum

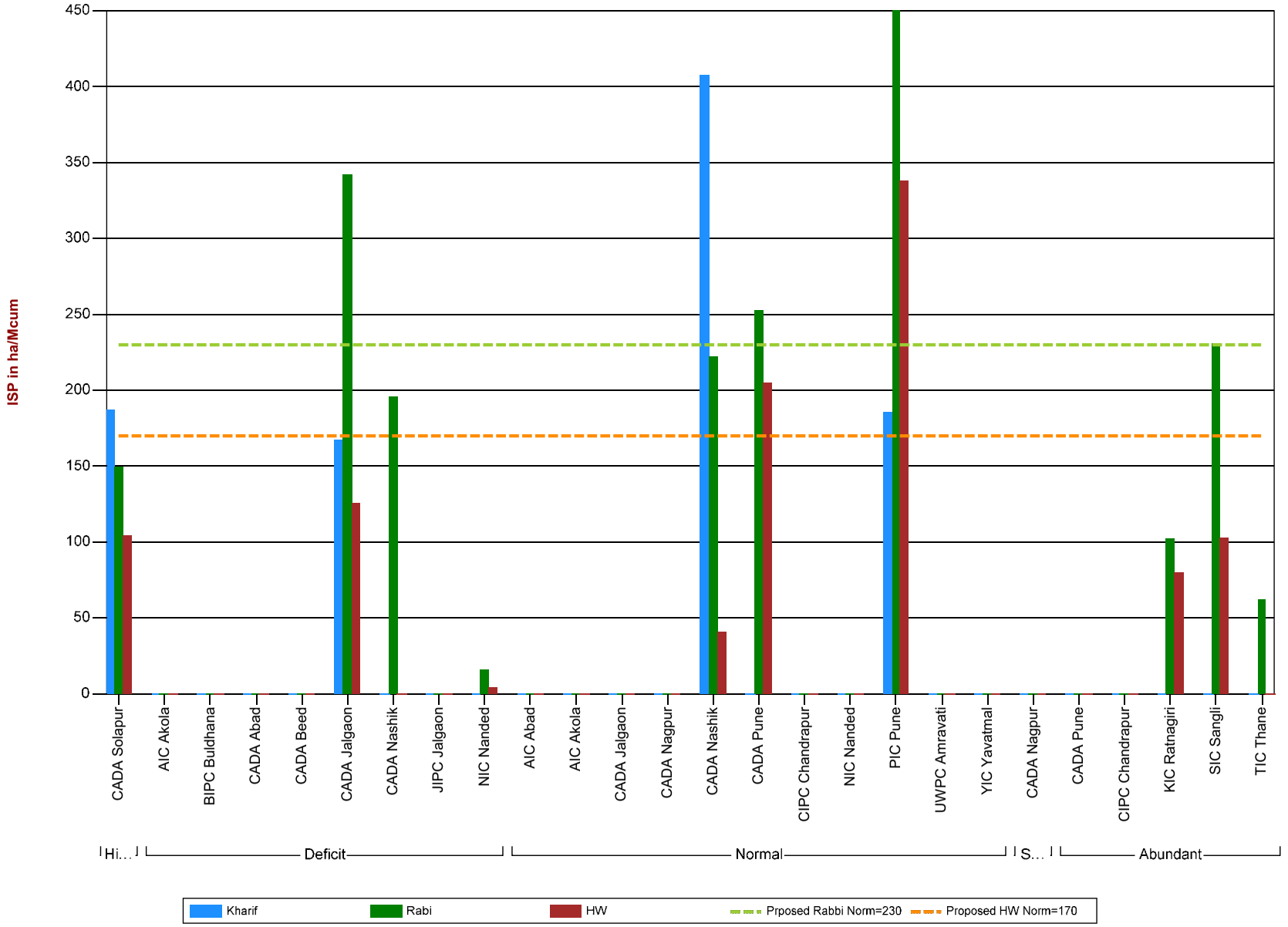
Subbasin/ PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Middle Tapi (Satpuda)	Hatnur	**268**	**226**	**91**
	CADA Jalgaon	**268**	**226**	**91**
Wardha	Lower Wunna Complex	**0**	**277**	**0**
	CADA Nagpur	**0**	**277**	**0**
Upper Godavari	Bhandardara	**214**	**210**	**0**
	Darna	**0**	**245**	**0**
	Gangapur	**0**	**237**	**122**
	Gautami	**0**	**205**	**0**
	Kadwa	**532**	**104**	**110**
	Kashyapi	**0**	**146**	**0**
	Mukane	**0**	**149**	**0**
	Mula	**418**	**324**	**247**
	NMWeir	**0**	**0**	**0**
	Upper Godavari Complex	**573**	**391**	**279**
	CADA Nashik	**506**	**275**	**247**
Upper Bhima	Ghod	**239**	**218**	**164**
	Kukadi Complex	**347**	**284**	**294**
	CADA Pune	**295**	**252**	**218**
Wardha	Bor	**0**	**0**	**0**
	CIPC Chandrapur	**0**	**0**	**0**
Painganga	Upper Penganga	**0**	**191**	**0**
	NIC Nanded	**0**	**191**	**0**
Upper Bhima	Bhama Askhed	**0**	**163**	**0**
	Chaskaman	**1190**	**153**	**63**
	Khadakwasla Complex	**296**	**379**	**94**
	Neera Complex	**276**	**168**	**108**
	Neera Devdhar	**0**	**0**	**0**
	Pawana	**159**	**150**	**120**
	PIC Pune	**286**	**179**	**94**
Wardha	Upper Wardha	**0**	**544**	**335**
	UWPC Amravati	**0**	**544**	**335**
Painganga	Arunawati	**0**	**433**	**275**
	YIC Yavatmal	**0**	**433**	**275**
Normal		**304**	**247**	**180**

Indicator V: Irrigation System Performance (Reservoir Lifts) - Page 3 of 3

(Major Projects / 2009-10) Unit: Ha/Mcum

Subbasin/ PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Surplus				
Middle Wainganga	Bagh Complex	**100**	**0**	**150**
	Itiadoh	**0**	**0**	**0**
	Pench Complex	**1001**	**226**	**0**
	CADA Nagpur	**123**	**80**	**150**
Surplus		**123**	**80**	**150**
Abundant				
Upper Krishna (W)	Dhom	**0**	**587**	**471**
	Kanher	**0**	**259**	**270**
	CADA Pune	**0**	**457**	**424**
Lower Wainganga	Asolamendha	**0**	**0**	**0**
	Dina	**0**	**0**	**0**
	CIPC Chandrapur	**0**	**0**	**0**
Telekhol- Tillari	Tillari	**0**	**0**	**0**
	KIC Ratnagiri	**0**	**0**	**0**
Upper Krishna (W)	Dudhaganga	**0**	**0**	**0**
	Krishna LIS Complex	**0**	**0**	**0**
	Radhanagari	**0**	**0**	**0**
	Tulshi	**0**	**0**	**0**
	Warana	**0**	**0**	**0**
	SIC Sangli	**0**	**0**	**0**
North Konkan	Bhatsa	**0**	**0**	**0**
	Kal-Amba	**0**	**0**	**0**
	Surya	**0**	**0**	**0**
	TIC Thane	**0**	**0**	**0**
Abundant		**0**	**309**	**377**
Major		**234**	**175**	**128**

Indicator V : Major Projects - Irrigation System Performance (River Lifts)



Indicator V: Irrigation System Performance (River Lifts) - Page 1 of 3

(Major Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project /Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Highly Deficit				
Remaining Bhima+ M	Bhima (Ujjani)	189	149	106
	Sina Kolegaon LIS	0	0	0
	Sina Madha Link Canal			
	Sina Madha LIS	170	0	79
	CADA Solapur	**188**	**149**	**104**
Highly Deficit		**188**	**149**	**104**
Deficit				
Purna (Tapi)	Katepurna	0	0	0
	Nalganga	0	0	0
	AIC Akola	**0**	**0**	**0**
Purna (Tapi)	Wan	0	0	0
	BIPC Buldhana	**0**	**0**	**0**
Lower Godavari	Jayakwadi Stage I	0	0	0
	CADA Abad	**0**	**0**	**0**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	0	0	0
	Lower Terna	0	0	0
	Manjra	0	0	0
	CADA Beed	**0**	**0**	**0**
Girna	Girna+Panzan	168	342	127
	CADA Jalgaon	**168**	**342**	**127**
Girna	Chankapur	0	196	0
	CADA Nashik	**0**	**196**	**0**
Middle Tapi (South)	Waghur			
	JIPC Jalgaon			
Manjra	Manar	0	0	0
	Purna Complex	0	16	4
	Vishnupuri	0	0	0
	NIC Nanded	**0**	**16**	**4**
Deficit		**168**	**35**	**18**
Normal				
Upper Godavari	NMC Express Mukane	0	0	0
	AIC Abad	**0**	**0**	**0**
Painganga	Pus	0	0	0
	AIC Akola	**0**	**0**	**0**
Middle Tapi (Satpuda)	Hatnur	0	0	0

Indicator V: Irrigation System Performance (River Lifts) - Page 2 of 3

(Major Projects / 2009-10) Unit: Ha/Mcum

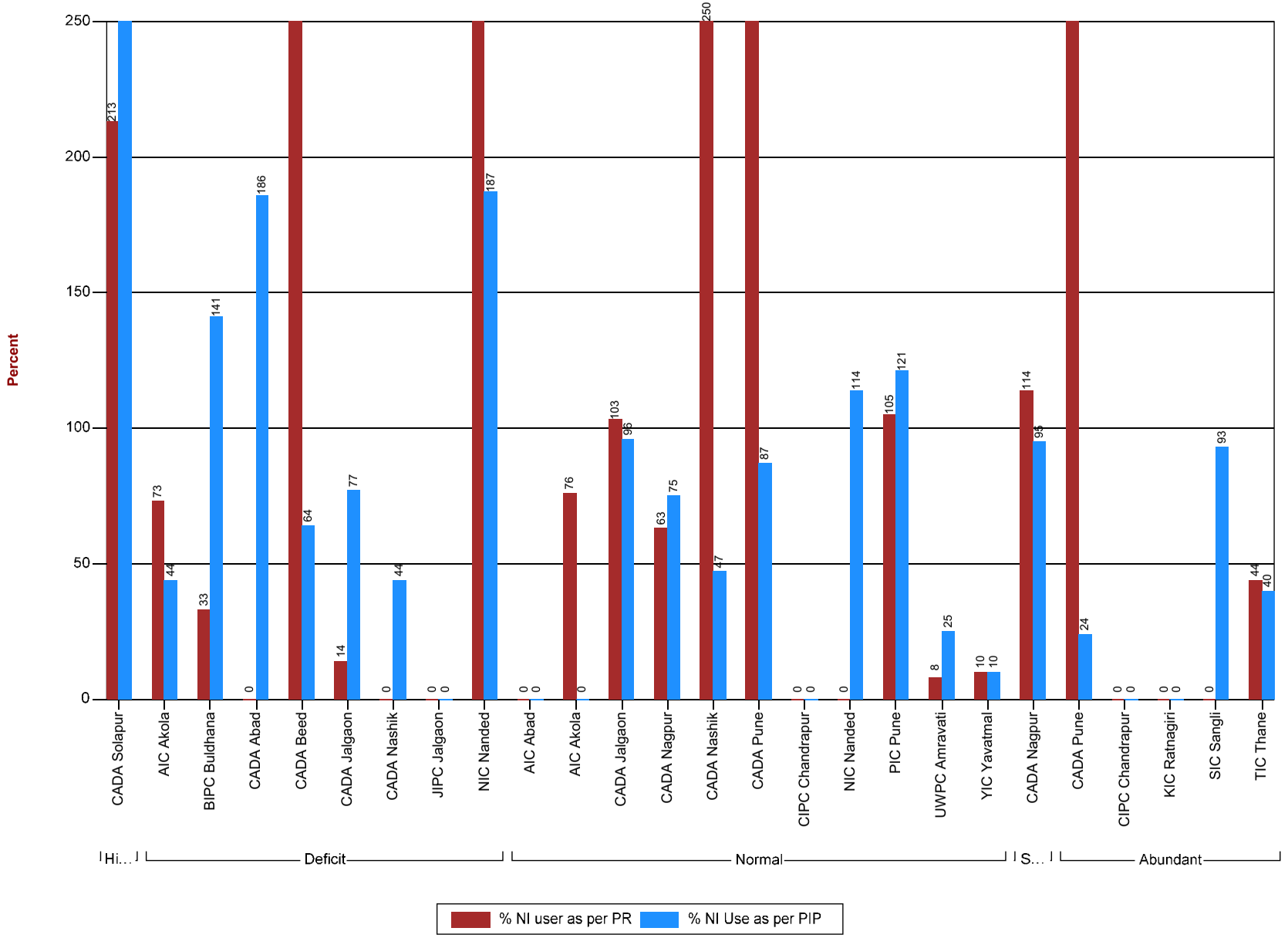
Subbasin/PlanGroup	Project /Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	CADA Jalgaon	**0**	**0**	**0**
Wardha	Lower Wunna Complex	0	0	0
	CADA Nagpur	**0**	**0**	**0**
Upper Godavari	Bhandardara	208	112	37
	Darna	2867	253	211
	Gangapur	24710	2092	192
	Gautami	0	0	0
	Kadwa	0	263	95
	Kashyapi	0	0	0
	Mukane	0	130	0
	Mula	0	0	0
	NMWeir	0	0	0
	Upper Godavari Complex	0	454	0
	CADA Nashik	**409**	**223**	**41**
Upper Bhima	Ghod	0	0	0
	Kukadi Complex	0	253	205
	CADA Pune	**0**	**253**	**205**
Wardha	Bor	0	0	0
	CIPC Chandrapur	**0**	**0**	**0**
Painganga	Upper Penganga	0	0	0
	NIC Nanded	**0**	**0**	**0**
Upper Bhima	Bhama Askhed	0	0	152
	Chaskaman	0	0	1151
	Khadakwasla Complex	188	0	0
	Neera Complex	149	111	98
	Neera Devdhar	0	0	0
	Pawana	180	141	141
	PIC Pune	**187**	**1861**	**338**
Wardha	Upper Wardha	0	0	0
	UWPC Amravati	**0**	**0**	**0**
Painganga	Arunawati	0	0	0
	YIC Yavatmal	**0**	**0**	**0**
Normal		**218**	**484**	**176**
Surplus				
Middle Wainganga	Bagh Complex	0	0	0

Indicator V: Irrigation System Performance (River Lifts) - Page 3 of 3

(Major Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project /Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Itiadoh	0	0	0
	Pench Complex	0	0	0
	CADA Nagpur	**0**	**0**	**0**
Surplus		**0**	**0**	**0**
Abundant				
Upper Krishna (W)	Dhom	0	0	0
	Kanher	0	0	0
	CADA Pune	**0**	**0**	**0**
Lower Wainganga	Asolamendha	0	0	0
	Dina	0	0	0
	CIPC Chandrapur	**0**	**0**	**0**
Telekhol- Tillari	Tillari	0	103	80
	KIC Ratnagiri	**0**	**103**	**80**
Upper Krishna (W)	Dudhaganga	0	128	61
	Krishna LIS Complex	0	365	158
	Radhanagari	0	188	95
	Tulshi	0	119	100
	Warana	0	151	80
	SIC Sangli	**0**	**231**	**104**
North Konkan	Bhatsa	0	62	0
	Kal-Amba	0	0	0
	Surya	0	0	0
	TIC Thane	**0**	**62**	**0**
Abundant		**0**	**237**	**104**
Major		**206**	**214**	**105**

Indicator VI : Major Projects - Percentage of Planned & Actual Non-Irrigation Use



(Major / 2009-10) 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)	85.50	150.95	76.00	57	113
	Sina Kolegaon LIS	0.34	6.23	6.23	5	5
	Sina Madha Link Canal				0	0
	Sina Madha LIS	1.01	0.00	0.00	0	0
	CADA Solapur	**86.850**	**157.178**	**82.228**	**55**	**106**
Highly Deficit		**86.850**	**157.178**	**82.228**	**55**	**106**
Deficit						
Purna (Tapi)	Katepurna	12.14	0.00	9.24	0	131
	Nalganga	1.27	6.51	1.50	19	85
	AIC Akola	**13.410**	**6.510**	**10.740**	**206**	**125**
Purna (Tapi)	Wan	8.48	25.70	6.00	33	141
	BIPC Buldhana	**8.480**	**25.699**	**6.000**	**33**	**141**
Lower Godavari	Jayakwadi Stage I	194.75	0.00	180.00	0	108
	CADA Abad	**194.750**	**0.000**	**180.000**	**0**	**108**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	17.61	0.00	38.71	0	45
	Lower Terna	4.28	14.36	1.50	30	286
	Manjra	27.46	0.00	28.00	0	98
	CADA Beed	**49.350**	**14.361**	**68.210**	**344**	**72**
Girna	Girna+Panzan	30.52	147.42	28.28	21	108
	CADA Jalgaon	**30.520**	**147.422**	**28.275**	**21**	**108**
Girna	Chankapur	25.98	0.00	59.94	0	43
	CADA Nashik	**25.980**	**0.000**	**59.940**	**0**	**43**
Middle Tapi (South)	Waghur				0	0
	JIPC Jalgaon				**0**	**0**
Manjra	Manar	0.61	2.62	0.00	23	0
	Purna Complex	81.54	0.00	67.29	0	121
	Vishnupuri	26.33	12.15	0.00	217	0
	NIC Nanded	**108.480**	**14.770**	**67.285**	**734**	**161**
Deficit		**430.980**	**208.762**	**420.450**	**206**	**103**
Normal						

(Major / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Upper Godavari	NMC Express Mukane	13.00	0.00	0.00	0	0
	AIC Abad	**13.000**	**0.000**	**0.000**	**0**	**0**
Painganga	Pus	10.60	3.31	0.00	320	0
	AIC Akola	**10.600**	**3.308**	**0.000**	**320**	**0**
Middle Tapi (Satpuda)	Hatnur	89.38	90.53	97.52	99	92
	CADA Jalgaon	**89.380**	**90.530**	**97.520**	**99**	**92**
Wardha	Lower Wunna Complex	8.19	16.00	13.37	51	61
	CADA Nagpur	**8.190**	**16.000**	**13.365**	**51**	**61**
Upper Godavari	Bhandardara	36.64	0.00	68.70	0	53
	Darna	28.03	1.53	50.60	1832	55
	Gangapur	127.56	2.73	107.80	4672	118
	Gautami	0.00	0.00	0.00	0	0
	Kadwa	0.00	0.60	0.27	0	0
	Kashyapi	0.00	0.00	0.00	0	0
	Mukane	2.49	0.00	0.00	0	0
	Mula	45.07	59.13	58.26	76	77
	NMWeir	55.50	0.00	93.93	0	59
	Upper Godavari Complex	48.12	23.46	80.68	205	60
	CADA Nashik	**343.400**	**87.448**	**460.236**	**393**	**75**
Upper Bhima	Ghod	7.66	8.26	11.94	93	64
	Kukadi Complex	28.16	0.00	72.77	0	39
	CADA Pune	**35.820**	**8.260**	**84.705**	**434**	**42**
Wardha	Bor	1.05	6.35	0.00	17	0
	CIPC Chandrapur	**1.050**	**6.350**	**0.000**	**17**	**0**
Painganga	Upper Penganga	65.88	0.00	56.00	0	118
	NIC Nanded	**65.880**	**0.000**	**56.000**	**0**	**118**
Upper Bhima	Bhama Askhed	0.31	3.96	0.00	8	0
	Chaskaman	4.60	0.00	5.60	0	82
	Khadakwasla Complex	626.79	407.62	289.70	154	216
	Neera Complex	66.27	0.00	66.72	0	99

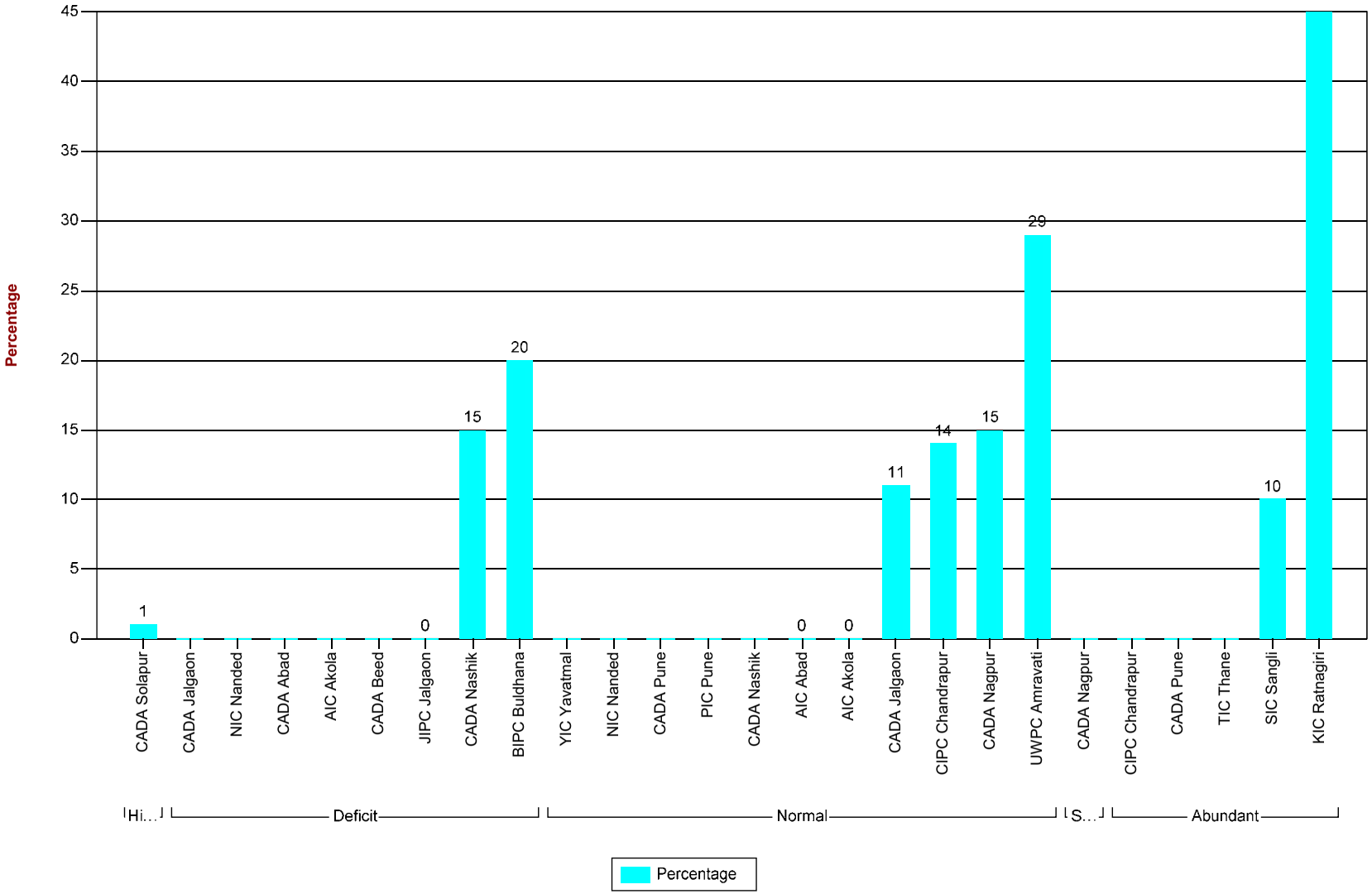
(Major / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Neera Devdhar	0.00	0.00	0.00	0	0
	Pawana	149.61	168.32	142.00	89	105
	PIC Pune	**847.580**	**579.904**	**504.020**	**146**	**168**
Wardha						
	Upper Wardha	32.10	102.06	34.72	31	92
	UWPC Amravati	**32.100**	**102.059**	**34.720**	**31**	**92**
Painganga						
	Arunawati	1.10	15.65	15.65	7	7
	YIC Yavatmal	**1.100**	**15.652**	**15.652**	**7**	**7**
Normal		**1448.110**	**909.511**	**1266.218**	**159**	**114**
Surplus						
Middle Wainganga						
	Bagh Complex	7.11	43.09	0.00	16	0
	Itiadoh	3.75	0.00	3.75	0	100
	Pench Complex	244.61	179.00	264.81	137	92
	CADA Nagpur	**255.470**	**222.087**	**268.560**	**115**	**95**
Surplus		**255.470**	**222.087**	**268.560**	**115**	**95**
Abundant						
Upper Krishna (W)						
	Dhom	4.21	0.42	20.50	1015	21
	Kanher	1.21	1.63	10.00	74	12
	CADA Pune	**5.430**	**2.045**	**30.500**	**265**	**18**
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**
Telekhol- Tillari						
	Tillari	0.28	57.43	0.00	0	0
	KIC Ratnagiri	**0.280**	**57.430**	**0.000**	**0**	**0**
Upper Krishna (W)						
	Dudhaganga	7.81	0.00	8.60	0	91
	Krishna LIS Complex	59.96	0.00	66.50	0	90
	Radhanagari	18.47	0.00	19.00	0	97
	Tulshi	6.40	0.00	0.15	0	4267
	Warana	8.57	0.00	7.79	0	110
	SIC Sangli	**101.220**	**0.000**	**102.040**	**0**	**99**
North Konkan						
	Bhatsa	276.28	426.80	730.79	65	38
	Kal-Amba	69.29	362.85	65.46	19	106
	Surya	5.36	0.00	66.00	0	8
	TIC Thane	**350.940**	**789.650**	**862.250**	**44**	**41**

(Major / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Abundant		**457.860**	**849.125**	**994.790**	**54**	**46**
Major		**2679.260**	**2346.663**	**3032.246**	**114**	**88**

Indicator VII : Major Projects - Percentage of Unutilised Water to Live Storage



Indicator VII: Percentage of Unutilized water to Live Storage - Page 1 of 3

(Major / 2009-10) 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)	365.11	0.00	230.32	134.79	1519.59	8.87
	Sina Kolegaon LIS	0.00	0.00	0.00	0.00	72.65	0.00
	Sina Madha Link Canal	0.00	0.00	0.00	0.00	0.00	0.00
	Sina Madha LIS	0.00	0.00	30.18	0.00	0.00	0.00
	CADA Solapur	**365.11**	**0.00**	**260.50**	**134.79**	**1,592.24**	**8.47**
Highly Deficit		**365.11**	**0.00**	**260.50**	**134.79**	**1592.24**	**8.47**
Deficit							
Purna (Tapi)	Katepurna	1.81	0.00	0.00	1.81	13.51	13.41
	Nalganga	5.63	18.40	0.68	0.00	15.83	0.00
	AIC Akola	**7.44**	**18.40**	**0.68**	**1.81**	**29.34**	**6.18**
Purna (Tapi)	Wan	12.84	7.02	0.08	5.74	28.32	20.28
	BIPC Buldhana	**12.84**	**7.02**	**0.08**	**5.74**	**28.32**	**20.28**
Lower Godavari	Jayakwadi Stage I	17.87	381.70	9.49	0.00	528.61	0.00
	CADA Abad	**17.87**	**381.70**	**9.49**	**0.00**	**528.61**	**0.00**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	10.80	0.00	12.05	0.00	112.00	0.00
	Lower Terna	0.00	0.00	0.41	0.00	27.62	0.00
	Manjra	17.35	4.42	16.41	0.00	106.15	0.00
	CADA Beed	**28.15**	**4.42**	**28.86**	**0.00**	**245.77**	**0.00**
Girna	Girna+Panzan	35.90	155.65	113.06	0.00	127.18	0.00
	CADA Jalgaon	**35.90**	**155.65**	**113.06**	**0.00**	**127.18**	**0.00**
Girna	Chankapur	20.52	0.00	8.27	12.25	76.85	15.94
	CADA Nashik	**20.52**	**0.00**	**8.27**	**12.25**	**76.85**	**15.94**
Middle Tapi (South)	Waghur	0.00	0.00	0.00	0.00	0.00	0.00
	JIPC Jalgaon	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Manjra	Manar	1.09	0.00	1.06	0.03	7.63	0.37
	Purna Complex	0.00	243.52	49.11	0.00	133.50	0.00
	Vishnupuri	13.85	0.00	0.00	13.85	80.79	17.14
	NIC Nanded	**14.94**	**243.52**	**50.18**	**13.88**	**221.92**	**6.25**
Deficit		**137.67**	**810.71**	**210.61**	**33.68**	**1257.99**	**2.68**
Normal							
Upper Godavari	NMC Express Mukane	0.00	0.00	0.00	0.00	0.00	0.00
	AIC Abad	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Painganga	Pus	16.44	8.50	7.68	0.26	27.93	0.93
	AIC Akola	**16.44**	**8.50**	**7.68**	**0.26**	**27.93**	**0.93**

Indicator VII: Percentage of Unutilized water to Live Storage - Page 2 of 3

(Major / 2009-10) Unit: MCum

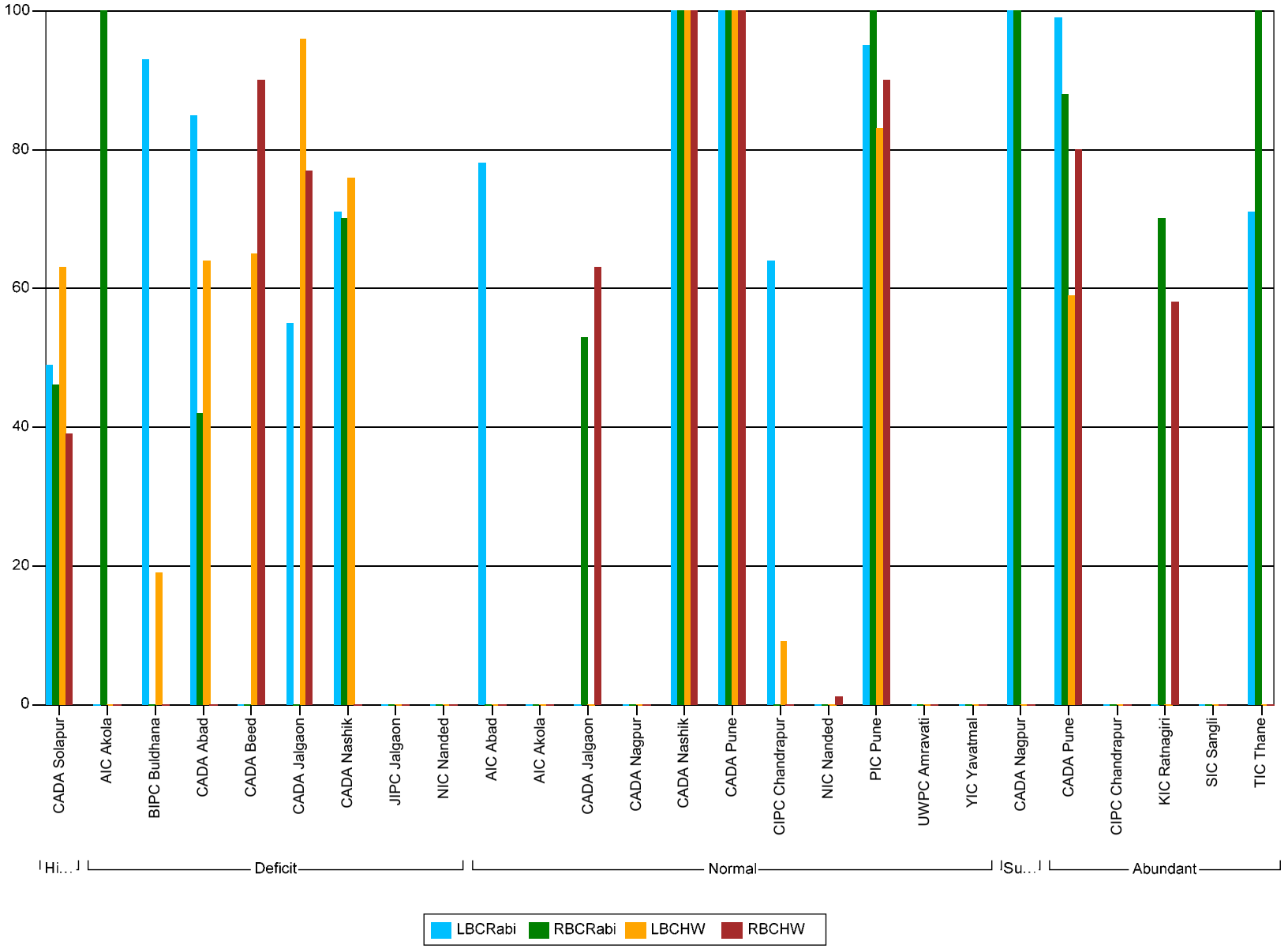
Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Storage15Oct	Percent Unutilise
Middle Tapi (Satpuda)	Hatnur	140.00	0.00	111.39	28.61	255.00	11.22
	CADA Jalgaon	**140.00**	**0.00**	**111.39**	**28.61**	**255.00**	**11.22**
Wardha	Lower Wunna Complex	37.88	0.00	12.07	28.00	168.74	15.30
	CADA Nagpur	**37.88**	**0.00**	**12.07**	**28.00**	**168.74**	**16.59**
Upper Godavari	Bhandardara	48.30	0.00	15.13	33.17	332.18	9.99
	Darna	36.87	0.00	37.62	0.00	181.48	0.00
	Gangapur	44.21	0.00	50.41	0.00	125.65	0.00
	Gautami	5.60	0.00	0.72	4.88	30.69	15.90
	Kadwa	5.35	0.00	4.33	1.02	52.91	1.93
	Kashyapi	0.31	0.00	0.50	0.00	26.27	0.00
	Mukane	0.20	0.00	3.85	0.00	75.21	0.00
	Mula	39.33	28.30	25.40	0.00	338.10	0.00
	NMWeir	0.00	0.00	94.72	0.00	6.12	0.00
	Upper Godavari Complex	31.64	0.00	39.12	18.73	205.87	0.00
	CADA Nashik	**211.80**	**28.30**	**271.80**	**57.80**	**1,374.48**	**4.21**
Upper Bhima	Ghod	35.77	0.00	41.09	0.00	80.19	0.00
	Kukadi Complex	37.48	128.55	159.66	0.00	535.16	0.00
	CADA Pune	**73.25**	**128.55**	**200.75**	**0.00**	**615.35**	**0.00**
Wardha	Bor	33.54	15.80	3.24	14.50	102.64	14.12
	CIPC Chandrapur	**33.54**	**15.80**	**3.24**	**14.50**	**102.64**	**14.12**
Painganga	Upper Penganga	0.00	0.00	31.69	0.00	53.98	0.00
	NIC Nanded	**0.00**	**0.00**	**31.69**	**0.00**	**53.98**	**0.00**
Upper Bhima	Bhama Askhed	76.35	58.74	2.80	14.81	139.32	10.63
	Chaskaman	56.07	18.55	8.88	28.64	209.72	13.66
	Khadakwasla Complex	29.93	7.80	396.31	13.46	677.08	0.00
	Neera Complex	191.13	49.63	543.98	104.38	931.93	0.00
	Neera Devdhar	7.73	0.00	8.76	0.00	316.44	0.00
	Pawana	82.22	2.27	15.48	64.47	240.97	26.75
	PIC Pune	**443.42**	**136.99**	**976.21**	**225.74**	**2,515.46**	**8.97**
Wardha	Upper Wardha	160.26	0.00	8.34	151.92	507.90	29.91
	UWPC Amravati	**160.26**	**0.00**	**8.34**	**151.92**	**507.90**	**29.91**
Painganga	Arunawati	6.04	72.00	7.00	0.00	17.32	0.00
	YIC Yavatmal	**6.04**	**72.00**	**7.00**	**0.00**	**17.32**	**0.00**
Normal		**1122.63**	**390.14**	**1630.17**	**506.83**	**5638.80**	**8.99**

Indicator VII: Percentage of Unutilized water to Live Storage - Page 3 of 3

(Major / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Surplus							
Middle Wainganga	Bagh Complex	37.71	7.85	24.96	14.80	96.79	5.06
	Itiadoh	65.34	0.00	23.13	42.21	116.70	36.17
	Pench Complex	227.95	0.00	344.37	35.83	836.00	0.00
	CADA Nagpur	**331.00**	**7.85**	**392.46**	**92.85**	**1,049.49**	**8.85**
Surplus		**331.00**	**7.85**	**392.46**	**92.85**	**1049.49**	**8.85**
Abundant							
Upper Krishna (W)	Dhom	69.32	0.00	112.48	0.00	256.06	0.00
	Kanher	56.46	0.00	17.89	38.57	271.99	14.18
	CADA Pune	**125.78**	**0.00**	**130.37**	**38.57**	**528.05**	**7.30**
Lower Wainganga	Asolamendha	0.00	0.00	0.00	0.00	8.08	0.00
	Dina	0.00	0.00	1.78	0.00	30.36	0.00
	CIPC	**0.00**	**0.00**	**1.78**	**0.00**	**38.44**	**0.00**
	Chandrapur						
Telekhol- Tillari	Tillari	310.22	14.80	45.82	249.60	444.53	56.15
	KIC Ratnagiri	**310.22**	**14.80**	**45.82**	**249.60**	**444.53**	**56.15**
Upper Krishna (W)	Dudhaganga	223.91	0.00	45.57	178.34	663.51	26.88
	Krishna LIS Complex	0.00	0.00	193.37	0.00	0.00	0.00
	Radhanagari	64.80	81.62	0.00	0.00	217.81	0.00
	Tulshi	7.97	0.00	3.17	4.80	96.33	4.98
	Warana	265.65	0.00	58.24	207.41	783.41	26.48
	SIC Sangli	**562.33**	**81.62**	**300.35**	**390.55**	**1,761.06**	**22.18**
North Konkan	Bhatsa	242.07	225.42	59.08	0.00	624.86	0.00
	Kal-Amba	51.70	0.00	71.80	0.00	402.96	0.00
	Surya	53.32	0.00	1.79	51.52	216.41	23.81
	TIC Thane	**347.09**	**225.42**	**132.68**	**51.52**	**1,244.23**	**4.14**
Abundant		**1345.41**	**321.84**	**610.99**	**730.24**	**4016.31**	**18.18**
Major		**3301.82**	**1530.53**	**3104.73**	**1498.39**	**13554.82**	**11.05**

Indicator VIII : Conveyance Efficiency of Main Canals - Major



Indicator VIII: Conveyance Efficiency of Main Canals - Page 1 of 3

(Major Projects / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Highly Deficit					
Remaining Bhima+ Man	Bhima (Ujjani)	49.00	47.00	63.00	39.00
	Sina Kolegaon LIS	0.00	0.00	0.00	0.00
	Sina Madha Link Canal				
	Sina Madha LIS	0.00	0.00	0.00	0.00
	CADA Solapur	**16.33**	**15.67**	**21.00**	**13.00**
Highly Deficit		**16.33**	**15.67**	**21.00**	**13.00**
Deficit					
Purna (Tapi)	Katepurna	0.00	0.00	0.00	0.00
	Nalganga	0.00	104.00	0.00	0.00
	AIC Akola	**0.00**	**52.00**	**0.00**	**0.00**
Purna (Tapi)	Wan	94.00	0.00	19.00	0.00
	BIPC Buldhana	**94.00**	**0.00**	**19.00**	**0.00**
Lower Godavari	Jayakwadi Stage I	86.00	43.00	65.00	0.00
	CADA Abad	**86.00**	**43.00**	**65.00**	**0.00**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	0.00	0.00	0.00	35.00
	Lower Terna	0.00	0.00	0.00	0.00
	Manjra	0.00	0.00	66.00	55.00
	CADA Beed	**0.00**	**0.00**	**22.00**	**30.00**
Girna	Girna+Panzan	56.00	0.00	96.00	77.00
	CADA Jalgaon	**56.00**	**0.00**	**96.00**	**77.00**
Girna	Chankapur	71.00	70.00	77.00	0.00
	CADA Nashik	**71.00**	**70.00**	**77.00**	**0.00**
Middle Tapi (South)	Waghur				
	JIPC Jalgaon				
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	**0.00**	**0.00**	**0.00**	**0.00**
Deficit		**25.58**	**18.08**	**26.92**	**13.92**
Normal					
Upper Godavari	NMC Express Mukane	78.00	0.00	0.00	0.00
	AIC Abad	**78.00**	**0.00**	**0.00**	**0.00**
Painganga	Pus	0.00	0.00	0.00	0.00
	AIC Akola	**0.00**	**0.00**	**0.00**	**0.00**
Middle Tapi (Satpuda)	Hatnur	0.00	53.00	0.00	63.00
	CADA Jalgaon	**0.00**	**53.00**	**0.00**	**63.00**
Wardha					

Indicator VIII: Conveyance Efficiency of Main Canals - Page 2 of 3

(Major Projects / 2009-10) Unit: %

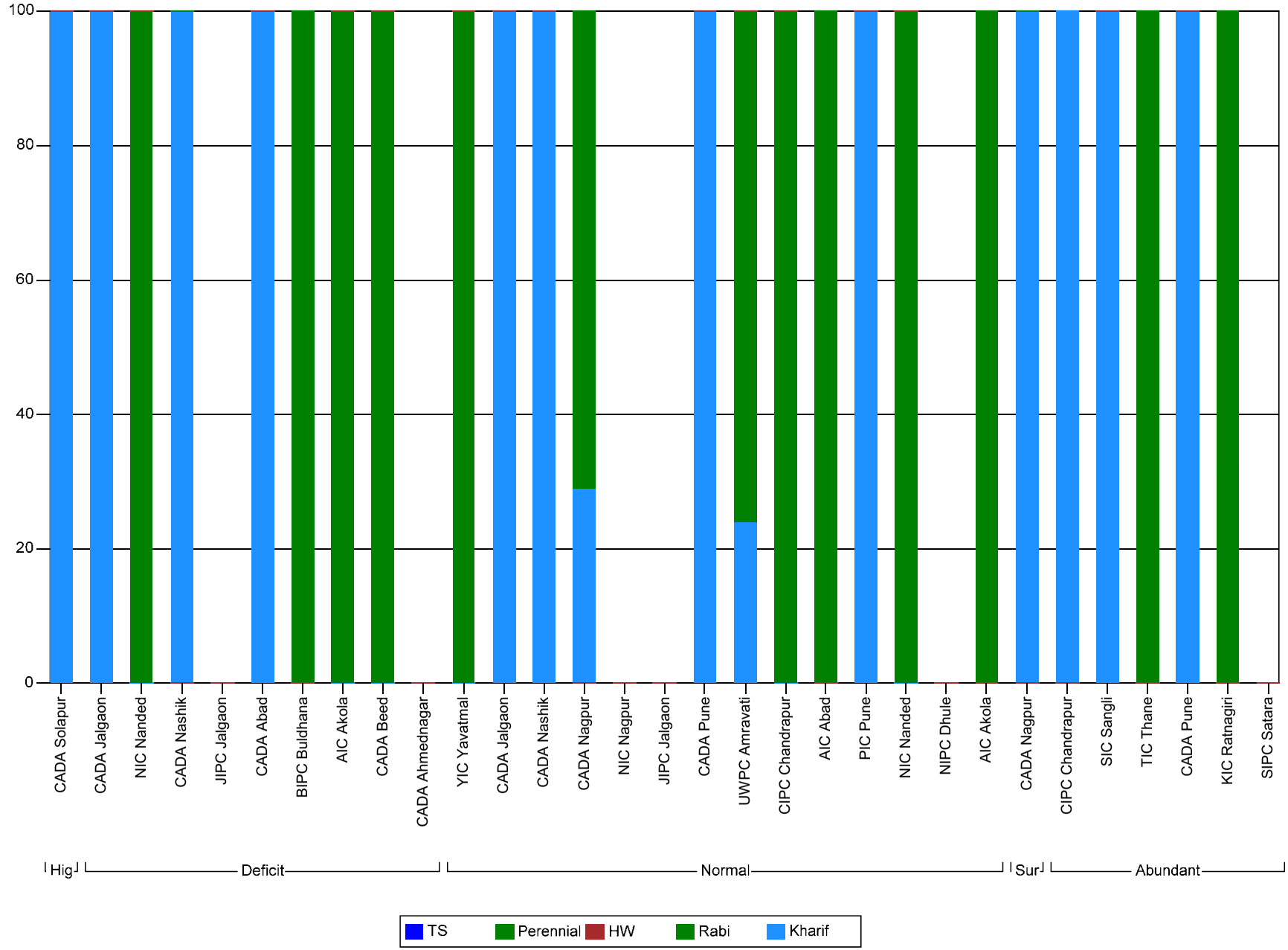
Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
	Lower Wunna Complex	0.00	0.00	0.00	0.00
	CADA Nagpur	**0.00**	**0.00**	**0.00**	**0.00**
Upper Godavari	Bhandardara	33.00	46.00	44.00	41.00
	Darna	0.00	0.00	0.00	0.00
	Gangapur	55.00	0.00	48.00	0.00
	Gautami	0.00	0.00	0.00	0.00
	Kadwa	0.00	30.00	0.00	0.00
	Kashyapi	0.00	0.00	0.00	0.00
	Mukane	0.00	0.00	0.00	0.00
	Mula	53.00	66.00	55.00	63.00
	NMWeir	47.00	35.00	42.00	16.00
	Upper Godavari Complex	158.00	89.00	235.00	86.00
	CADA Nashik	**34.60**	**26.60**	**42.40**	**20.60**
Upper Bhima	Ghod	60.00	47.00	64.00	40.00
	Kukadi Complex	206.00	64.00	374.00	67.00
	CADA Pune	**133.00**	**55.50**	**219.00**	**53.50**
Wardha	Bor	65.00	0.00	9.00	0.00
	CIPC Chandrapur	**65.00**	**0.00**	**9.00**	**0.00**
Painganga	Upper Penganga	0.00	0.00	0.00	2.00
	NIC Nanded	**0.00**	**0.00**	**0.00**	**2.00**
Upper Bhima	Bhama Askhed	0.00	0.00	0.00	0.00
	Chaskaman	46.00	0.00	36.00	0.00
	Khadakwasla Complex	0.00	63.00	0.00	42.00
	Neera Complex	49.00	53.00	48.00	48.00
	Neera Devdhar	0.00	0.00	0.00	0.00
	Pawana	0.00	0.00	0.00	0.00
	PIC Pune	**15.83**	**19.33**	**14.00**	**15.00**
Wardha	Upper Wardha	0.00	0.00	0.00	0.00
	UWPC Amravati	**0.00**	**0.00**	**0.00**	**0.00**
Painganga	Arunawati	0.00	0.00	0.00	0.00
	YIC Yavatmal	**0.00**	**0.00**	**0.00**	**0.00**
Normal		**32.69**	**21.00**	**36.73**	**18.00**
Surplus					
Middle Wainganga	Bagh Complex	319.00	81.00	0.00	0.00
	Itiadoh	0.00	874.00	0.00	0.00
	Pench Complex	0.00	0.00	0.00	0.00
	CADA Nagpur	**106.33**	**318.33**	**0.00**	**0.00**

Indicator VIII: Conveyance Efficiency of Main Canals - Page 3 of 3

(Major Projects / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Surplus		**106.33**	**318.33**	**0.00**	**0.00**
Abundant					
Upper Krishna (W)	Dhom	56.00	50.00	33.00	48.00
	Kanher	43.00	38.00	27.00	33.00
	CADA Pune	**49.50**	**44.00**	**30.00**	**40.50**
Lower Wainganga	Asolamendha	0.00	0.00	0.00	0.00
	Dina	0.00	0.00	0.00	0.00
	CIPC Chandrapur	**0.00**	**0.00**	**0.00**	**0.00**
Telekhol- Tillari	Tillari	0.00	70.00	0.00	59.00
	KIC Ratnagiri	**0.00**	**70.00**	**0.00**	**59.00**
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	**0.00**	**0.00**	**0.00**	**0.00**
North Konkan	Bhatsa	0.00	92.00	0.00	0.00
	Kal-Amba	25.00	60.00	0.00	0.00
	Surya	46.00	61.00	0.00	0.00
	TIC Thane	**23.67**	**71.00**	**0.00**	**0.00**
Abundant		**13.08**	**28.54**	**4.62**	**10.77**

Indicator IX : Actual Cropping Pattern - Major



Indicator IX: Actual Cropping Pattern - Page 1 of 3

(Major / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Highly Deficit						
Remaining Bhima+ Man						
	Bhima (Ujjani)	16.89	0.02	24.24	16.60	42.25
	Sina Kolegaon LIS	0.55	0.00	51.61	3.26	44.57
	Sina Madha Link Canal					
	Sina Madha LIS	14.29	0.00	0.00	2.69	83.03
	CADA Solapur	16.81	0.02	24.06	16.39	42.73
Highly Deficit						
Deficit						
Purna (Tapi)						
	Katepurna	0.00	0.00	0.00	0.00	0.00
	Nalganga	0.00	60.15	39.13	0.40	0.33
	AIC Akola	0.00	60.15	39.13	0.40	0.33
Purna (Tapi)						
	Wan	0.00	5.04	94.46	0.00	0.50
	BIPC Buldhana	0.00	5.04	94.46	0.00	0.50
Lower Godavari						
	Jayakwadi Stage I	10.85	22.30	26.95	4.97	34.94
	CADA Abad	10.85	22.30	26.95	4.97	34.94
Lower Godavari						
	Jayakwadi Stage II (Majalgaon)	0.00	2.55	2.73	8.30	86.43
	Lower Terna	0.00	2.26	60.01	4.81	32.92
	Manjra	0.00	0.16	6.83	13.62	79.40
	CADA Beed	0.00	1.40	15.53	10.07	73.00
Girna						
	Girna+Panzan	30.48	10.14	45.90	11.30	2.18
	CADA Jalgaon	30.48	10.14	45.90	11.30	2.18
Girna						
	Chankapur	37.44	0.08	62.27	0.00	0.21
	CADA Nashik	37.44	0.08	62.27	0.00	0.21
Middle Tapi (South)						
	Waghur					
	JIPC Jalgaon					
Manjra						
	Manar	0.00	0.00	0.00	0.00	0.00
	Purna Complex	0.00	15.57	60.59	14.76	9.08
	Vishnupuri	0.00	0.86	53.80	0.00	45.34
	NIC Nanded	0.00	12.69	59.26	11.87	16.18
Deficit						
Normal						
Upper Godavari						
	NMC Express Mukane	0.00	3.84	96.16	0.00	0.00

Indicator IX: Actual Cropping Pattern - Page 2 of 3

(Major / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	AIC Abad	0.00	3.84	96.16	0.00	0.00
Painganga						
	Pus	0.00	31.66	63.31	0.00	5.03
	AIC Akola	0.00	31.66	63.31	0.00	5.03
Middle Tapi (Satpuda)						
	Hatnur	13.06	21.83	46.29	2.17	16.66
	CADA Jalgaon	13.06	21.83	46.29	2.17	16.66
Wardha						
	Lower Wunna Complex	0.33	2.98	95.39	0.00	1.29
	CADA Nagpur	0.33	2.98	95.39	0.00	1.29
Upper Godavari						
	Bhandardara	33.48	0.00	45.72	2.55	18.25
	Darna	17.76	0.00	62.12	8.28	11.85
	Gangapur	29.67	0.00	44.35	3.36	22.62
	Gautami	0.00	0.00	91.95	0.00	8.05
	Kadwa	21.15	0.00	58.54	7.22	13.08
	Kashyapi	0.00	0.00	95.35	0.00	4.65
	Mukane	0.00	0.00	99.40	0.00	0.60
	Mula	18.73	1.16	37.95	20.84	21.32
	NMWeir	35.62	0.00	44.29	3.02	17.08
	Upper Godavari Complex	26.16	0.70	45.87	0.54	26.72
	CADA Nashik	26.60	0.49	44.07	7.94	20.90
Upper Bhima						
	Ghod	14.74	0.20	47.86	28.99	8.21
	Kukadi Complex	16.43	0.00	52.30	26.34	4.93
	CADA Pune	15.99	0.05	51.13	27.04	5.80
Wardha						
	Bor	0.00	0.19	96.63	2.21	0.98
	CIPC Chandrapur	0.00	0.19	96.63	2.21	0.98
Painganga						
	Upper Penganga	0.00	11.49	61.28	6.15	21.08
	NIC Nanded	0.00	11.49	61.28	6.15	21.08
Upper Bhima						
	Bhama Askhed	0.00	0.00	11.41	88.59	0.00
	Chaskaman	27.69	0.00	40.93	26.23	5.14
	Khadakwasla Complex	29.03	0.00	34.51	15.73	20.73
	Neera Complex	25.29	0.00	39.96	20.57	14.18
	Neera Devdhar	0.00	0.00	0.00	0.00	0.00
	Pawana	35.64	0.00	43.75	5.39	15.22
	PIC Pune	25.93	0.00	38.83	20.54	14.71
Wardha						
	Upper Wardha	0.08	4.99	83.72	0.04	11.18

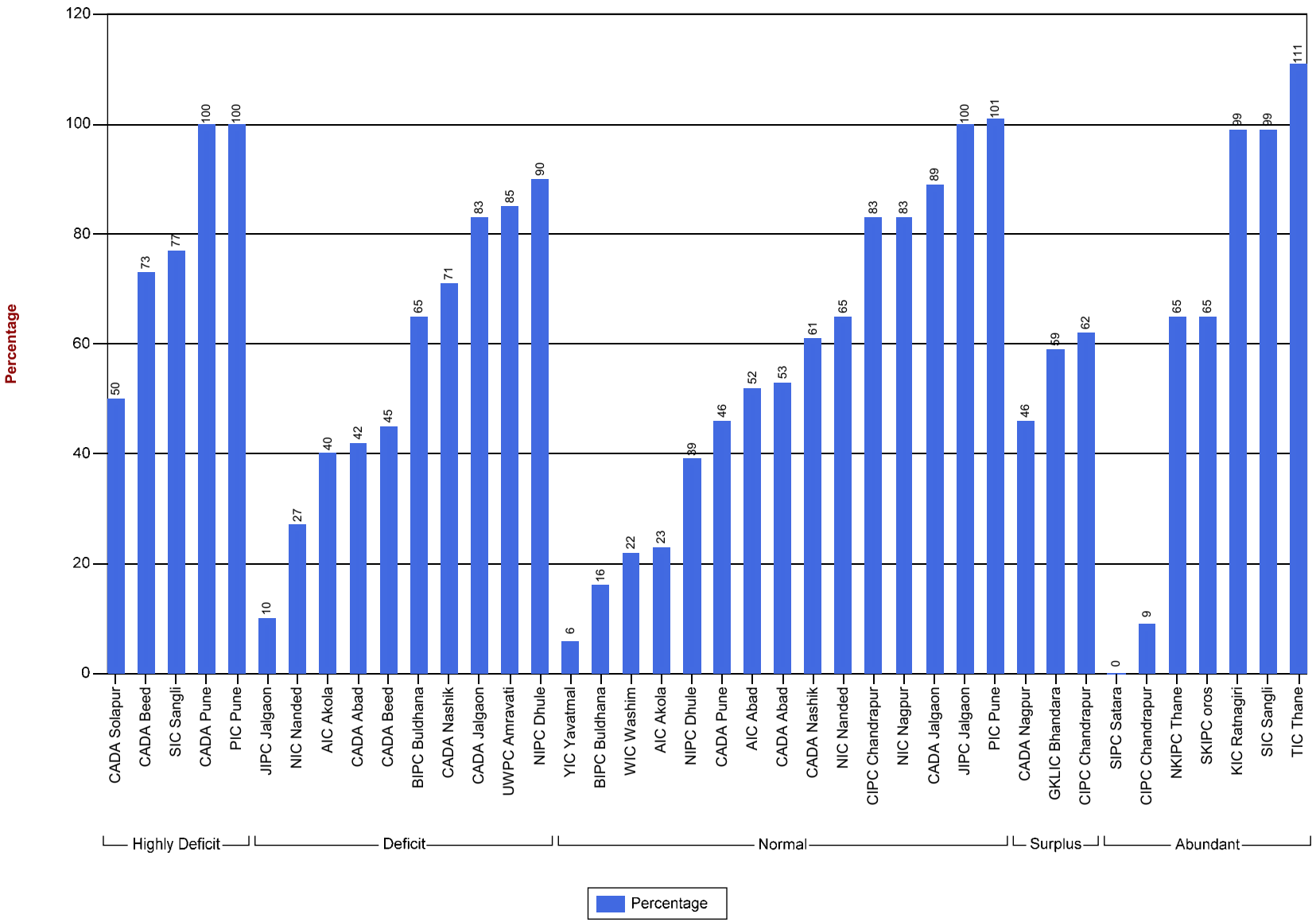
Indicator IX: Actual Cropping Pattern - Page 3 of 3

(Major / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	UWPC Amravati	0.08	4.99	83.72	0.04	11.18
Painganga						
	Arunawati	0.00	14.63	74.48	8.36	2.54
	YIC Yavatmal	0.00	14.63	74.48	8.36	2.54
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
	Pench Complex	60.62	0.34	38.89	0.00	0.15
	CADA Nagpur	73.59	0.23	26.07	0.00	0.10
Surplus						
Abundant						
Upper Krishna (W)						
	Dhom	8.54	0.11	59.97	16.67	14.71
	Kanher	27.87	0.77	44.99	13.15	13.22
	CADA Pune	17.15	0.40	53.30	15.10	14.05
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
Telekhol- Tillari						
	Tillari	0.00	3.11	23.13	0.00	73.76
	KIC Ratnagiri	0.00	3.11	23.13	0.00	73.76
Upper Krishna (W)						
	Dudhaganga	0.00	0.00	8.21	2.80	88.99
	Krishna LIS Complex	4.31	0.00	46.35	0.00	49.34
	Radhanagari	0.00	0.00	8.70	1.39	89.91
	Tulshi	0.00	0.00	21.41	3.64	74.95
	Warana	0.00	0.00	28.17	3.41	68.42
	SIC Sangli	2.38	0.00	33.01	1.15	63.46
North Konkan						
	Bhatsa	0.00	0.00	80.75	0.00	19.25
	Kal-Amba	0.00	0.00	100.00	0.00	0.00
	Surya	0.00	0.00	70.33	0.00	29.67
	TIC Thane	0.00	0.00	83.05	0.00	16.95
Abundant						

Annex II
Indicators of Medium Projects

Indicator I : Medium Projects - Water Availability in Reservoirs



(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Highly Deficit				
Upper Krishna (E)	Yeralwadi	19.60	19.60	100
	CADA Pune	**19.600**	**19.600**	**100**
Remaining Bhima+ Man	Dodda Nalla	0.00	6.06	0
	Sankh	14.87	14.87	100
	Siddhewadi	6.12	6.10	100
	SIC Sangli	**20.988**	**27.029**	**78**
Remaining Bhima+ Man	Ashti	16.01	23.01	70
	Bori	13.85	19.25	72
	Buddhihal	0.00	27.95	0
	Ekrukh	9.97	61.15	16
	Hingani (Pangaon)	25.58	32.00	80
	Jawalgaon	19.18	29.18	66
	Mangi	27.91	30.40	92
	CADA Solapur	**112.494**	**222.944**	**50**
Sina	Banganga	4.97	4.96	100
	Benitura	6.77	11.47	59
	Chandani	17.53	21.50	82
	Harni	2.49	11.17	22
	Kada	8.56	8.56	100
	Kadi	3.14	5.47	57
	Kambli	1.37	3.10	44
	Khandala	0.51	5.24	10
	Khandeshwar	8.58	8.78	98
	Khasapur	13.04	13.04	100
	Kurnoor	26.51	32.28	82
	Mehkari	8.60	12.97	66
	Ramganga	5.34	5.34	100
	Ruti	10.28	10.28	100
	Sakat	9.09	13.48	67
	Talwar	2.01	3.23	62
	Turori	0.09	6.20	2
	CADA Beed	**128.870**	**177.069**	**73**
Remaining Bhima+ Man	Andhali	7.43	7.42	100
	Khairy	13.74	13.74	100
	Mhaswad	46.12	46.12	100
	Nher	11.79	11.79	100
	Ranand	6.42	6.42	100
	Sina	52.30	52.30	100
	Tisangi	24.46	24.46	100
	PIC Pune	**162.260**	**162.250**	**100**
Highly Deficit		**444.212**	**608.892**	**73**
Deficit				
Middle Tapi (Satpuda)	Bahula	1.60	16.13	10
	JIPC Jalgaon	**1.601**	**16.130**	**10**
Manjra	Karadkhed	4.53	11.01	41
	Kudala	1.42	4.35	33

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	Kundrala	2.50	10.42	24
	Pethwadaj	0.81	9.04	9
	NIC Nanded	**9.261**	**34.821**	**27**
Purna (Tapi)	Mun	15.55	36.83	42
	Torna	6.91	7.90	87
	Utawali	19.79	19.79	100
	BIPC Buldhana	**42.248**	**64.520**	**65**
Girna	Haranbari	29.26	33.02	89
	Kelzar	12.11	16.22	75
	Nagya Sakya	1.27	11.24	11
	CADA Nashik	**42.640**	**60.480**	**71**
Purna (Tapi)	Chandrabhaga (Amravati)	36.45	41.25	88
	Purna (Achalpur)	28.98	35.37	82
	UWPC Amravati	**65.432**	**76.618**	**85**
Middle Tapi (South)	Prakasha Barrage	61.93	62.11	100
	Shivan	12.17	20.66	59
	NIPC Dhule	**74.095**	**82.765**	**90**
Middle Tapi (South)	Ajanta Andhari	1.02	7.65	13
	Anjana Palashi	5.65	13.74	41
	Gadadgad	4.64	4.64	100
	Galhati	11.84	13.84	86
	Girja	1.28	21.23	6
	Jui	1.38	6.03	23
	Kalyan Girija	3.55	8.47	42
	Karpara	24.33	24.90	98
	Khelna	11.07	11.07	100
	Lahuki	1.10	5.32	21
	Masoli	0.42	27.14	2
	Pir Kalyan	0.00	10.38	0
	Purna Nevpur	9.34	9.34	100
	Sukhana	5.81	18.50	31
	Upper Dudhana	0.84	13.02	6
	CADA Abad	**82.269**	**195.267**	**42**
Purna (Tapi)	Dnyanganga	9.34	33.93	28
	Mas	6.03	22.04	27
	Morna (Akola)	9.84	41.46	24
	Nirguna	9.89	28.85	34
	Paldhag	4.83	7.51	64
	Sapan	16.11	38.60	42
	Shahnoor	36.25	46.04	79
	Uma	0.00	11.68	0
	AIC Akola	**92.290**	**230.110**	**40**
Girna	Agnavati	2.76	2.76	100
	Bhokarbari	0.28	6.54	4
	Bori (Jalgaon)	13.24	25.15	53
	Burai	14.21	14.21	100

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	Hiwara	9.60	9.60	100
	Jamkhedi	12.34	12.34	100
	Kanoli	8.45	8.45	100
	Manyad	40.42	40.27	100
	Rangawali	11.83	12.89	92
	Tondapur	0.63	4.64	14
	CADA Jalgaon	**113.764**	**136.849**	**83**
Manjra	Belpara	1.52	5.82	26
	Bindusara	7.11	7.11	100
	Bodhegaon	2.60	3.65	71
	Borna	5.66	8.97	63
	Devarjan	0.00	10.68	0
	Gharni	0.00	22.46	0
	Kundalika	37.69	37.69	100
	Mahasangvi	5.88	5.88	100
	Raigavan	1.58	11.26	14
	Renapur	10.67	20.55	52
	Rui	1.90	8.61	22
	Sakol	0.00	10.95	0
	Sangameshwar (Dokewadi)	15.04	15.04	100
	Saraswati	5.34	6.21	86
	Sindphana	4.42	7.35	60
	Tawarja	1.38	20.35	7
	Terna	8.25	19.66	42
	Tiru	0.00	15.29	0
	Waghe Babhulgaon	3.74	3.74	100
	Wan (Beed)	16.44	21.91	75
	Whati	0.00	8.27	0
	CADA Beed	**129.204**	**271.439**	**48**
Deficit		**652.804**	**1168.999**	**56**
Normal				
Painganga	Adan	2.52	67.25	4
	Nawargaon	2.07	12.47	17
	YIC Yavatmal	**4.590**	**79.720**	**6**
Upper Godavari	Manikpunj	4.61	11.75	39
	NIPC Dhule	**4.610**	**11.750**	**39**
Painganga	Ekbhuji	5.24	11.97	44
	Sonal	1.11	16.92	7
	WIC Washim	**6.350**	**28.890**	**22**
Painganga	Pen Takli	9.45	59.98	16
	BIPC Buldhana	**9.449**	**59.976**	**16**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	6.41	6.41	100
	Mor	7.91	7.96	99
	JIPC Jalgaon	**14.318**	**14.367**	**100**
Painganga	Dongargaon (Nanded)	6.17	8.81	70
	Loni	4.55	8.38	54

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	Nagzari	4.82	6.57	73
	NIC Nanded	**15.543**	**23.751**	**65**
Upper Godavari	Shivna Takali	19.10	36.45	52
	AIC Abad	**19.100**	**36.450**	**52**
Upper Bhima	Chilhewadi	17.45	24.61	71
	Visapur	5.81	25.61	23
	CADA Pune	**23.260**	**50.220**	**46**
Upper Godavari	Ambadi	7.06	9.43	75
	Dheku	9.38	12.16	77
	Kolhi	0.74	3.24	23
	Narangi	0.00	11.50	0
	Tembhapuri	14.17	19.61	72
	CADA Abad	**31.359**	**55.937**	**56**
Painganga	Borgaon	1.39	6.61	21
	Goki	16.39	42.71	38
	Koradi	0.95	20.70	5
	Lower Pus	8.11	59.63	14
	Saikheda	7.37	27.18	27
	Waghadi	10.68	35.37	30
	AIC Akola	**44.890**	**192.202**	**23**
Lower Wainganga	Dongargaon (Chandrapur)	2.69	12.44	22
	Jam	24.18	24.30	99
	Kar	21.06	21.06	100
	NIC Nagpur	**47.927**	**57.804**	**83**
Upper Godavari	Adhala	10.98	27.60	40
	Alandi	20.84	27.46	76
	Bhojapur	2.38	10.22	23
	Ghatshil Pargaon	1.19	8.50	14
	Mandohol	6.39	8.78	73
	Waldevi	28.45	32.09	89
	CADA Nashik	**70.226**	**114.650**	**61**
Upper Bhima	Kasarsai	16.06	16.06	100
	Nazare	16.63	16.62	100
	Shetphal	18.06	16.93	107
	Wadiwale	30.39	30.39	100
	PIC Pune	**81.138**	**80.000**	**101**
Wardha	Amalnalla	6.07	24.48	25
	Dham	60.77	62.51	97
	Dongargaon (Wardha)	4.33	4.44	98
	Pothra1	33.22	34.72	96
	CIPC Chandrapur	**104.388**	**126.150**	**83**
Middle Tapi (Satpuda)	Abhora	6.02	6.02	100
	Aner	59.20	59.20	100
	Karwand	20.73	20.73	100
	Malangaon	11.33	11.33	100
	Panzara	23.79	35.63	67

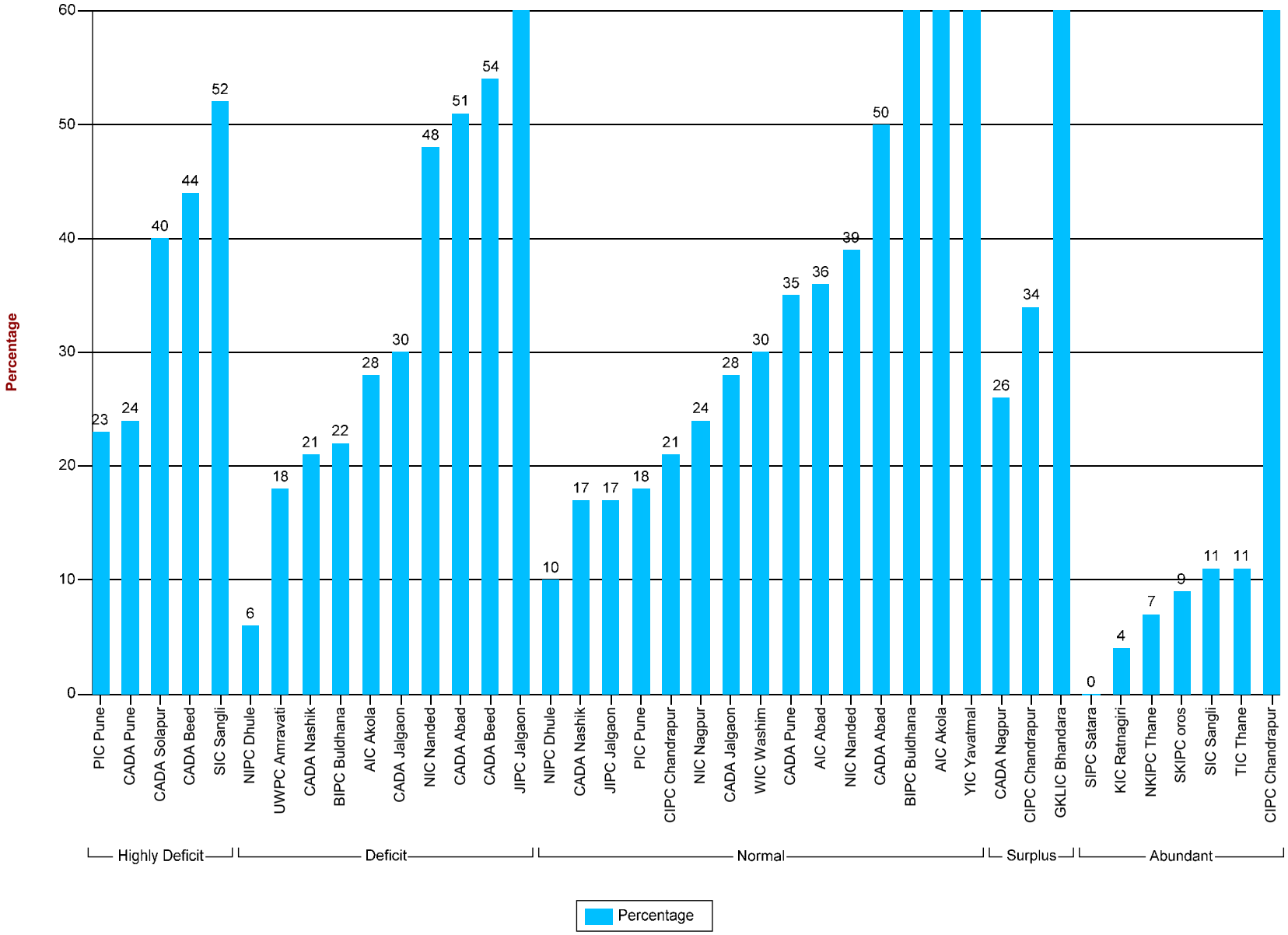
(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	Sonwad	5.99	14.36	42
	Suki	39.85	39.85	100
	Suki Pickup Wier	0.00	0.00	0
	CADA Jalgaon	**166.907**	**187.120**	**89**
Normal		**644.055**	**1118.987**	**58**
Surplus				
Middle Wainganga	Katangi	5.59	9.40	59
	GKLIC Bhandara	**5.590**	**9.400**	**59**
Middle Wainganga	Chandai	5.33	10.69	50
	Chargaon	16.04	19.87	81
	Labhansarad	3.96	7.35	54
	Pakadigundam	2.14	11.80	18
	Panchadhara Complex	9.56	10.39	92
	CIPC Chandrapur	**37.028**	**60.094**	**62**
Middle Wainganga	Bagheda	0.43	4.54	9
	Betekar Bothli	0.00	3.67	0
	Bodalkasa	1.99	16.45	12
	Chandpur	0.68	28.88	2
	Chandrabhaga (Nagpur)	6.42	8.26	78
	Chorakhmara	1.11	20.80	5
	Chulband	3.57	21.46	17
	Kanolibara	20.33	20.49	99
	Kesarnala	3.16	3.93	80
	Khairbanda	1.95	15.95	12
	Khekara Nalla	23.18	23.81	97
	Kolar	31.32	31.32	100
	Makardhokada-Saiki	13.50	25.90	52
	Managadh	0.35	7.05	5
	Mordham	3.50	4.95	71
	Pandharbodi	3.57	13.14	27
	Rengepar	1.34	3.57	38
	Sangrampur	0.27	3.87	7
	Sorna	0.00	5.73	0
	Tekepar LIS	0.00	0.00	0
	Umri	3.25	5.14	63
	Wunna	15.09	21.64	70
	CADA Nagpur	**135.025**	**290.541**	**46**
Surplus		**177.643**	**360.035**	**49**
Abundant				
Lower Wainganga	Ghorazari	3.49	43.16	8
	Naleshwar	1.08	10.23	11
	CIPC Chandrapur	**4.575**	**53.393**	**9**
Vashishthi	Natuwadi	26.86	27.23	99
	KIC Ratnagiri	**26.857**	**27.230**	**99**
South Konkan	Deoghar	63.89	98.02	65
	SKIPC oros	**63.888**	**98.020**	**65**
South Konkan	Gad Nadi	14.70	82.90	18

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
	Hetwane	132.36	144.98	91
	NKIPC Thane	**147.063**	**227.880**	**65**
North Konkan	Rajanalla Complex	212.07	65.20	325
	Vaitarna	232.20	331.31	70
	Wandri	35.18	35.93	98
	TIC Thane	**479.450**	**432.444**	**111**
Upper Krishna (W)	Chikotra	32.89	43.06	76
	Chitri	53.41	52.73	101
	Ghataprbha	38.64	43.69	88
	Jangamhatti	34.83	26.88	130
	Kadvi	70.56	70.56	100
	Kasari	77.97	77.97	100
	Krishna Canal & Khodshi Backwater	8.35	7.62	110
	Kumbhi	76.04	76.50	99
	Morna (Sangli)	16.64	16.64	100
	Patgaon	105.99	104.77	101
	Yeoti Masoli	6.88	6.88	100
	SIC Sangli	**522.186**	**527.288**	**99**
Abundant		**1244.019**	**1366.255**	**91**
Medium		**3162.732**	**4623.168**	**68**

Indicator II : Medium Projects Percentage of Actual Evaporation to Live Storage



Indicator II: Percentage of Actual Evaporation to Live Storage -

(Medium Project / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Highly Deficit				
Sina	Banganga	2.40	4.97	48.00
	Benitura	2.03	6.77	30.00
	Chandani	6.54	17.53	37.00
	Harni	0.46	2.49	18.00
	Kada	3.62	8.56	42.00
	Kadi	1.33	3.14	42.00
	Kambli	1.28	1.37	93.00
	Khandala	0.02	0.51	3.00
	Khandeshwar	3.93	8.58	46.00
	Khasapur	7.54	13.04	58.00
	Kurnoor	5.52	26.51	21.00
	Mehkari	4.47	8.60	52.00
	Ramganga	5.31	5.34	99.00
	Ruti	3.54	10.28	34.00
	Sakat	6.04	9.09	66.00
	Talwar	1.58	2.01	79.00
	Turori	0.61	0.09	654.00
	CADA Beed	**56.20**	**128.87**	**44.00**
Upper Krishna (E)	Yeralwadi	4.70	19.60	24.00
	CADA Pune	**4.70**	**19.60**	**24.00**
Remaining Bhima+ Man	Ashti	8.67	16.01	54.00
	Bori	2.29	13.85	17.00
	Buddhihal	3.93	0.00	0.00
	Ekrukh	5.27	9.97	53.00
	Hingani (Pangaon)	8.14	25.58	32.00
	Jawalgaon	7.90	19.18	41.00
	Mangi	9.27	27.91	33.00
	CADA Solapur	**45.47**	**112.49**	**40.00**
Remaining Bhima+ Man	Andhali	2.23	7.43	30.00
	Khairy	2.90	13.74	21.00
	Mhaswad	10.10	46.12	22.00
	Nher	6.55	11.79	56.00
	Ranand	1.90	6.42	30.00
	Sina	5.26	52.30	10.00
	Tisangi	8.38	24.46	34.00
	PIC Pune	**37.32**	**162.26**	**23.00**
Remaining Bhima+ Man	Dodda Nalla	2.63	0.00	0.00
	Sankh	6.51	14.87	44.00
	Siddhewadi	1.70	6.12	28.00
	SIC Sangli	**10.84**	**20.99**	**52.00**
Highly Deficit		**154.52**	**444.21**	**35.00**
Deficit				

Indicator II: Percentage of Actual Evaporation to Live Storage -

(Medium Project / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Purna (Tapi)	Dnyanganga	5.75	9.34	62.00
	Mas	3.98	6.03	66.00
	Morna (Akola)	2.63	9.84	27.00
	Nirguna	1.61	9.89	16.00
	Paldhag	1.48	4.83	31.00
	Sapan	6.97	16.11	43.00
	Shahnoor	3.45	36.25	10.00
	Uma	0.00	0.00	0.00
	AIC Akola	**25.86**	**92.29**	**28.00**
Purna (Tapi)	Mun	3.93	15.55	25.00
	Torna	2.46	6.91	36.00
	Utawali	2.87	19.79	15.00
	BIPC Buldhana	**9.26**	**42.25**	**22.00**
Middle Tapi (South)	Ajanta Andhari	0.63	1.02	62.00
	Anjana Palashi	2.03	5.65	36.00
	Gadadgad	1.90	4.64	41.00
	Galhati	3.94	11.84	33.00
	Girja	1.45	1.28	113.00
	Jui	0.40	1.38	29.00
	Kalyan Girija	1.28	3.55	36.00
	Karpara	11.66	24.33	48.00
	Khelna	2.67	11.07	24.00
	Lahuki	0.86	1.10	79.00
	Masoli	2.63	0.42	634.00
	Pir Kalyan	3.38	0.00	0.00
	Purna Nevpur	2.60	9.34	28.00
	Sukhana	4.64	5.81	80.00
	Upper Dudhana	1.70	0.84	202.00
	CADA Abad	**41.78**	**82.27**	**51.00**
Manjra	Belpara	1.92	1.52	126.00
	Bindusara	1.22	7.11	17.00
	Bodhegaon	0.49	2.60	19.00
	Borna	1.83	5.66	32.00
	Devarjan	0.42	0.00	0.00
	Gharni	1.98	0.00	0.00
	Kundalika	6.56	37.69	17.00
	Mahasangvi	0.80	5.88	14.00
	Raigavan	0.93	1.58	59.00
	Renapur	5.42	10.67	51.00
	Rui	1.72	1.90	90.00
	Sakol	0.62	0.00	0.00
	Sangameshwar (Dokewadi)	11.83	15.04	79.00
	Saraswati	1.27	5.34	24.00

Indicator II: Percentage of Actual Evaporation to Live Storage -

(Medium Project / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Sindphana	1.58	4.42	36.00
	Tawarja	5.66	1.38	410.00
	Terna	6.52	8.25	79.00
	Tiru	2.87	0.00	0.00
	Waghe Babhulgaon	3.19	3.74	85.00
	Wan (Beed)	8.01	16.44	49.00
	Whati	0.00	0.00	0.00
	CADA Beed	**64.83**	**129.20**	**50.00**
Girna	Agnavati	0.97	2.76	35.00
	Bhokarbari	0.98	0.28	345.00
	Bori (Jalgaon)	8.24	13.24	62.00
	Burai	4.27	14.21	30.00
	Hiwara	4.60	9.60	48.00
	Jamkhedi	2.47	12.34	20.00
	Kanoli	2.90	8.45	34.00
	Manyad	7.50	40.42	19.00
	Rangawali	1.24	11.83	10.00
	Tondapur	0.85	0.63	136.00
	CADA Jalgaon	**34.03**	**113.76**	**30.00**
Girna	Haranbari	4.18	29.26	14.00
	Kelzar	1.68	12.11	14.00
	Nagya Sakya	2.90	1.27	228.00
	CADA Nashik	**8.76**	**42.64**	**21.00**
Middle Tapi (Satpuda)	Bahula	2.91	1.60	182.00
	JIPC Jalgaon	**2.91**	**1.60**	**182.00**
Manjra	Karadkhed	2.41	4.53	53.00
	Kudala	0.27	1.42	19.00
	Kundrala	1.09	2.50	44.00
	Pethwadaj	0.72	0.81	89.00
	NIC Nanded	**4.49**	**9.26**	**48.00**
Middle Tapi (South)	Prakasha Barrage	3.70	61.93	6.00
	Shivan	0.88	12.17	7.00
	NIPC Dhule	**4.58**	**74.10**	**6.00**
Purna (Tapi)	Chandrabhaga (Amravati)	3.78	36.45	10.00
	Purna (Achalpur)	7.75	28.98	27.00
	UWPC Amravati	**11.53**	**65.43**	**18.00**
Deficit		**208.01**	**652.80**	**32.00**
Normal				
Upper Godavari	Shivna Takali	6.97	19.10	36.00
	AIC Abad	**6.97**	**19.10**	**36.00**
Painganga	Borgaon	1.08	1.39	78.00
	Goki	10.48	16.39	64.00

Indicator II: Percentage of Actual Evaporation to Live Storage -

(Medium Project / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Koradi	0.83	0.95	87.00
	Lower Pus	8.69	8.11	107.00
	Saikheda	7.14	7.37	97.00
	Waghadi	4.69	10.68	44.00
	AIC Akola	**32.90**	**44.89**	**73.00**
Painganga	Pen Takli	5.87	9.45	62.00
	BIPC Buldhana	**5.87**	**9.45**	**62.00**
Upper Godavari	Ambadi	3.09	7.06	44.00
	Dheku	5.30	9.38	56.00
	Kolhi	1.26	0.74	170.00
	Narangi	0.19	0.00	0.00
	Tembhapuri	4.85	14.17	34.00
	CADA Abad	**14.70**	**31.36**	**47.00**
Middle Tapi (Satpuda)	Abhora	2.00	6.02	33.00
	Aner	23.13	59.20	39.00
	Karwand	2.49	20.73	12.00
	Malangaon	2.91	11.33	26.00
	Panzara	4.88	23.79	21.00
	Sonwad	2.15	5.99	36.00
	Suki	9.20	39.85	23.00
	Suki Pickup Wier	0.00	0.00	0.00
	CADA Jalgaon	**46.75**	**166.91**	**28.00**
Upper Godavari	Adhala	2.28	10.98	21.00
	Alandi	2.57	20.84	12.00
	Bhojapur	0.86	2.38	36.00
	Ghatshil Pargaon	0.34	1.19	29.00
	Mandohol	2.47	6.39	39.00
	Waldevi	3.72	28.45	13.00
	CADA Nashik	**12.24**	**70.23**	**17.00**
Upper Bhima	Chilhewadi	1.63	17.45	9.00
	Visapur	6.56	5.81	113.00
	CADA Pune	**8.18**	**23.26**	**35.00**
Wardha	Amalnalla	2.62	6.07	43.00
	Dham	9.16	60.77	15.00
	Dongargaon (Wardha)	1.07	4.33	25.00
	Pothra1	9.57	33.22	29.00
	CIPC Chandrapur	**22.42**	**104.39**	**21.00**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	1.37	6.41	21.00
	Mor	1.05	7.91	13.00
	JIPC Jalgaon	**2.42**	**14.32**	**17.00**
Lower Wainganga	Dongargaon (Chandrapur)	1.81	2.69	67.00
	Jam	6.14	24.18	25.00

Indicator II: Percentage of Actual Evaporation to Live Storage -

(Medium Project / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Kar	3.53	21.06	17.00
	NIC Nagpur	**11.48**	**47.93**	**24.00**
Painganga	Dongargaon (Nanded)	2.11	6.17	34.00
	Loni	1.75	4.55	39.00
	Nagzari	2.14	4.82	44.00
	NIC Nanded	**6.00**	**15.54**	**39.00**
Upper Godavari	Manikpunj	0.45	4.61	10.00
	NIPC Dhule	**0.45**	**4.61**	**10.00**
Upper Bhima	Andra Khore	0.00	0.00	0.00
	Kasarsai	2.50	16.06	16.00
	Nazare	3.98	16.63	24.00
	Shetphal	3.15	18.06	17.00
	Wadiwale	4.81	30.39	16.00
	PIC Pune	**14.44**	**81.14**	**18.00**
Painganga	Ekbhuji	1.53	5.24	29.00
	Sonal	0.40	1.11	36.00
	WIC Washim	**1.93**	**6.35**	**30.00**
Painganga	Adan	7.10	2.52	282.00
	Nawargaon	1.23	2.07	59.00
	YIC Yavatmal	**8.33**	**4.59**	**181.00**
Normal		**195.06**	**644.06**	**30.00**
Surplus				
Middle Wainganga	Bagheda	0.49	0.43	115.00
	Betekar Bothli	0.10	0.00	0.00
	Bodalkasa	0.76	1.99	38.00
	Chandpur	1.19	0.68	176.00
	Chandrabhaga (Nagpur)	1.73	6.42	27.00
	Chorakhmara	0.84	1.11	76.00
	Chulband	1.54	3.57	43.00
	Kanolibara	3.52	20.33	17.00
	Kesarnala	0.62	3.16	19.00
	Khairbanda	2.24	1.95	115.00
	Khekara Nalla	6.70	23.19	29.00
	Kolar	2.07	31.32	7.00
	Makardhokada-Saiki	2.97	13.50	22.00
	Managadh	0.50	0.35	142.00
	Mordham	1.03	3.50	29.00
	Pandharbodi	2.22	3.57	62.00
	Rengepar	0.32	1.34	24.00
	Sangrampur	0.35	0.27	128.00
	Sorna	0.13	0.00	0.00
	Tekepar LIS	0.00	0.00	0.00
	Umri	0.97	3.25	30.00

Indicator II: Percentage of Actual Evaporation to Live Storage -

(Medium Project / 2009-10) Unit: MCum

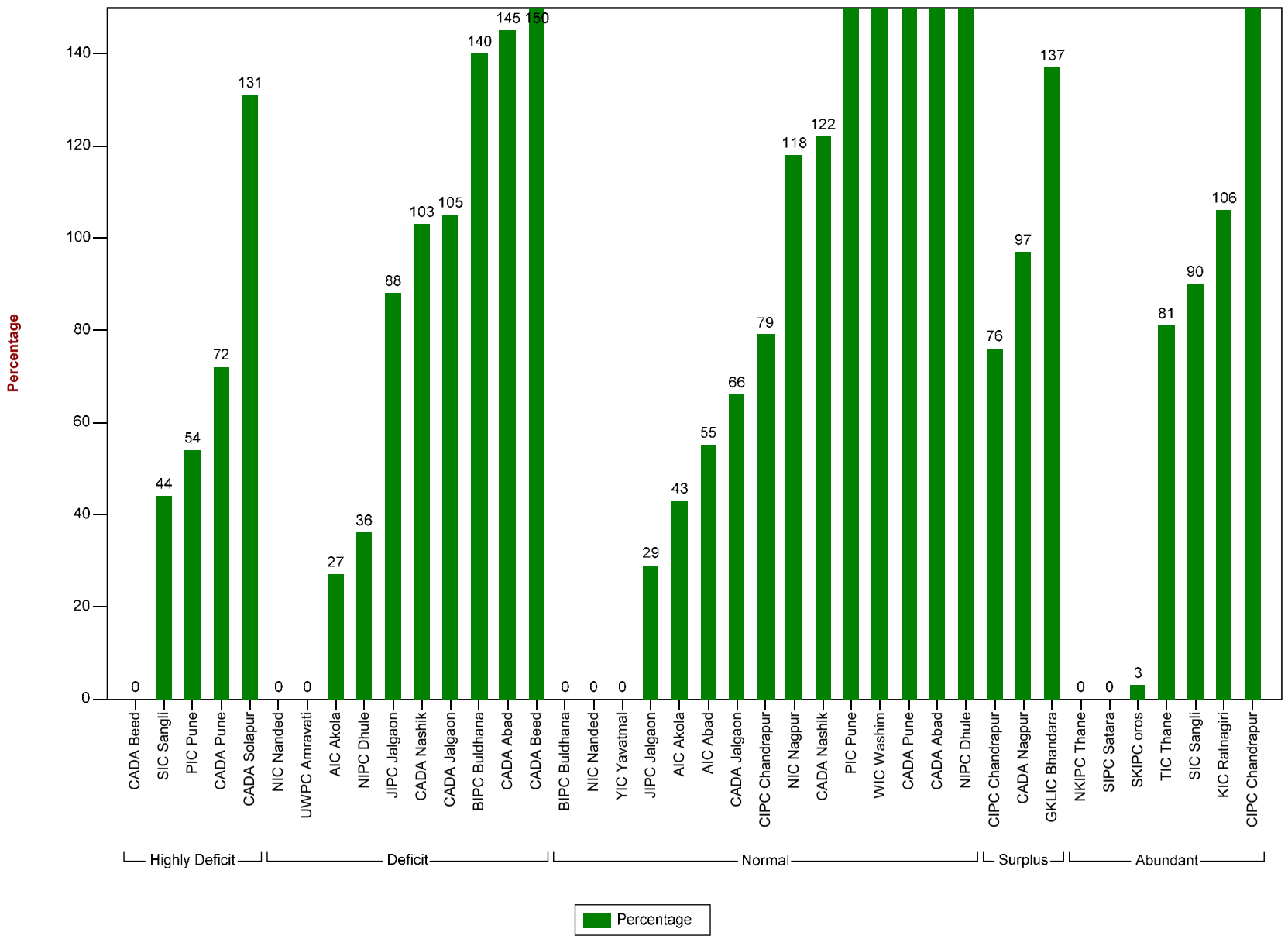
Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Wunna	5.11	15.09	34.00
	CADA Nagpur	**35.39**	**135.03**	**26.00**
Middle Wainganga	Chandai	6.26	5.33	117.00
	Chargaon	2.24	16.04	14.00
	Labhansarad	1.71	3.96	43.00
	Pakadigundam	0.92	2.14	43.00
	Panchadhara Complex	1.57	9.56	16.00
	CIPC Chandrapur	**12.70**	**37.03**	**34.00**
Middle Wainganga	Katangi	3.44	5.59	62.00
	GKLIC Bhandara	**3.44**	**5.59**	**62.00**
Surplus		**51.53**	**177.64**	**29.00**
Abundant				
Lower Wainganga	Ghorazari	3.17	3.50	91.00
	Naleshwar	2.80	1.08	259.00
	CIPC Chandrapur	**5.96**	**4.58**	**130.00**
Vashishthi	Natuwadi	0.99	26.86	4.00
	KIC Ratnagiri	**0.99**	**26.86**	**4.00**
South Konkan	Gad Nadi	1.65	14.70	11.00
	Hetwane	8.91	132.36	7.00
	NKIPC Thane	**10.56**	**147.06**	**7.00**
Upper Krishna (W)	Chikotra	5.92	32.89	18.00
	Chitri	7.92	53.41	15.00
	Dhamni	0.00	0.00	0.00
	Ghataprbha	2.76	38.64	7.00
	Jangamhatti	4.34	34.83	12.00
	Kadvi	8.66	70.56	12.00
	Kasari	5.52	77.97	7.00
	Krishna Canal & Khodshi Backwater	3.24	8.35	39.00
	Kumbhi	5.77	76.04	8.00
	Morna (Sangli)	2.86	16.64	17.00
	Patgaon	8.03	105.99	8.00
	Yeoti Masoli	0.86	6.88	13.00
	SIC Sangli	**55.89**	**522.19**	**11.00**
Upper Krishna (W)	Morna	0.00	0.00	0.00
	SIPC Satara	**0.00**	**0.00**	**0.00**
South Konkan	Deoghar	5.96	63.89	9.00
	Nardave	0.00	0.00	0.00
	SKIPC oros	**5.96**	**63.89**	**9.00**
North Konkan	Rajanalla Complex	13.34	212.07	6.00
	Vaitarna	34.81	232.20	15.00
	Wandri	5.10	35.18	14.00

Indicator II: Percentage of Actual Evaporation to Live Storage -

(Medium Project / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project / Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	TIC Thane	**53.25**	**479.45**	**11.00**
Abundant		**132.61**	**1244.02**	**11.00**
Medium Project - Grand Total:		**741.74**	**3162.73**	**23.00**

Indicator III : Medium Projects - Target and Achievement of Irrigation Potential Utilisation



(Medium / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
Highly Deficit				
Sina				
	Banganga	0	253	0
	Benitura	0	425	0
	Chandani	0	865	0
	Harni	0	298	0
	Kada	0	243	0
	Kadi	0	160	0
	Kambli	0	53	0
	Khandala	0	92	0
	Khandeshwar	0	731	0
	Khasapur	0	1051	0
	Kurnoor	0	1486	0
	Mehkari	0	204	0
	Ramganga	0	328	0
	Ruti	0	134	0
	Sakat	0	716	0
	Talwar	0	86	0
	Turori	0	0	0
	CADA Beed	**0**	**7125**	**0**
Upper Krishna (E)				
	Yeralwadi	1400	1001	72
	CADA Pune	**1400**	**1001**	**72**
Remaining Bhima+ Man				
	Ashti	0	2926	0
	Bori	1000	1966	197
	Buddhihal	343	320	93
	Ekrukh	500	757	151
	Hingani (Pangaon)	3100	2453	79
	Jawalgaon	2530	1939	77
	Mangi	2700	2936	109
	CADA Solapur	**10173**	**13296**	**131**
Remaining Bhima+ Man				
	Andhali	651	133	20
	Khairy	1750	1449	83
	Mhaswad	6530	3520	54
	Nher	2149	827	38
	Ranand	608	442	73
	Sina	7595	4041	53
	Tisangi	3740	2088	56
	PIC Pune	**23023**	**12500**	**54**
Remaining Bhima+ Man				
	Dodda Nalla	260	238	92
	Sankh	1000	255	26
	Siddhewadi	600	327	55
	SIC Sangli	**1860**	**820**	**44**

(Medium / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
Highly Deficit		**36456**	**34742**	**95**
Deficit				
Purna (Tapi)				
	Dnyanganga	0	1	0
	Mas	250	223	89
	Morna (Akola)	0	81	0
	Nirguna	930	365	39
	Paldhag	380	186	49
	Sapan	1568	96	6
	Shahnoor	2456	563	23
	Uma	0	0	0
	AIC Akola	**5584**	**1515**	**27**
Purna (Tapi)				
	Mun	0	1370	0
	Torna	830	401	48
	Utawali	1820	1950	107
	BIPC Buldhana	**2650**	**3721**	**140**
Middle Tapi (South)				
	Ajanta Andhari	0	53	0
	Anjana Palashi	545	351	64
	Gadadgad	480	412	86
	Galhati	1525	638	42
	Girja	0	268	0
	Jui	0	30	0
	Kalyan Girija	0	346	0
	Karpara	0	1287	0
	Khelna	509	958	188
	Lahuki	0	169	0
	Masoli	0	0	0
	Pir Kalyan	0	0	0
	Purna Nevpur	799	555	69
	Sukhana	465	985	212
	Upper Dudhana	0	231	0
	CADA Abad	**4323**	**6283**	**145**
Manjra				
	Belpara	60	114	190
	Bindusara	0	204	0
	Bodhegaon	190	206	108
	Borna	169	434	257
	Devarjan	0	0	0
	Gharni	0	0	0
	Kundalika	2165	911	42
	Mahasangvi	0	413	0
	Raigavan	0	40	0
	Renapur	0	341	0
	Rui	0	0	0
	Sakol	0	0	0

(Medium / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	Sangameshwar (Dokewadi)	0	1190	0
	Saraswati	185	280	151
	Sindphana	0	642	0
	Tawarja	0	0	0
	Terna	0	0	0
	Tiru	0	0	0
	Waghe Babhulgaon	154	178	116
	Wan (Beed)	693	472	68
	Whati	0	0	0
	CADA Beed	**3616**	**5425**	**150**
Girna				
	Agnavati	109	131	120
	Bhokarbari	184	101	55
	Bori (Jalgaon)	1880	1555	83
	Burai	1346	1127	84
	Hiwara	670	747	111
	Jamkhedi	0	537	0
	Kanoli	765	944	123
	Manyad	3906	4046	104
	Rangawali	973	1179	121
	Tondapur	0	0	0
	CADA Jalgaon	**9833**	**10367**	**105**
Girna				
	Haranbari	2457	3111	127
	Kelzar	1465	1812	124
	Nagya Sakya	2163	1372	63
	CADA Nashik	**6085**	**6295**	**103**
Middle Tapi (Satpuda)				
	Bahula	514	452	88
	JIPC Jalgaon	**514**	**452**	**88**
Manjra				
	Karadkhed	0	0	0
	Kudala	0	111	0
	Kundrala	0	125	0
	Pethwadaj	0	0	0
	NIC Nanded	**0**	**236**	**0**
Middle Tapi (South)				
	Prakasha Barrage	1687	1064	63
	Shivan	2200	350	16
	NIPC Dhule	**3887**	**1414**	**36**
Purna (Tapi)				
	Chandrabhaga (Amravati)	0	188	0
	Purna (Achalpur)	0	447	0
	UWPC Amravati	**0**	**635**	**0**
Deficit		**36492**	**36342**	**100**

(Medium / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
Normal				
Upper Godavari				
	Shivna Takali	787	432	55
	AIC Abad	**787**	**432**	**55**
Painganga				
	Borgaon	70	77	110
	Goki	470	448	95
	Koradi	150	11	7
	Lower Pus	590	195	33
	Saikheda	90	0	0
	Waghadi	480	70	15
	AIC Akola	**1850**	**801**	**43**
Painganga				
	Pen Takli	0	0	0
	BIPC Buldhana	**0**	**0**	**0**
Upper Godavari				
	Ambadi	0	377	0
	Dheku	610	370	61
	Kolhi	56	135	241
	Narangi	0	0	0
	Tembhapuri	0	501	0
	CADA Abad	**666**	**1383**	**208**
Middle Tapi (Satpuda)				
	Abhora	155	340	219
	Aner	5810	3395	58
	Karwand	3900	1874	48
	Malangaon	1650	1048	64
	Panzara	2159	2011	93
	Sonwad	600	567	95
	Suki	0	0	0
	Suki Pickup Wier	1129	962	85
	CADA Jalgaon	**15403**	**10197**	**66**
Upper Godavari				
	Adhala	1382	2350	170
	Alandi	2192	1949	89
	Bhojapur	1100	1109	101
	Ghatshil Pargaon	473	774	164
	Mandohol	771	687	89
	Waldevi	0	333	0
	CADA Nashik	**5918**	**7203**	**122**
Upper Bhima				
	Chilhewadi	0	325	0
	Visapur	2840	4812	169
	CADA Pune	**2840**	**5137**	**181**
Wardha				
	Amalnalla	0	0	0
	Dham	1280	1892	148

(Medium / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	Dongargaon (Wardha)	385	273	71
	Pothra1	3060	1585	52
	CIPC Chandrapur	**4725**	**3750**	**79**
Middle Tapi (Satpuda)				
	Bhokar (Mangrul)	0	0	0
	Mor	150	43	29
	JIPC Jalgaon	**150**	**43**	**29**
Lower Wainganga				
	Dongargaon (Chandrapur)	0	400	0
	Jam	1115	1025	92
	Kar	805	832	103
	NIC Nagpur	**1920**	**2257**	**118**
Painganga				
	Dongargaon (Nanded)	0	10	0
	Loni	0	0	0
	Nagzari	0	0	0
	NIC Nanded	**0**	**10**	**0**
Upper Godavari				
	Manikpunj	292	1012	346
	NIPC Dhule	**292**	**1012**	**346**
Upper Bhima				
	Andra Khore			
	Kasarsai	3700	3475	94
	Nazare	2488	2025	81
	Shetphal	0	2056	0
	Wadiwale	2655	6584	248
	PIC Pune	**8843**	**14140**	**160**
Painganga				
	Ekbhuji	239	385	161
	Sonal	0	10	0
	WIC Washim	**239**	**395**	**165**
Painganga				
	Adan	0	0	0
	Nawargaon	0	0	0
	YIC Yavatmal	**0**	**0**	**0**
Normal		**43633**	**46760**	**107**
Surplus				
Middle Wainganga				
	Bagheda	1261	962	76
	Betekar Bothli	800	765	96
	Bodalkasa	4345	3699	85
	Chandpur	6750	6528	97
	Chandrabhaga (Nagpur)	786	344	44
	Chorakhmara	5064	2423	48
	Chulband	3010	3016	100

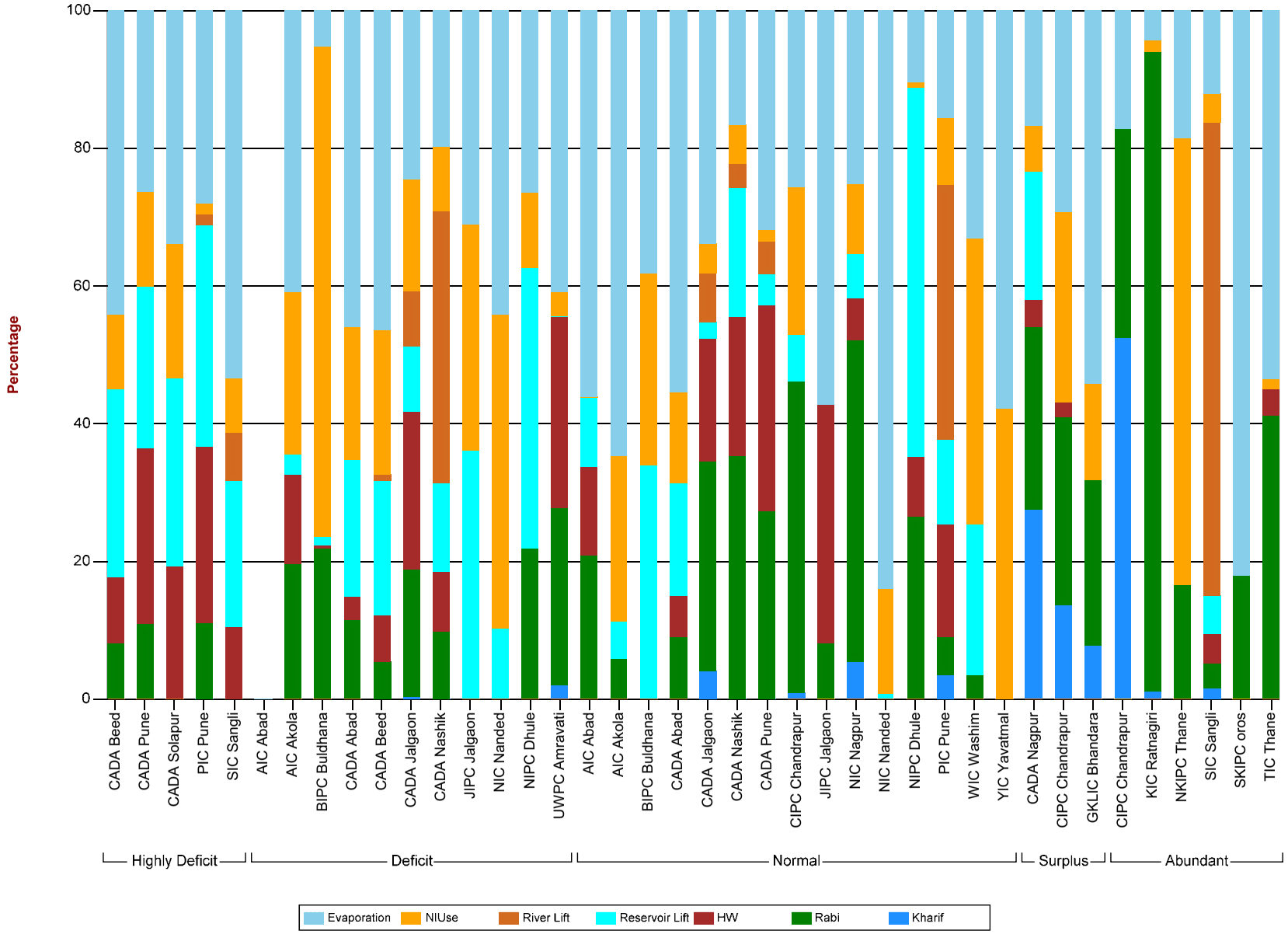
(Medium / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	Kanolibara	2425	2149	89
	Kesarnala	0	285	0
	Khairbanda	5294	5188	98
	Khekara Nalla	0	418	0
	Kolar	0	1261	0
	Makardhokada-Saiki	1215	2351	194
	Managadh	962	929	97
	Mordham	479	340	71
	Pandharbodi	443	418	94
	Rengepar	952	1896	199
	Sangrampur	1104	925	84
	Sorna	890	807	91
	Tekepar LIS	4200	3906	93
	Umri	307	400	130
	Wunna	0	67	0
	CADA Nagpur	**40287**	**39078**	**97**
Middle Wainganga				
	Chandai	1300	1238	95
	Chargaon	950	1073	113
	Labhansarad	1200	339	28
	Pakadigundam	0	0	0
	Panchadhara Complex	780	575	74
	CIPC Chandrapur	**4230**	**3225**	**76**
Middle Wainganga				
	Katangi	500	686	137
	GKLIC Bhandara	**500**	**686**	**137**
Surplus		**45017**	**42989**	**95**
Abundant				
Lower Wainganga				
	Ghorazari	5500	5603	102
	Naleshwar	0	2728	0
	CIPC Chandrapur	**5500**	**8331**	**151**
Vashishthi				
	Natuwadi	99	105	106
	KIC Ratnagiri	**99**	**105**	**106**
South Konkan				
	Gad Nadi	0	0	0
	Hetwane	0	140	0
	NKIPC Thane	**0**	**140**	**0**
Upper Krishna (W)				
	Chikotra	4300	4082	95
	Chitri	10850	8527	79
	Dhamni			
	Ghataprbha	2550	2177	85
	Jangamhatti	5150	4714	92
	Kadvi	2500	2328	93

(Medium / 2009-10) Unit: ha

Subbasin/ PlanGroup	Project/ Circle	Planned Target as per PIP	Achievement	Percent Achievement
	Kasari	8900	8503	96
	Krishna Canal & Khodshi Backwater	10700	8712	81
	Kumbhi	6150	5872	95
	Morna (Sangli)	1650	1477	90
	Patgaon	5400	5168	96
	Yeoti Masoli	0	860	0
	SIC Sangli	**58150**	**52420**	**90**
Upper Krishna (W)	Morna			
	SIPC Satara			
South Konkan	Deoghar	2201	60	3
	Nardave			
	SKIPC oros	**2201**	**60**	**3**
North Konkan	Rajanalla Complex	2200	1870	85
	Vaitarna	0	214	0
	Wandri	1200	681	57
	TIC Thane	**3400**	**2765**	**81**
Abundant		**69350**	**63821**	**92**
Medium		**230948**	**224653**	**97**

Indicator IV : Medium Projects - Water Use Pattern



(Medium / 2009-10) 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	0.440	0.000	1.180	0.000	0.570	2.395	4.585
	Benitura	0.000	0.000	0.000	4.967	0.000	1.014	2.025	8.006
	Chandani	0.000	0.360	0.400	4.960	0.000	3.120	6.535	15.375
	Harni	0.000	0.310	0.310	1.410	0.000	0.000	0.460	2.490
	Kada	0.000	0.160	0.450	0.710	0.000	0.590	3.620	5.530
	Kadi	0.000	0.597	0.000	0.990	0.000	0.000	1.326	2.913
	Kambli	0.000	0.620	0.000	0.000	0.000	0.000	1.280	1.900
	Khandala	0.000	0.000	0.000	0.437	0.000	0.155	0.015	0.607
	Khandeshwar	0.000	0.220	0.170	4.220	0.000	0.160	3.930	8.700
	Khasapur	0.000	1.400	0.850	4.590	0.000	2.280	7.540	16.660
	Kurnoor	0.000	4.330	7.080	4.960	0.000	3.372	5.520	25.262
	Mehkari	0.000	0.170	0.840	1.050	0.000	0.000	4.470	6.530
	Ramganga	0.000	0.490	0.280	1.480	0.000	0.000	5.310	7.560
	Ruti	0.000	0.140	0.320	0.540	0.000	0.000	3.543	4.543
	Sakat	0.000	1.130	1.620	2.401	0.000	0.281	6.040	11.472
	Talwar	0.000	0.000	0.000	0.770	0.000	0.200	1.579	2.549
	Turori	0.000	0.000	0.000	0.000	0.000	1.932	0.608	2.539
	CADA Beed	**0.000**	**10.367**	**12.320**	**34.665**	**0.000**	**13.673**	**56.196**	**127.221**
Upper Krishna (E)	Yeralwadi	0.000	1.960	4.620	4.230	0.000	2.490	4.700	18.000
	CADA Pune	**0.000**	**1.960**	**4.620**	**4.230**	**0.000**	**2.490**	**4.700**	**18.000**
Remaining Bhima+ Man	Ashti	0.000	0.000	0.000	0.000	0.000	21.315	8.670	29.985
	Bori	0.000	0.000	0.000	7.654	0.000	0.119	2.290	10.063
	Buddhihal	0.000	0.000	2.210	0.780	0.000	0.000	3.930	6.920
	Ekrukh	0.000	0.000	0.000	5.019	0.000	3.290	5.270	13.579
	Hingani (Pangaon)	0.000	0.000	9.270	6.530	0.000	1.020	8.140	24.960
	Jawalgaon	0.000	0.000	3.400	9.930	0.000	0.000	7.900	21.230
	Mangi	0.000	0.000	11.071	6.935	0.000	0.411	9.269	27.686
	CADA Solapur	**0.000**	**0.000**	**25.951**	**36.848**	**0.000**	**26.155**	**45.469**	**134.423**
Remaining Bhima+ Man	Andhali	0.000	0.026	0.500	0.338	0.000	1.261	2.232	4.357
	Khairy	0.000	0.000	2.001	5.300	0.000	0.026	2.900	10.227
	Mhaswad	0.000	3.140	10.840	13.010	0.000	0.000	10.100	37.090
	Nher	0.000	3.280	0.000	0.550	2.220	0.000	6.550	12.600
	Ranand	0.000	0.112	0.495	1.777	0.000	0.000	1.897	4.281
	Sina	0.000	2.112	14.877	19.059	0.000	0.475	5.259	41.782
	Tisangi	0.000	6.180	5.410	2.840	0.000	0.209	8.383	23.022
	PIC Pune	**0.000**	**14.850**	**34.123**	**42.874**	**2.220**	**1.971**	**37.321**	**133.359**

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Remaining Bhima+ Man									
	Dodda Nalla	0.000	0.000	0.460	0.950	0.000	0.000	2.630	4.040
	Sankh	0.000	0.000	1.568	1.255	0.000	0.000	6.505	9.328
	Siddhewadi	0.000	0.000	0.090	2.131	1.410	1.588	1.700	6.919
	SIC Sangli	**0.000**	**0.000**	**2.118**	**4.336**	**1.410**	**1.588**	**10.835**	**20.287**
Highly Deficit		**0.000**	**27.177**	**79.132**	**122.953**	**3.630**	**45.877**	**154.521**	**433.290**
Deficit									
Purna (Tapi)									
	Dnyanganga	0.000	0.000	0.000	0.000	0.000	1.300	5.750	7.050
	Mas	0.000	0.000	0.000	0.560	0.000	0.100	3.980	4.640
	Morna (Akola)	0.000	0.000	0.000	0.700	0.000	2.915	2.625	6.240
	Nirguna	0.000	4.107	0.000	0.038	0.000	1.160	1.605	6.910
	Paldhag	0.000	0.780	0.240	0.178	0.000	1.581	1.480	4.259
	Sapan	0.000	1.500	0.000	0.000	0.000	0.000	6.970	8.470
	Shahnoor	0.020	6.050	8.080	0.300	0.000	7.460	3.450	25.320
	Uma	0.000	0.000	0.000	0.000	0.000	0.453	0.000	0.453
	AIC Akola	**0.020**	**12.437**	**8.320**	**1.776**	**0.000**	**14.969**	**25.860**	**63.342**
Purna (Tapi)									
	Mun	2.479	6.355	1.754	0.120	0.000	8.962	3.926	15.130
	Torna	2.479	0.692	1.764	0.300	0.000	8.481	2.460	7.690
	Utawali	2.479	0.902	3.726	0.030	0.000	8.481	2.870	13.530
	BIPC	**7.437**	**7.949**	**0.208**	**0.450**	**0.000**	**25.924**	**9.256**	**36.351**
	Buldhana								
Middle Tapi (South)									
	Ajanta Andhari	0.000	0.000	0.000	0.110	0.000	1.280	0.630	2.020
	Anjana Palashi	0.000	0.000	0.000	1.870	0.000	0.790	2.030	4.690
	Gadadgad	0.000	0.420	0.780	0.439	0.000	0.000	1.903	3.542
	Galhati	0.000	0.875	0.430	3.877	0.000	0.000	3.942	9.124
	Girja	0.000	0.000	0.000	1.170	0.000	1.460	1.450	4.080
	Jui	0.000	0.000	0.000	0.230	0.000	2.080	0.400	2.710
	Kalyan Girija	0.000	0.330	0.000	0.350	0.000	0.000	1.280	1.960
	Karpara	0.000	3.294	0.878	4.204	0.000	1.040	11.661	21.077
	Khelna	0.000	3.110	0.000	1.070	0.000	3.830	2.670	10.680
	Lahuki	0.000	0.000	0.000	0.450	0.000	0.630	0.860	1.940
	Masoli	0.000	0.000	0.000	0.000	0.000	2.357	2.631	4.988
	Pir Kalyan	0.000	0.000	0.000	0.000	0.000	2.980	3.379	6.359
	Purna Nevpur	0.000	0.685	0.938	2.238	0.000	0.456	2.595	6.912
	Sukhana	0.000	1.837	0.000	0.812	0.000	0.355	4.644	7.648
	Upper Dudhana	0.000	0.000	0.000	1.200	0.000	0.400	1.704	3.304
	CADA Abad	**0.000**	**10.551**	**3.026**	**18.020**	**0.000**	**17.658**	**41.779**	**91.034**
Manjra									
	Belpara	0.000	0.000	0.960	1.030	0.000	0.000	1.920	3.910
	Bindusara	0.000	1.200	0.530	0.000	0.000	3.240	1.220	6.190

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Bodhegaon	0.000	0.000	0.040	1.730	0.000	0.300	0.490	2.560
	Borna	0.000	0.000	0.000	2.966	0.000	0.000	1.828	4.794
	Devarjan	0.000	0.000	0.000	0.000	0.000	0.000	0.415	0.415
	Gharni	0.000	0.000	0.000	0.000	0.000	0.579	1.979	2.558
	Kundalika	0.000	3.000	2.640	2.640	0.000	4.900	6.560	19.740
	Mahasangvi	0.000	0.600	0.000	2.200	0.000	0.000	0.804	3.604
	Raigavan	0.000	0.000	0.000	0.363	0.000	2.204	0.930	3.497
	Renapur	0.000	0.000	0.000	3.583	0.000	1.672	5.418	10.673
	Rui	0.000	0.000	0.000	0.000	0.000	2.313	1.718	4.031
	Sakol	0.000	0.000	0.000	0.000	0.000	0.616	0.623	1.239
	Sangameshwar (Dokewadi)	0.000	0.000	2.820	6.420	1.420	0.000	11.830	22.490
	Saraswati	0.000	0.300	0.400	1.900	0.000	1.000	1.270	4.870
	Sindphana	0.000	2.400	1.050	0.150	0.000	1.250	1.579	6.429
	Tawarja	0.000	0.000	0.000	0.000	0.000	1.621	5.664	7.285
	Terna	0.000	0.000	0.000	0.000	0.000	4.098	6.515	10.613
	Tiru	0.000	0.000	0.000	0.000	0.000	2.420	2.869	5.289
	Waghe Babhulgaon	0.000	0.000	0.000	1.240	0.000	0.000	3.191	4.431
	Wan (Beed)	0.000	0.000	1.200	2.970	0.000	2.658	8.005	14.833
	Whati	0.000	0.000	0.000	0.000	0.000	0.311	0.000	0.311
	CADA Beed	**0.000**	**7.500**	**9.640**	**27.192**	**1.420**	**29.182**	**64.828**	**139.762**
Girna									
	Agnavati	0.000	0.324	0.000	0.453	0.033	0.580	0.970	2.360
	Bhokarbari	0.000	0.427	0.000	0.203	0.000	0.315	0.979	1.923
	Bori (Jalgaon)	0.000	5.726	5.270	1.090	0.500	10.569	8.244	31.399
	Burai	0.440	5.000	2.900	0.000	0.000	2.230	4.270	14.840
	Hiwara	0.000	3.313	0.555	2.303	0.000	2.808	4.599	13.578
	Jamkhedi	0.000	0.000	0.000	0.000	8.880	0.000	2.470	11.350
	Kanoli	0.000	0.920	1.210	1.000	0.000	2.800	2.900	8.830
	Manyad	0.000	6.370	18.071	8.381	0.000	1.241	7.501	41.564
	Rangawali	0.000	3.815	3.580	0.000	1.870	0.000	1.240	10.505
	Tondapur	0.000	0.000	0.000	0.000	0.000	1.797	0.852	2.649
	CADA Jalgaon	**0.440**	**25.896**	**31.587**	**13.429**	**11.283**	**22.339**	**34.025**	**138.999**
Girna									
	Haranbari	0.000	1.810	0.000	1.030	11.640	3.190	4.180	21.850
	Kelzar	0.000	1.280	0.000	0.890	5.890	1.000	1.680	10.740
	Nagya Sakya	0.000	1.310	3.840	3.820	0.000	0.000	2.900	11.870
	CADA Nashik	**0.000**	**4.400**	**3.840**	**5.740**	**17.530**	**4.190**	**8.760**	**44.460**
Middle Tapi (Satpuda)									
	Bahula	0.000	0.000	0.000	3.406	0.000	3.089	2.909	9.404
	JIPC Jalgaon	**0.000**	**0.000**	**0.000**	**3.406**	**0.000**	**3.089**	**2.909**	**9.404**
Manjra									
	Karadkhed	0.000	0.000	0.000	0.000	0.000	2.670	2.412	5.082

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Kudala	0.000	0.000	0.000	0.780	0.000	0.670	0.267	1.717
	Kundrala	0.000	0.000	0.000	0.266	0.000	1.045	1.088	2.399
	Pethwadaj	0.000	0.000	0.000	0.000	0.000	0.240	0.724	0.964
	NIC Nanded	**0.000**	**0.000**	**0.000**	**1.046**	**0.000**	**4.625**	**4.491**	**10.162**
Middle Tapi (South)	Prakasha Barrage	0.000	0.000	0.000	7.090	0.000	0.000	3.700	10.790
	Shivan	0.000	3.800	0.000	0.000	0.000	1.900	0.875	6.575
	NIPC Dhule	**0.000**	**3.800**	**0.000**	**7.090**	**0.000**	**1.900**	**4.575**	**17.365**
Purna (Tapi)	Chandrabhaga (Amravati)	0.603	4.960	3.514	0.030	0.000	0.000	3.776	12.883
	Purna (Achalpur)	0.000	2.287	4.349	0.000	0.000	0.966	7.751	15.353
	UWPC	**0.603**	**7.247**	**7.863**	**0.030**	**0.000**	**0.966**	**11.527**	**28.236**
	Amravati								
Deficit		**6.414**	**79.780**	**64.484**	**78.179**	**30.233**	**124.842**	**208.010**	**579.114**
Normal									
Upper Godavari	Shivna Takali	0.000	2.605	1.608	1.242	0.000	0.021	6.967	12.443
	AIC Abad	**0.000**	**2.605**	**1.608**	**1.242**	**0.000**	**0.021**	**6.967**	**12.443**
Painganga	Borgaon	0.000	0.094	0.000	0.026	0.000	0.410	1.078	1.608
	Goki	0.000	2.883	0.000	0.980	0.000	1.761	10.481	16.105
	Koradi	0.000	0.000	0.000	0.011	0.000	2.290	0.831	3.132
	Lower Pus	0.000	0.000	0.000	1.300	0.000	0.101	8.686	10.087
	Saikheda	0.000	0.000	0.000	0.000	0.000	3.688	7.136	10.824
	Waghadi	0.000	0.000	0.000	0.466	0.000	4.070	4.686	9.222
	AIC Akola	**0.000**	**2.977**	**0.000**	**2.783**	**0.000**	**12.320**	**32.898**	**50.978**
Painganga	Pen Takli	0.000	0.000	0.000	5.232	0.000	4.323	5.866	15.421
	BIPC	**0.000**	**0.000**	**0.000**	**5.232**	**0.000**	**4.323**	**5.866**	**15.421**
	Buldhana								
Upper Godavari	Ambadi	0.000	1.420	0.264	0.600	0.000	1.284	3.093	6.661
	Dheku	0.000	0.000	1.225	1.328	0.000	0.044	5.300	7.897
	Kolhi	0.000	0.000	0.095	0.457	0.000	0.584	1.262	2.398
	Narangi	0.000	0.000	0.000	0.000	0.000	0.018	0.190	0.208
	Tembhapuri	0.000	1.000	0.000	1.970	0.000	1.580	4.850	9.400
	CADA Abad	**0.000**	**2.420**	**1.584**	**4.355**	**0.000**	**3.510**	**14.695**	**26.564**
Middle Tapi (Satpuda)	Abhora	0.000	1.497	0.470	0.089	0.000	0.000	2.003	4.059
	Aner	2.730	8.670	11.080	0.000	0.000	0.000	23.125	45.605

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Karwand	2.900	4.070	5.430	3.370	0.000	1.090	2.490	19.350
	Malangaon	0.000	5.797	2.381	0.000	0.000	0.240	2.905	11.323
	Panzara	0.000	13.660	4.430	0.000	0.000	0.310	4.880	23.280
	Sonwad	0.000	1.760	0.000	0.000	0.000	2.530	2.150	6.440
	Suki	0.000	0.000	0.000	0.000	9.752	1.148	9.201	20.101
	Suki Pickup Wier	0.000	6.718	0.830	0.000	0.000	0.712	0.000	8.260
	CADA Jalgaon	**5.630**	**42.172**	**24.621**	**3.459**	**9.752**	**6.030**	**46.754**	**138.418**
Upper Godavari									
	Adhala	0.000	10.050	7.020	4.574	0.000	1.344	2.280	25.268
	Alandi	0.000	6.391	5.813	2.137	0.858	0.000	2.565	17.764
	Bhojapur	0.000	8.620	0.000	0.189	0.000	1.231	0.860	10.900
	Ghatshil Pargaon	0.000	0.600	0.000	3.120	0.000	0.070	0.340	4.130
	Mandohol	0.000	0.720	2.170	3.140	0.000	1.150	2.470	9.650
	Waldevi	0.000	0.000	0.000	0.700	1.800	0.510	3.720	6.730
	CADA Nashik	**0.000**	**26.381**	**15.003**	**13.860**	**2.658**	**4.305**	**12.235**	**74.442**
Upper Bhima									
	Chilhewadi	0.000	0.000	0.000	0.000	1.230	0.000	1.628	2.858
	Visapur	0.000	7.010	7.740	1.140	0.000	0.425	6.555	22.871
	CADA Pune	**0.000**	**7.010**	**7.740**	**1.140**	**1.230**	**0.425**	**8.183**	**25.728**
Wardha									
	Amalnalla	0.000	0.000	0.000	0.000	0.000	2.192	2.620	4.812
	Dham	0.000	20.990	0.000	5.520	0.000	8.630	9.160	44.300
	Dongargaon (Wardha)	0.039	2.222	0.000	0.000	0.000	0.000	1.073	3.334
	Pothra1	0.810	16.460	0.000	0.440	0.000	8.020	9.570	35.300
	CIPC	**0.849**	**39.672**	**0.000**	**5.960**	**0.000**	**18.842**	**22.423**	**87.746**
	Chandrapur								
Middle Tapi (Satpuda)									
	Bhokar (Mangrul)	0.000	0.000	0.000	0.000	0.000	0.000	1.370	1.370
	Mor	0.000	0.340	1.479	0.000	0.000	0.000	1.050	2.869
	JIPC Jalgaon	**0.000**	**0.340**	**1.479**	**0.000**	**0.000**	**0.000**	**2.420**	**4.239**
Lower Wainganga									
	Dongargaon (Chandrapur)	2.438	0.880	0.000	0.000	0.000	0.000	1.806	5.124
	Jam	0.000	10.725	0.000	1.289	0.000	3.359	6.144	21.517
	Kar	0.000	9.804	2.763	1.692	0.000	1.295	3.529	19.083
	NIC Nagpur	**2.438**	**21.409**	**2.763**	**2.981**	**0.000**	**4.654**	**11.479**	**45.724**
Painganga									
	Dongargaon (Nanded)	0.000	0.000	0.000	0.057	0.000	0.000	2.107	2.164
	Loni	0.000	0.000	0.000	0.000	0.000	0.000	1.751	1.751
	Nagzari	0.000	0.000	0.000	0.000	0.000	1.080	2.139	3.219

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	NIC Nanded	**0.000**	**0.000**	**0.000**	**0.057**	**0.000**	**1.080**	**5.997**	**7.134**
Upper Godavari	Manikpunj	0.000	1.150	0.380	2.330	0.000	0.030	0.450	4.339
	NIPC Dhule	**0.000**	**1.150**	**0.380**	**2.330**	**0.000**	**0.030**	**0.450**	**4.339**
Upper Bhima	Andra Khore								
	Kasarsai	0.000	0.000	0.000	6.850	10.000	0.003	2.500	19.353
	Nazare	1.080	2.220	5.650	3.740	1.160	4.450	3.980	22.280
	Shetphal	2.186	2.994	9.574	0.000	0.000	0.908	3.151	18.812
	Wadiwale	0.000	0.000	0.000	0.880	23.350	3.740	4.813	32.783
	PIC Pune	**3.266**	**5.214**	**15.224**	**11.470**	**34.510**	**9.101**	**14.443**	**93.228**
Painganga	Ekbhuji	0.000	0.200	0.000	1.214	0.000	2.060	1.526	5.000
	Sonal	0.000	0.000	0.000	0.073	0.000	0.370	0.400	0.843
	WIC Washim	**0.000**	**0.200**	**0.000**	**1.287**	**0.000**	**2.430**	**1.926**	**5.843**
Painganga	Adan	0.000	0.000	0.000	0.000	0.000	4.128	7.098	11.226
	Nawargaon	0.000	0.000	0.000	0.000	0.000	1.960	1.229	3.189
	YIC Yavatmal	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**6.088**	**8.327**	**14.415**
Normal		**12.183**	**151.549**	**70.402**	**56.156**	**48.150**	**73.159**	**195.063**	**606.663**
Surplus									
Middle Wainganga	Bagheda	1.130	0.356	0.000	0.000	0.000	0.000	0.488	1.974
	Betekar Bothli	2.356	0.000	0.000	0.000	0.000	0.000	0.103	2.459
	Bodalkasa	8.122	1.131	0.255	0.000	0.000	0.120	0.761	10.389
	Chandpur	10.582	0.667	0.000	0.000	0.000	0.000	1.189	12.438
	Chandrabhaga (Nagpur)	0.000	3.000	0.000	0.623	0.000	0.123	1.729	5.475
	Chorakhmara	5.363	0.000	0.000	0.000	0.000	0.000	0.844	6.207
	Chulband	9.203	2.874	0.000	0.121	0.000	0.000	1.542	13.740
	Kanolibara	1.035	9.918	2.410	0.538	0.000	0.000	3.515	17.416
	Kesarnala	0.000	1.464	0.000	0.000	0.000	1.536	0.615	3.615
	Khairbanda	7.812	0.012	0.000	0.000	0.000	0.000	2.235	10.059
	Khekara Nalla	0.000	11.743	0.000	0.000	0.000	0.000	6.701	18.445
	Kolar	0.220	9.714	5.757	4.535	0.000	1.146	2.070	23.442
	Makardhokada-Saiki	0.000	10.960	0.000	0.329	0.000	0.948	2.968	15.205
	Managadh	3.486	0.000	0.000	0.000	0.000	0.000	0.497	3.983
	Mordham	0.000	1.558	0.009	0.724	0.000	0.080	1.026	3.397
	Pandharbodi	2.767	0.000	0.000	0.000	0.000	1.527	2.224	6.518
	Rengepar	2.172	1.233	0.000	0.000	0.000	0.000	0.323	3.728
	Sangrampur	2.598	0.000	0.000	0.000	0.000	0.000	0.351	2.949
	Sorna	1.935	0.000	0.000	0.000	0.000	0.000	0.127	2.062
	Tekepar LIS	0.000	0.000	0.000	31.560	0.000	0.000	0.000	31.560

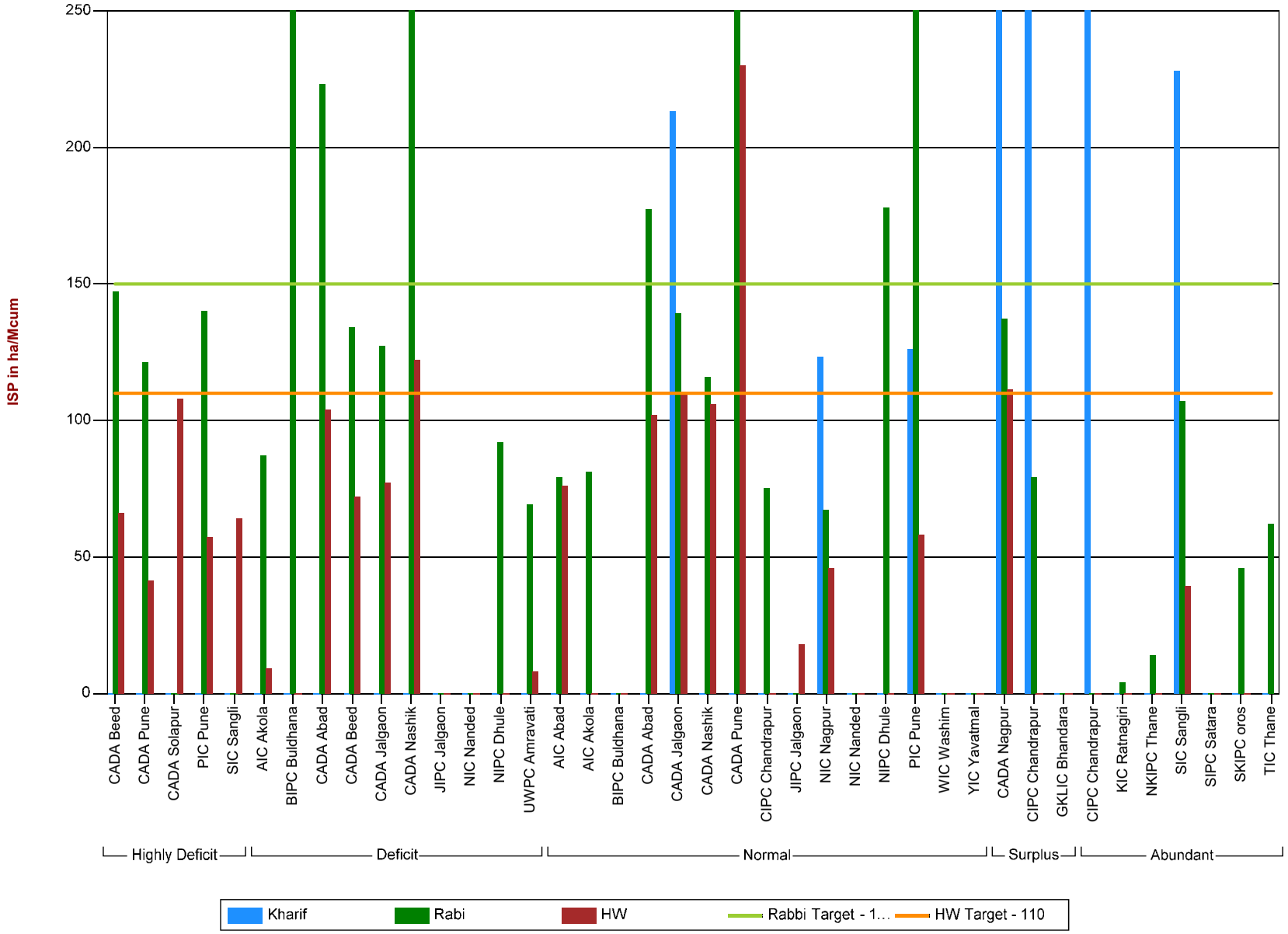
(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Umri	0.000	1.627	0.000	0.959	0.000	0.000	0.969	3.555
	Wunna	0.000	0.000	0.000	0.230	0.000	8.571	5.110	13.911
	CADA Nagpur	**58.781**	**56.258**	**8.431**	**39.619**	**0.000**	**14.051**	**35.387**	**212.526**
Middle Wainganga									
	Chandai	2.309	1.600	0.000	0.000	0.000	0.000	6.258	10.167
	Chargaon	3.629	2.186	0.000	0.000	0.000	10.295	2.242	18.352
	Labhansarad	0.000	1.209	0.000	0.000	0.000	0.072	1.712	2.993
	Pakadigundam	0.000	0.000	0.000	0.000	0.000	1.620	0.923	2.543
	Panchadhara Complex	0.000	6.847	0.982	0.000	0.000	0.000	1.565	9.394
	CIPC	**5.938**	**11.842**	**0.982**	**0.000**	**0.000**	**11.987**	**12.700**	**43.449**
	Chandrapur								
Middle Wainganga									
	Katangi	0.488	1.539	0.000	0.000	0.000	0.888	3.444	6.359
	GKLIC	**0.488**	**1.539**	**0.000**	**0.000**	**0.000**	**0.888**	**3.444**	**6.359**
	Bhandara								
Surplus		**65.207**	**69.639**	**9.413**	**39.619**	**0.000**	**26.926**	**51.531**	**262.334**
Abundant									
Lower Wainganga									
	Ghorazari	17.925	5.315	0.000	0.000	0.000	0.000	3.165	26.405
	Naleshwar	0.290	5.217	0.000	0.000	0.000	0.000	2.799	8.306
	CIPC	**18.215**	**10.532**	**0.000**	**0.000**	**0.000**	**0.000**	**5.964**	**34.711**
	Chandrapur								
Vashishthi									
	Natuwadi	0.253	21.442	0.000	0.000	0.000	0.352	0.992	23.039
	KIC Ratnagiri	**0.253**	**21.442**	**0.000**	**0.000**	**0.000**	**0.352**	**0.992**	**23.039**
South Konkan									
	Gad Nadi	0.000	0.000	0.000	0.000	0.000	0.000	1.650	1.650
	Hetwane	0.000	9.539	0.000	0.000	0.000	37.328	8.910	55.777
	NKIPC Thane	**0.000**	**9.539**	**0.000**	**0.000**	**0.000**	**37.328**	**10.560**	**57.427**
Upper Krishna (W)									
	Chikotra	0.000	0.000	0.000	0.000	24.224	0.416	5.920	30.560
	Chitri	0.000	0.000	0.000	0.000	42.400	3.110	7.920	53.430
	Dhamni								
	Ghataprbha	0.000	0.000	0.000	0.000	15.430	0.250	2.760	18.440
	Jangamhatti	0.000	0.000	0.000	0.000	27.500	0.990	4.340	32.830
	Kadvi	0.000	0.000	0.000	0.000	21.376	0.392	8.660	30.428
	Kasari	0.000	0.000	0.000	0.000	57.506	0.531	5.517	63.554
	Krishna Canal & Khodshi Backwater	7.230	16.915	20.012	25.910	0.000	1.023	3.240	74.330
	Kumbhi	0.000	0.000	0.000	0.000	66.030	0.000	5.773	71.803
	Morna (Sangli)	0.000	0.000	0.000	0.070	9.832	8.361	2.864	21.127

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
	Patgaon	0.000	0.000	0.000	0.000	49.919	2.103	8.034	60.056
	Yeoti Masoli	0.000	0.000	0.000	0.000	3.744	1.629	0.860	6.233
	SIC Sangli	**7.230**	**16.915**	**20.012**	**25.980**	**317.961**	**18.805**	**55.888**	**462.791**
Upper Krishna (W)	Morna								
	SIPC Satara								
South Konkan	Deoghar	0.000	1.300	0.000	0.000	0.000	0.000	5.957	7.257
	Nardave								
	SKIPC oros	**0.000**	**1.300**	**0.000**	**0.000**	**0.000**	**0.000**	**5.957**	**7.257**
North Konkan	Rajanalla Complex	0.000	17.970	1.130	0.000	0.000	0.000	13.339	32.439
	Vaitarna	0.000	0.000	0.000	0.000	0.000	1.430	34.810	36.240
	Wandri	0.000	23.094	2.720	0.000	0.000	0.000	5.100	30.914
	TIC Thane	**0.000**	**41.064**	**3.850**	**0.000**	**0.000**	**1.430**	**53.249**	**99.593**
Abundant		**25.698**	**100.792**	**23.862**	**25.980**	**317.961**	**57.915**	**132.610**	**684.818**
Medium		**96.674**	**428.936**	**247.293**	**322.888**	**399.974**	**328.720**	**741.735**	**2566.219**

Indicator V : Medium Projects - Irrigation System Performance (Canals)



Indicator V: Irrigation System Performance (Canals) - Page 1 of 7

(Medium Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Highly Deficit				
Sina	Banganga	0	159	0
	Benitura	0	0	0
	Chandani	0	159	90
	Harni	0	151	101
	Kada	0	125	80
	Kadi	0	101	0
	Kambli	0	85	0
	Khandala	0	0	0
	Khandeshwar	0	159	88
	Khasapur	0	178	92
	Kurnoor	0	150	47
	Mehkari	0	88	111
	Ramganga	0	160	91
	Ruti	0	107	81
	Sakat	0	159	90
	Talwar	0	0	0
	Turori	0	0	0
	CADA Beed	**0**	**105**	**66**
Upper Krishna (E)	Yeralwadi	0	122	41
	CADA Pune	**0**	**122**	**41**
Remaining Bhima+ Man	Ashti	0	0	0
	Bori	0	0	0
	Buddhihal	0	0	90
	Ekrukh	0	0	0
	Hingani (Pangaon)	0	0	101
	Jawalgaon	0	0	83
	Mangi	0	0	125
	CADA Solapur	**0**	**0**	**108**
Remaining Bhima+ Man	Andhali	0	154	120
	Khairy	0	0	48
	Mhaswad	0	123	55
	Nher	0	149	0
	Ranand	0	438	121
	Sina	0	82	34
	Tisangi	0	160	120
	PIC Pune	**0**	**158**	**58**

Indicator V: Irrigation System Performance (Canals) - Page 2 of 7

(Medium Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Remaining Bhima+ Man	Dodda Nalla	0	0	126
	Sankh	0	0	41
	Siddhewadi	0	0	156
	SIC Sangli	**0**	**0**	**64**
Highly Deficit		**0**	**142**	**75**
Deficit				
Purna (Tapi)	Dnyanganga	0	0	0
	Mas	0	0	0
	Morna (Akola)	0	0	0
	Nirguna	0	87	0
	Paldhag	0	222	0
	Sapan	0	64	0
	Shahnoor	0	76	9
	Uma	0	0	0
	AIC Akola	**0**	**56**	**9**
Purna (Tapi)	Mun	0	216	0
	Torna	0	579	0
	Utawali	0	1733	103
	BIPC Buldhana	**0**	**843**	**1837**
Middle Tapi (South)	Ajanta Andhari	0	0	0
	Anjana Palashi	0	0	0
	Gadadgad	0	369	164
	Galhati	0	301	160
	Girja	0	0	0
	Jui	0	0	0
	Kalyan Girija	0	409	0
	Karpara	0	169	64
	Khelna	0	193	0
	Lahuki	0	0	0
	Masoli	0	0	0
	Pir Kalyan	0	0	0
	Purna Nevpur	0	234	66
	Sukhana	0	265	0
	Upper Dudhana	0	0	0
	CADA Abad	**0**	**129**	**104**
Manjra	Belpara	0	0	22
	Bindusara	0	149	47

Indicator V: Irrigation System Performance (Canals) - Page 3 of 7

(Medium Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Bodhegaon	0	0	375
	Borna	0	0	0
	Devarjan	0	0	0
	Gharni	0	0	0
	Kundalika	0	106	110
	Mahasangvi	0	130	0
	Raigavan	0	0	0
	Renapur	0	0	0
	Rui	0	0	0
	Sakol	0	0	0
	Sangameshwar (Dokewadi)	0	0	0
	Saraswati	0	53	83
	Sindphana	0	176	186
	Tawarja	0	0	0
	Terna	0	0	0
	Tiru	0	0	0
	Waghe Babhulgaon	0	0	0
	Wan (Beed)	0	0	100
	Whati	0	0	0
	CADA Beed	**0**	**29**	**73**
Girna	Agnavati	0	92	0
	Bhokarbari	0	77	0
	Bori (Jalgaon)	0	128	114
	Burai	482	155	48
	Hiwara	0	88	171
	Jamkhedi	0	0	0
	Kanoli	0	327	407
	Manyad	0	148	53
	Rangawali	0	52	40
	Tondapur	0	0	0
	CADA Jalgaon	**482**	**107**	**77**
Girna	Haranbari	0	347	0
	Kelzar	0	250	0
	Nagya Sakya	0	295	123
	CADA Nashik	**0**	**297**	**123**
Middle Tapi (Satpuda)	Bahula	0	0	0
	JIPC Jalgaon	**0**	**0**	**0**

Indicator V: Irrigation System Performance (Canals) - Page 4 of 7

(Medium Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Manjra	Karadkhed	0	0	0
	Kudala	0	0	0
	Kundrala	0	0	0
	Pethwadaj	0	0	0
	NIC Nanded	**0**	**0**	**0**
Middle Tapi (South)	Prakasha Barrage	0	0	0
	Shivan	0	92	0
	NIPC Dhule	**0**	**46**	**0**
Purna (Tapi)	Chandrabhaga (Amravati)	103	25	0
	Purna (Achalpur)	0	167	15
	UWPC Amravati	**103**	**96**	**8**
Deficit		**-43**	**166**	**69**
Normal				
Upper Godavari	Shivna Takali	0	80	76
	AIC Abad	**0**	**80**	**76**
Painganga	Borgaon	0	702	0
	Goki	0	61	0
	Koradi	0	0	0
	Lower Pus	0	0	0
	Saikheda	0	0	0
	Waghadi	0	0	0
	AIC Akola	**0**	**127**	**0**
Painganga	Pen Takli	0	0	0
	BIPC Buldhana	**0**	**0**	**0**
Upper Godavari	Ambadi	0	189	117
	Dheku	0	0	87
	Kolhi	0	0	263
	Narangi	0	0	0
	Tembhapuri	0	160	0
	CADA Abad	**0**	**70**	**103**
Middle Tapi (Satpuda)	Abhora	0	135	272
	Aner	360	163	90
	Karwand	74	144	124
	Malangaon	0	137	106
	Panzara	0	119	86
	Sonwad	0	322	0
	Suki	0	0	0

Indicator V: Irrigation System Performance (Canals) - Page 5 of 7

(Medium Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Suki Pickup Wier	0	101	343
	CADA Jalgaon	**213**	**140**	**110**
Upper Godavari	Adhala	0	103	108
	Alandi	0	110	123
	Bhojapur	0	125	0
	Ghatshil Pargaon	0	310	0
	Mandohol	0	104	56
	Waldevi	0	0	0
	CADA Nashik	**0**	**125**	**106**
Upper Bhima	Chilhewadi	0	0	0
	Visapur	0	354	230
	CADA Pune	**0**	**177**	**230**
Wardha	Amalnalla	0	0	0
	Dham	0	69	0
	Dongargaon (Wardha)	641	112	0
	Pothra1	75	80	0
	CIPC Chandrapur	**101**	**65**	**0**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0	0	0
	Mor	0	47	18
	JIPC Jalgaon	**0**	**24**	**18**
Lower Wainganga	Dongargaon (Chandrapur)	123	114	0
	Jam	0	77	0
	Kar	0	53	47
	NIC Nagpur	**123**	**81**	**47**
Painganga	Dongargaon (Nanded)	0	0	0
	Loni	0	0	0
	Nagzari	0	0	0
	NIC Nanded	**0**	**0**	**0**
Upper Godavari	Manikpunj	0	178	158
	NIPC Dhule	**0**	**178**	**158**
Upper Bhima	Andra Khore			
	Kasarsai	0	0	0
	Nazare	96	362	39
	Shetphal	142	360	70
	Wadiwale	0	0	0
	PIC Pune	**127**	**181**	**58**

Indicator V: Irrigation System Performance (Canals) - Page 6 of 7

(Medium Projects / 2009-10) Unit: Ha/Mcum

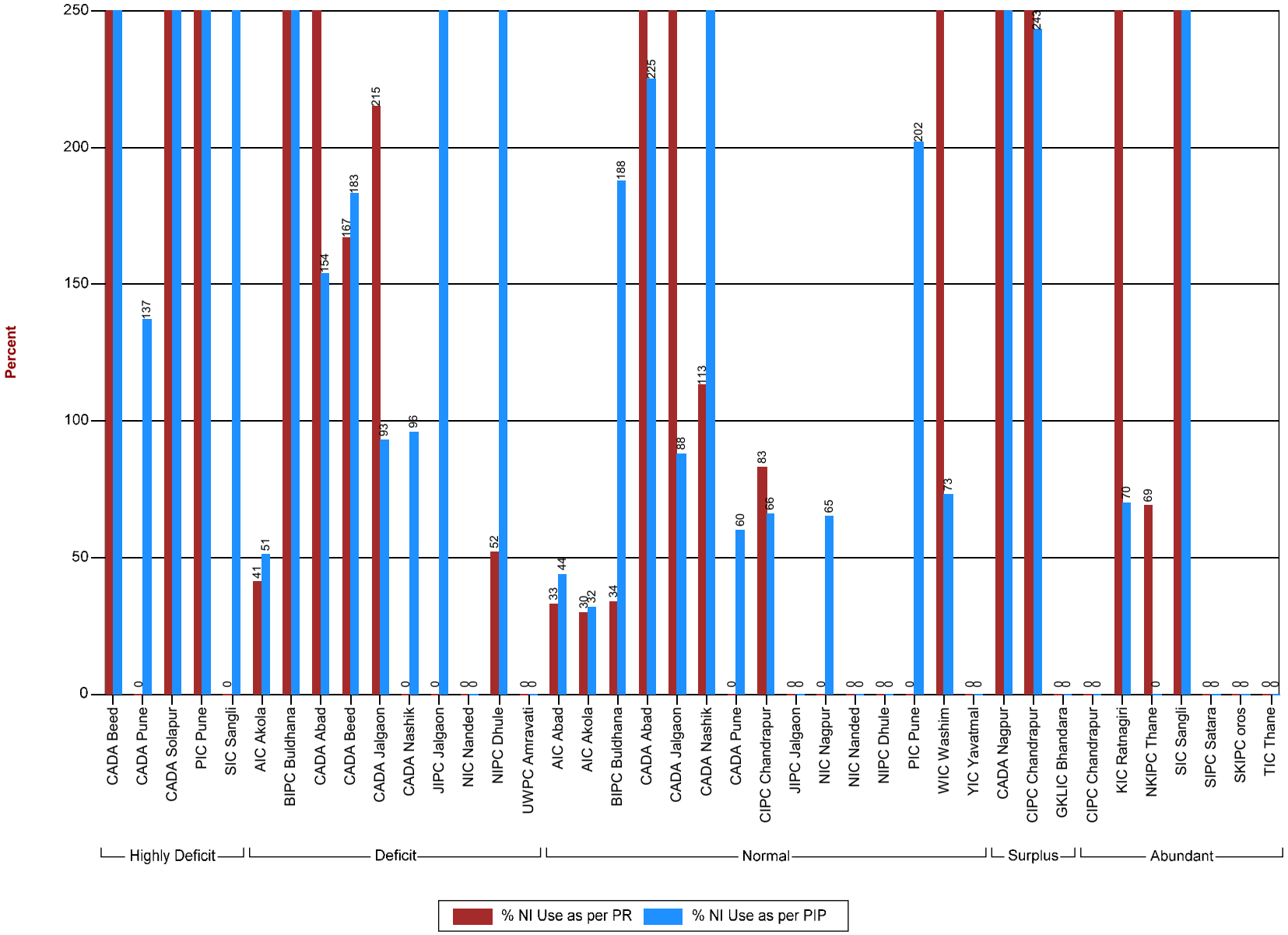
Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Painganga	Ekbhuji	0	330	0
	Sonal	0	0	0
	WIC Washim	**0**	**165**	**0**
Painganga	Adan	0	0	0
	Nawargaon	0	0	0
	YIC Yavatmal	**0**	**0**	**0**
Normal		**164**	**125**	**106**
Surplus				
Middle Wainganga	Bagheda	852	0	0
	Betekar Bothli	325	0	0
	Bodalkasa	384	513	0
	Chandpur	617	0	0
	Chandrabhaga (Nagpur)	0	82	0
	Chorakhmara	452	0	0
	Chulband	255	226	0
	Kanolibara	213	97	370
	Kesarnala	0	147	0
	Khairbanda	654	6500	0
	Khekara Nalla	0	36	0
	Kolar	91	84	7
	Makardhokada-Saiki	0	210	0
	Managadh	266	0	0
	Mordham	0	156	194
	Pandharbodi	151	0	0
	Rengepar	436	769	0
	Sangrampur	356	0	0
	Sorna	417	0	0
	Tekepar LIS	0	0	0
	Umri	0	175	0
	Wunna	0	0	0
	CADA Nagpur	**434**	**409**	**111**
Middle Wainganga	Chandai	465	103	0
	Chargaon	296	0	0
	Labhansarad	0	280	0
	Pakadigundam	0	0	0
	Panchadhara Complex	0	64	143
	CIPC Chandrapur	**361**	**89**	**143**

Indicator V: Irrigation System Performance (Canals) - Page 7 of 7

(Medium Projects / 2009-10) Unit: Ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Middle Wainganga	Katangi	1406	0	0
	GKLIC Bhandara	**1406**	**0**	**0**
Surplus		**435**	**125**	**114**
Abundant				
Lower Wainganga	Ghorazari	313	0	0
	Naleshwar	9407	0	0
	CIPC Chandrapur	**457**	**0**	**0**
Vashishthi	Natuwadi	0	5	0
	KIC Ratnagiri	**0**	**5**	**0**
South Konkan	Gad Nadi	0	0	0
	Hetwane	0	15	0
	NKIPC Thane	**0**	**8**	**0**
Upper Krishna (W)	Chikotra	0	0	0
	Chitri	0	0	0
	Dhamni			
	Ghataprbha	0	0	0
	Jangamhatti	0	0	0
	Kadvi	0	0	0
	Kasari	0	0	0
	Krishna Canal & Khodshi Backwater	229	108	40
	Kumbhi	0	0	0
	Morna (Sangli)	0	0	0
	Patgaon	0	0	0
	Yeoti Masoli	0	0	0
	SIC Sangli	**229**	**10**	**40**
Upper Krishna (W)	Morna			
	SIPC Satara			
South Konkan	Deoghar	0	46	0
	Nardave			
	SKIPC oros	**0**	**46**	**0**
North Konkan	Rajanalla Complex	0	104	0
	Vaitarna	0	0	0
	Wandri	0	29	0
	TIC Thane	**0**	**44**	**0**
Abundant		**389**	**46**	**33**
		420	**115**	**80**

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



(Medium / 2009-10) 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	0.57	0.00	0.00	0	0
	Benitura	1.01	1.77	1.77	57	57
	Chandani	3.12	0.00	1.46	0	214
	Harni	0.00	0.00	0.00	0	0
	Jakapur				0	0
	Kada	0.59	0.00	0.27	0	219
	Kadi	0.00	0.00	0.00	0	0
	Kambli	0.00	0.00	0.00	0	0
	Khandala	0.16	0.00	0.00	0	0
	Khandeshwar	0.16	0.00	0.16	0	100
	Khasapur	2.28	0.00	0.00	0	0
	Kurnoor	3.37	0.10	4.74	3372	71
	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	0.28	0.00	0.00	0	0
	Talwar	0.20	0.00	0.13	0	160
	Turori	1.93	0.00	0.00	0	0
	CADA Beed	**13.670**	**1.867**	**9.002**	**732**	**152**
Upper Krishna (E)						
	Yeralwadi	2.49	0.00	3.21	0	78
	CADA Pune	**2.490**	**0.000**	**3.207**	**0**	**78**
Remaining Bhima+ Man						
	Ashti	21.32	0.00	2.93	0	727
	Bori	0.12	2.10	2.41	6	5
	Buddhihal	0.00	0.00	0.00	0	0
	Ekrukh	3.29	5.13	3.94	64	84
	Hingani (Pangaon)	1.02	1.45	1.68	70	61
	Jawalgaon	0.00	0.00	0.20	0	0
	Mangi	0.41	0.00	0.00	0	0
	CADA Solapur	**26.160**	**8.680**	**11.160**	**301**	**234**
Remaining Bhima+ Man						
	Andhali	1.26	1.36	1.26	93	100
	Khairy	0.03	0.00	0.47	0	6
	Mhaswad	0.00	0.00	6.65	0	0
	Nher	0.00	0.00	1.22	0	0
	Ranand	0.00	0.00	0.00	0	0

(Medium / 2009-10) 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	0.47	0.00	1.50	0	32
	Tisangi	0.21	0.00	5.07	0	4
	PIC Pune	**1.970**	**1.360**	**16.171**	**145**	**12**
Upper Krishna (E)						
	Basappawadi				0	0
	Dodda Nalla	0.00	0.00	0.00	0	0
	Sankh	0.00	0.00	0.00	0	0
	Siddhewadi	1.59	0.00	1.60	0	99
	SIC Sangli	**1.590**	**0.000**	**1.600**	**0**	**99**
Highly Deficit		**45.880**	**11.907**	**41.140**	**385**	**112**
Deficit						
Purna+Dudhana						
	Wakod				0	0
	AIC Abad				**0**	**0**
Purna (Tapi)						
	Dnyanganga	1.30	8.69	4.60	15	28
	Mas	0.10	7.72	0.00	1	0
	Morna (Akola)	2.92	6.34	5.33	46	55
	Nirguna	1.16	0.38	0.38	305	305
	Paldhag	1.58	0.37	1.70	427	93
	Sapan	0.00	0.60	0.00	0	0
	Shahnoor	7.46	0.00	8.00	0	93
	Uma	0.45	1.35	0.42	34	108
	AIC Akola	**14.970**	**25.447**	**20.430**	**59**	**73**
Purna (Tapi)						
	Mun	8.96	5.13	0.50	175	1792
	Torna	8.48	0.12	0.00	7187	0
	Utawali	8.48	0.75	0.00	1131	0
	BIPC Buldhana	**25.920**	**5.994**	**0.500**	**432**	**5185**
Middle Tapi (South)						
	Ajanta Andhari	1.28	0.00	0.00	0	0
	Anjana Palashi	0.79	0.00	0.80	0	99
	Dhamna				0	0
	Gadadgad	0.00	0.00	0.00	0	0
	Galhati	0.00	0.00	0.00	0	0
	Girja	1.46	3.59	0.00	41	0
	Jivrekha				0	0
	Jui	2.08	0.00	1.54	0	135
	Kalyan Girija	0.00	0.00	0.00	0	0
	Karpara	1.04	0.00	2.80	0	37

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Khelna	3.83	0.00	2.57	0	149
	Lahuki	0.63	0.00	0.00	0	0
	Masoli	2.36	0.00	2.80	0	84
	Pir Kalyan	2.98	0.00	0.00	0	0
	Purna Nevpur	0.46	0.00	1.02	0	45
	Sukhana	0.36	0.00	0.63	0	56
	Upper Dudhana	0.40	0.00	0.00	0	0
	CADA Abad	**17.660**	**3.590**	**12.158**	**492**	**145**
Middle Tapi (Satpuda)						
	Tajnapur LIS				0	0
	CADA Ahmednagar				**0**	**0**
Manjra						
	Belpara	0.00	0.00	0.00	0	0
	Bindusara	3.24	0.00	3.50	0	93
	Bodhegaon	0.30	0.00	0.25	0	120
	Borna	0.00	0.00	2.66	0	0
	Devarjan	0.00	2.38	0.00	0	0
	Gharni	0.58	0.00	0.00	0	0
	Kundalika	4.90	0.00	2.00	0	245
	Mahasangvi	0.00	0.00	0.64	0	0
	Masalga				0	0
	Raigavan	2.20	0.28	0.00	779	0
	Renapur	1.67	3.90	0.00	43	0
	Rui	2.31	0.00	1.37	0	169
	Sakol	0.62	0.00	0.00	0	0
	Sangameshwar (Dokewadi)	0.00	0.00	0.00	0	0
	Saraswati	1.00	0.00	1.00	0	100
	Sindphana	1.25	0.00	1.25	0	100
	Tawarja	1.62	3.89	0.00	42	0
	Terna	4.10	4.81	3.01	85	136
	Tiru	2.42	2.38	0.00	102	0
	Waghe Babhulgaon	0.00	0.00	0.00	0	0
	Wan (Beed)	2.66	0.00	2.66	0	100
	Whati	0.31	2.38	0.00	13	0
	CADA Beed	**29.180**	**20.038**	**18.341**	**146**	**159**
Girna						
	Agnavati	0.58	0.58	0.59	100	98
	Bhokarbari	0.31	0.00	0.20	0	157
	Bori (Jalgaon)	10.57	7.08	13.68	149	77

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Burai	2.23	0.00	2.23	0	100
	Hiwara	2.81	0.00	3.00	0	94
	Jamkhedi	0.00	0.00	0.08	0	0
	Kanoli	2.80	1.71	2.80	164	100
	Manyad	1.24	0.00	0.49	0	253
	Rangawali	0.00	0.00	0.00	0	0
	Tondapur	1.80	0.86	0.54	210	333
	CADA Jalgaon	**22.340**	**10.225**	**23.610**	**218**	**95**
Girna						
	Haranbari	3.19	0.00	7.78	0	41
	Kelzar	1.00	0.00	2.54	0	39
	Nagya Sakya	0.00	0.00	0.00	0	0
	CADA Nashik	**4.190**	**0.000**	**10.320**	**0**	**41**
Middle Tapi (Satpuda)						
	Anjani				0	0
	Bahula	3.09	0.00	0.55	0	566
	Kamani Tanda				0	0
	Shelgan Barrage				0	0
	JIPC Jalgaon	**3.090**	**0.000**	**0.546**	**0**	**566**
Manjra						
	Karadkhed	2.67	0.00	0.00	0	0
	Kudala	0.67	0.00	0.00	0	0
	Kundrala	1.05	0.00	0.00	0	0
	Mahalingi				0	0
	Pethwadaj	0.24	0.00	0.00	0	0
	NIC Nanded	**4.630**	**0.000**	**0.000**	**0**	**0**
Middle Tapi (Satpuda)						
	Amarawati				0	0
	Prakasha Barrage	0.00	9.01	0.00	0	0
	Sarangkheda Barrage				0	0
	Shivan	1.90	4.60	1.90	41	100
	Sulwade Barrage				0	0
	NIPC Dhule	**1.900**	**13.610**	**1.900**	**14**	**100**
Purna (Tapi)						
	Chandrabhaga (Amravati)	0.00	9.62	0.00	0	0
	Purna (Achalpur)	0.97	5.73	0.00	17	0
	UWPC Amravati	**0.970**	**15.347**	**0.000**	**6**	**0**
Deficit		**124.840**	**94.251**	**87.805**	**132**	**142**

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Normal						
Upper Godavari						
	Shivna Takali	0.02	3.79	2.84	1	1
	AIC Abad	**0.020**	**3.792**	**2.844**	**1**	**1**
Painganga						
	Borgaon	0.41	0.35	0.00	116	0
	Goki	1.76	3.65	1.76	48	100
	Koradi	2.29	10.68	0.00	21	0
	Lower Pus	0.10	0.00	2.91	0	3
	Saikheda	3.69	0.65	4.00	567	92
	Waghadi	4.07	0.00	5.37	0	76
	AIC Akola	**12.320**	**15.332**	**14.041**	**80**	**88**
Painganga						
	Pen Takli	4.32	15.58	2.82	28	153
	BIPC Buldhana	**4.320**	**15.580**	**2.824**	**28**	**153**
Upper Godavari						
	Ambadi	1.28	0.00	1.80	0	71
	Bor Dahegaon				0	0
	Dheku	0.04	0.30	0.24	15	18
	Kolhi	0.58	0.00	0.58	0	100
	Narangi	0.02	0.00	0.00	0	0
	Tembhapuri	1.58	0.00	0.00	0	0
	CADA Abad	**3.510**	**0.300**	**2.628**	**1170**	**134**
Middle Tapi (Satpuda)						
	Abhora	0.00	0.00	0.00	0	0
	Aner	0.00	0.00	0.00	0	0
	Karwand	1.09	0.00	1.09	0	100
	Malangaon	0.24	0.00	0.24	0	100
	Panzara	0.31	0.71	0.31	44	100
	Sonwad	2.53	0.00	2.53	0	100
	Suki	1.15	0.00	1.25	0	92
	Suki Pickup Wier	0.71	0.00	1.25	0	57
	CADA Jalgaon	**6.030**	**0.710**	**6.667**	**849**	**90**
Upper Godavari						
	Adhala	1.34	0.00	1.14	0	118
	Alandi	0.00	0.00	0.00	0	0
	Bhojapur	1.23	0.00	0.00	0	0
	Ghatshil Pargaon	0.07	0.00	0.07	0	100
	Mandohol	1.15	0.00	1.14	0	101
	Waldevi	0.51	12.17	0.00	4	0

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Upper Bhima	**CADA Nashik**	**4.310**	**12.170**	**2.350**	**35**	**183**
	Chilhewadi	0.00	0.00	0.00	0	0
	Visapur	0.43	0.00	1.91	0	22
	CADA Pune	**0.430**	**0.000**	**1.912**	**0**	**22**
Wardha	Amalnalla	2.19	3.93	3.93	56	56
	Dham	8.63	8.77	12.00	98	72
	Dongargaon (Wardha)	0.00	0.00	0.00	0	0
	Pothra1	8.02	0.00	0.00	0	0
	CIPC Chandrapur	**18.840**	**12.700**	**15.930**	**148**	**118**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0.00	1.56	0.00	0	0
	Gul				0	0
	Mor	0.00	0.00	0.00	0	0
	JIPC Jalgaon	**0.000**	**1.560**	**0.000**	**0**	**0**
Lower Wainganga	Dongargaon (Chandrapur)	0.00	0.00	0.00	0	0
	Jam	3.36	0.00	3.12	0	108
	Kar	1.30	0.00	1.40	0	93
	NIC Nagpur	**4.650**	**0.000**	**4.520**	**0**	**103**
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	0.00	0	0
	NIC Nanded	**1.080**	**0.000**	**0.000**	**0**	**0**
Panzra	Akkalpada(Lower Panzra)				0	0
	Manikpunj	0.03	0.00	0.00	0	0
	Wadi Shewadi				0	0
	NIPC Dhule	**0.030**	**0.000**	**0.000**	**0**	**0**
Upper Bhima	Andra Khore				0	0
	Kasarsai	0.00	0.00	0.20	0	1
	Nazare	4.45	0.00	3.74	0	119
	Shetphal	0.91	0.00	0.45	0	200
	Wadiwale	3.74	0.00	3.80	0	98
	PIC Pune	**9.100**	**0.000**	**8.193**	**0**	**111**
Upper Bhima						

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Kalmodi				0	0
	PIPC Pune				**0**	**0**
Painganga						
	Ekbhuji	2.06	0.76	3.43	271	60
	Sonal	0.37	0.00	1.12	0	33
	WIC Washim	**2.430**	**0.760**	**4.549**	**320**	**53**
Painganga						
	Adan	4.13	11.76	0.00	35	0
	Nawargaon	1.96	2.71	2.71	72	72
	YIC Yavatmal	**6.090**	**14.473**	**2.713**	**42**	**224**
Normal		**73.160**	**77.377**	**69.171**	**95**	**106**
Surplus						
Middle Wainganga						
	Bagheda	0.00	0.00	0.00	0	0
	Betekar Bothli	0.00	0.00	0.00	0	0
	Bodalkasa	0.12	0.00	0.12	0	100
	Chandpur	0.00	0.00	0.00	0	0
	Chandrabhaga (Nagpur)	0.12	0.00	0.17	0	73
	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	1.54	0.00	0.30	0	519
	Khairbanda	0.00	0.00	0.00	0	0
	Khekara Nalla	0.00	0.00	0.00	0	0
	Kolar	1.15	1.21	1.21	95	95
	Makardhokada-Saiki	0.95	0.00	2.03	0	47
	Managadh	0.00	0.00	0.00	0	0
	Mordham	0.08	0.00	0.06	0	127
	Pandharbodi	1.53	1.70	1.70	90	90
	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	0.00	0.00	0.00	0	0
	Wunna	8.57	11.55	0.00	74	0
	CADA Nagpur	**14.050**	**14.460**	**5.587**	**97**	**251**
Middle Wainganga						
	Chandai	0.00	0.00	0.00	0	0
	Chargaon	10.30	1.27	1.27	813	813
	Labhansarad	0.07	0.00	0.20	0	36

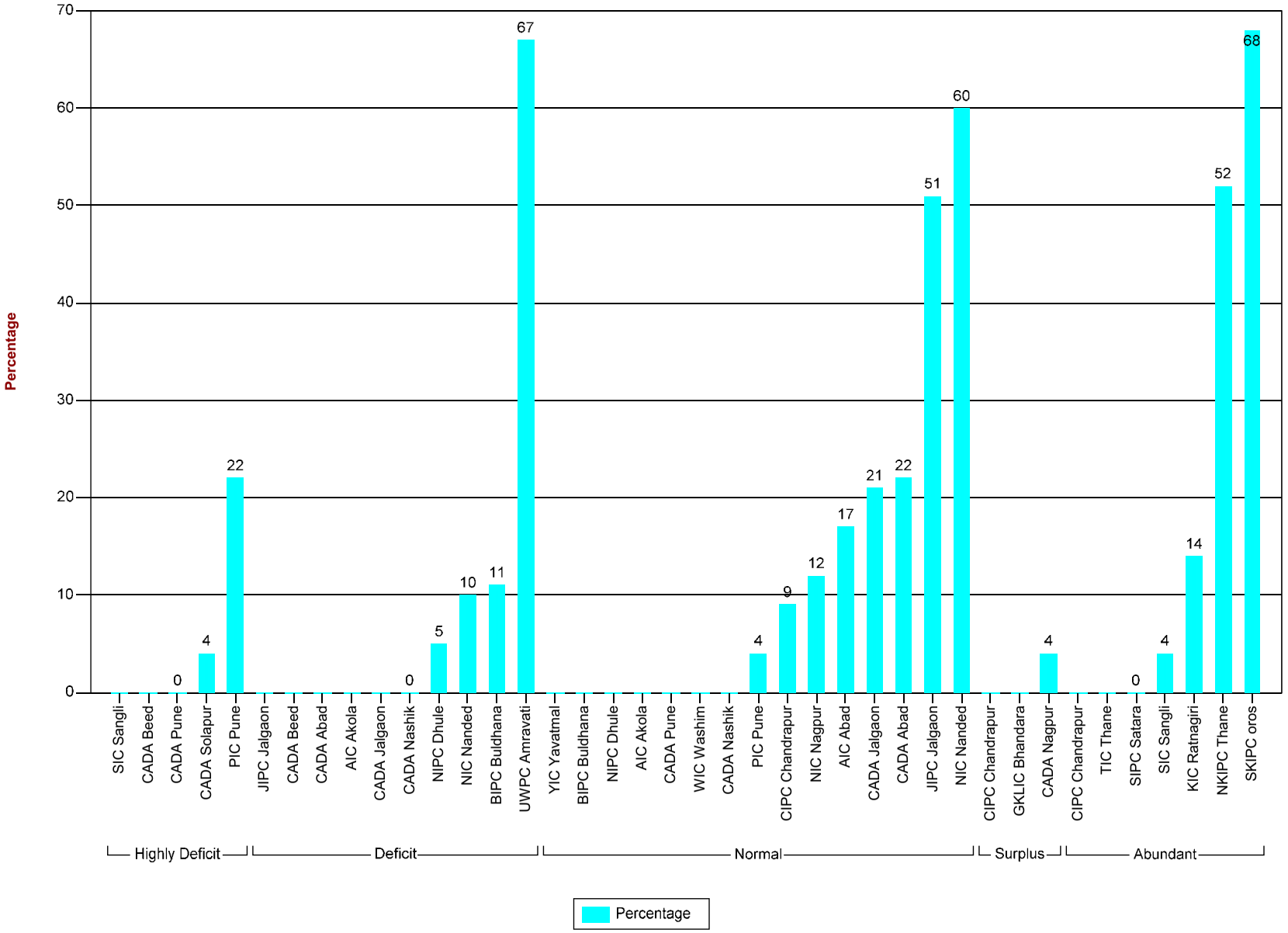
(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Pakadigundam	1.62	3.03	3.03	53	53
	Panchadhara Complex	0.00	0.00	0.00	0	0
	CIPC Chandrapur	**11.990**	**4.296**	**4.496**	**279**	**267**
Middle Wainganga						
	Katangi	0.89	0.00	0.89	0	100
	GKLIC Bhandara	**0.890**	**0.000**	**0.890**	**0**	**100**
Surplus		**26.930**	**18.756**	**10.973**	**144**	**245**
Abundant						
Upper Krishna (W)						
	Uttarmand				0	0
	CADA Pune				**0**	**0**
Lower Wainganga						
	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**
South Konkan						
	Arjuna				0	0
	Natuwadi	0.35	0.04	0.50	859	70
	KIC Ratnagiri	**0.350**	**0.041**	**0.500**	**859**	**70**
South Konkan						
	Gad Nadi	0.00	14.67	0.00	0	0
	Hetwane	37.33	39.00	0.00	96	0
	NKIPC Thane	**37.330**	**53.669**	**0.000**	**70**	**0**
Upper Krishna (W)						
	Chikotra	0.42	7.70	0.45	5	92
	Chitri	3.11	0.00	3.20	0	97
	Dhamni				0	0
	Ghataprbha	0.25	0.00	0.25	0	100
	Hiranyakeshi				0	0
	Jambre				0	0
	Jangamhatti	0.99	0.00	1.05	0	94
	Kadvi	0.39	0.00	0.39	0	101
	Kasari	0.53	0.00	0.55	0	97
	Krishna Canal & Khodshi Backwater	1.02	0.00	1.07	0	96
	Kumbhi	0.00	0.00	0.00	0	0
	Morna (Sangli)	8.36	0.00	0.46	0	1806
	Patgaon	2.10	0.00	2.15	0	98
	Yeoti Masoli	1.63	0.00	1.63	0	100
	SIC Sangli	**18.810**	**7.700**	**11.203**	**244**	**168**
Upper Krishna (W)						

(Medium / 2009-10) Unit: MCum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
	Morna				0	0
	Nagewadi				0	0
	Wang				0	0
	SIPC Satara				**0**	**0**
South Konkan						
	Deoghar	0.00	9.89	0.00	0	0
	Nardave				0	0
	SKIPC oros	**0.000**	**9.885**	**0.000**	**0**	**0**
North Konkan						
	Rajanalla Complex	0.00	0.00	0.00	0	0
	Vaitarna	1.43	138.33	138.33	1	1
	Wandri	0.00	0.00	0.00	0	0
	TIC Thane	**1.430**	**138.330**	**138.330**	**1**	**1**
Abundant		**57.920**	**209.625**	**150.033**	**28**	**39**
Medium		**328.720**	**411.916**	**359.122**	**80**	**92**

Indicator VII : Medium Projects - Percentage of Unutilised Water to Live Storage



Indicator VII: Percentage of Unutilized water to Live Storage -

(Medium / 2009-10) 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	1.68	0.00	1.16	0.52	4.97	10.46
	Benitura	0.00	0.00	0.00	0.00	6.77	0.00
	Chandani	1.37	0.00	1.89	0.00	17.53	0.00
	Harni	0.00	0.00	0.48	0.00	2.49	0.00
	Kada	0.00	0.00	0.49	0.00	8.56	0.00
	Kadi	0.00	0.00	0.33	0.00	3.14	0.00
	Kambli	0.00	0.00	0.53	0.00	1.37	0.00
	Khandala	0.00	0.00	0.00	0.00	0.51	0.00
	Khandeshwar	1.56	0.00	0.00	1.56	8.58	18.18
	Khasapur	1.97	0.00	0.99	0.98	13.04	7.52
	Kurnoor	2.51	0.00	0.14	2.37	26.51	8.95
	Mehkari	0.00	0.00	0.00	0.00	8.60	0.00
	Ramganga	1.23	0.00	0.33	0.90	5.34	16.85
	Ruti	0.00	0.00	0.00	0.00	10.28	0.00
	Sakat	1.88	0.00	0.00	1.88	9.09	20.68
	Talwar	0.00	0.00	0.23	0.00	2.01	0.00
	Turori	0.00	0.00	0.14	0.00	0.09	0.00
	CADA Beed	**12.20**	**0.00**	**6.70**	**8.21**	**128.87**	**6.37**
Upper Krishna (E)	Yeralwadi	5.58	0.00	5.45	0.13	19.60	0.66
	CADA Pune	**5.58**	**0.00**	**5.45**	**0.13**	**19.60**	**0.66**
Remaining Bhima+ Man	Ashti	9.01	0.00	8.75	0.26	16.01	1.65
	Bori	0.00	0.00	1.47	0.00	13.85	0.00
	Buddhihal	0.00	0.00	0.01	0.00	0.00	0.00
	Ekrukh	0.00	0.00	0.00	0.00	9.97	0.00
	Hingani (Pangaon)	6.44	0.00	0.64	5.80	25.58	22.68
	Jawalgaon	1.55	0.00	1.35	0.20	19.18	1.02
	Mangi	7.78	0.00	2.94	4.84	27.91	17.34
	CADA Solapur	**24.77**	**0.00**	**15.15**	**11.10**	**112.49**	**9.87**
Remaining Bhima+ Man	Andhali	3.08	0.00	0.43	2.65	7.43	35.72
	Khairy	6.49	0.00	1.21	5.27	13.74	38.38
	Mhaswad	13.16	0.00	0.86	12.30	46.12	26.67
	Nher	8.04	0.00	5.99	2.05	11.79	17.39
	Ranand	3.45	0.00	0.47	2.98	6.42	46.36
	Sina	10.97	0.00	2.00	8.97	52.30	17.14
	Tisangi	2.83	0.00	0.32	2.51	24.46	10.27
	PIC Pune	**48.02**	**0.00**	**11.28**	**36.73**	**162.26**	**22.64**

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Storage15Oct	Percent Unutilise
Remaining Bhima+ Man	Dodda Nalla	0.62	2.33	0.00	0.00	0.00	0.00
	Sankh	3.76	8.81	0.00	0.00	14.87	0.00
	Siddhewadi	1.43	3.89	1.41	0.00	6.12	0.00
	SIC Sangli	**5.80**	**15.03**	**1.41**	**0.00**	**20.99**	**0.00**
Highly Deficit		**96.37**	**15.03**	**39.99**	**56.18**	**444.21**	**12.65**
Deficit							
Purna (Tapi)	Dnyanganga	5.18	6.40	6.27	0.00	9.34	0.00
	Mas	6.03	0.00	3.68	2.35	6.03	38.97
	Morna (Akola)	5.00	0.00	0.30	4.70	9.84	47.76
	Nirguna	4.61	0.00	2.79	1.82	9.89	18.40
	Paldhag	2.29	0.00	0.68	1.61	4.83	33.33
	Sapan	13.25	6.98	2.09	4.18	16.11	25.95
	Shahnoor	14.17	25.38	0.51	0.00	36.25	0.00
	Uma	0.00	0.00	0.00	0.00	0.00	0.00
	AIC Akola	**50.53**	**38.76**	**16.32**	**14.66**	**92.29**	**15.88**
Purna (Tapi)	Mun	8.70	0.00	7.94	0.76	15.55	4.88
	Torna	13.77	0.00	13.95	0.00	6.91	0.00
	Utawali	13.33	0.00	9.19	4.14	19.79	20.92
	BIPC Buldhana	**35.80**	**0.00**	**31.08**	**4.90**	**42.25**	**11.60**
Middle Tapi (South)	Ajanta Andhari	0.49	0.00	0.40	0.10	1.02	9.34
	Anjana Palashi	0.90	0.00	0.00	0.90	5.65	15.93
	Gadadgad	0.30	0.00	0.13	0.17	4.64	3.77
	Galhati	0.64	0.00	0.00	0.63	11.84	5.36
	Girja	0.00	0.00	0.00	0.00	1.28	0.00
	Jui	0.06	0.00	0.17	0.00	1.38	0.00
	Kalyan Girija	0.00	0.00	0.07	0.00	3.55	0.00
	Karpara	0.21	0.00	0.10	0.12	24.33	0.48
	Khelna	2.26	0.00	0.93	1.33	11.07	12.01
	Lahuki	0.00	0.00	0.21	0.00	1.10	0.00
	Masoli	0.00	0.00	1.36	0.00	0.42	0.00
	Pir Kalyan	0.00	0.00	0.00	0.00	0.00	0.00
	Purna Nevpur	0.00	0.00	0.00	0.00	9.34	0.00
	Sukhana	0.00	0.00	0.13	0.00	5.81	0.00
	Upper Dudhana	0.00	0.00	0.50	0.00	0.84	0.00
	CADA Abad	**4.86**	**0.00**	**3.99**	**3.25**	**82.27**	**3.95**
Manjra	Belpara	0.00	0.00	0.00	0.00	1.52	0.00
	Bindusara	0.00	0.00	0.00	0.00	7.11	0.00
	Bodhegaon	0.00	0.00	0.19	0.00	2.60	0.00

Indicator VII: Percentage of Unutilized water to Live Storage - Page 3 of 8

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Borna	0.00	0.00	0.00	0.00	5.66	0.00
	Devarjan	0.00	0.00	0.02	0.00	0.00	0.00
	Gharni	0.00	0.00	0.00	0.00	0.00	0.00
	Kundalika	2.36	0.00	0.00	2.36	37.69	6.26
	Mahasangvi	0.00	0.00	0.00	0.00	5.88	0.00
	Raigavan	0.00	0.00	0.65	0.00	1.58	0.00
	Renapur	0.00	0.00	0.00	0.00	10.67	0.00
	Rui	0.00	0.00	1.37	0.00	1.90	0.00
	Sakol	0.00	0.00	0.08	0.00	0.00	0.00
	Sangameshwar (Dokewadi)	1.77	0.00	1.81	0.00	15.04	0.00
	Saraswati	0.00	0.00	0.25	0.00	5.34	0.00
	Sindphana	0.00	0.00	0.00	0.00	4.42	0.00
	Tawarja	0.00	0.00	0.00	0.00	1.38	0.00
	Terna	0.23	0.00	0.38	0.00	8.25	0.00
	Tiru	0.00	0.00	0.48	0.00	0.00	0.00
	Waghe Babhulgaon	0.00	0.00	0.59	0.00	3.74	0.00
	Wan (Beed)	2.25	0.00	0.00	2.25	16.44	13.68
	Whati	0.00	0.00	0.00	0.00	0.00	0.00
	CADA Beed	**6.61**	**0.00**	**5.81**	**4.61**	**129.20**	**3.57**
Girna	Agnavati	0.00	0.00	0.00	0.00	2.76	0.00
	Bhokarbari	0.27	0.00	0.00	0.27	0.28	96.27
	Bori (Jalgaon)	0.00	0.00	0.00	0.00	13.24	0.00
	Burai	0.00	0.00	1.61	0.00	14.21	0.00
	Hiwara	0.00	0.00	0.00	0.00	9.60	0.00
	Jamkhedi	0.99	0.00	0.00	0.99	12.34	8.02
	Kanoli	4.70	0.00	5.28	0.00	8.45	0.00
	Manyad	6.10	2.15	4.68	0.00	40.42	0.00
	Rangawali	0.91	0.00	0.19	0.72	11.83	6.09
	Tondapur	0.00	0.00	0.27	0.00	0.63	0.00
	CADA Jalgaon	**12.97**	**2.15**	**12.03**	**1.98**	**113.76**	**1.74**
Girna	Haranbari	5.11	0.00	4.98	0.13	29.26	0.44
	Kelzar	1.18	0.00	0.87	0.31	12.11	2.56
	Nagya Sakya	0.00	0.00	0.40	0.00	1.27	0.00
	CADA Nashik	**6.29**	**0.00**	**6.25**	**0.44**	**42.64**	**1.03**
Middle Tapi (Satpuda)	Bahula	0.00	0.00	0.00	0.00	1.60	0.00
	JIPC Jalgaon	**0.00**	**0.00**	**0.00**	**0.00**	**1.60**	**0.00**

Indicator VII: Percentage of Unutilized water to Live Storage - Page 4 of 8

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Storage15Oct	Percent Unutilise
Manjra	Karadkhed	0.59	0.00	0.00	0.59	4.53	13.02
	Kudala	0.07	0.00	0.26	0.00	1.42	0.00
	Kundrala	0.83	0.00	0.18	0.65	2.50	26.00
	Pethwadaj	0.00	0.00	0.00	0.00	0.81	0.00
	NIC Nanded	**1.49**	**0.00**	**0.44**	**1.24**	**9.26**	**13.39**
Middle Tapi (South)	Prakasha Barrage	0.00	0.00	0.00	0.00	61.93	0.00
	Shivan	5.81	0.00	0.32	5.49	12.17	45.10
	NIPC Dhule	**5.81**	**0.00**	**0.32**	**5.49**	**74.10**	**7.40**
Purna (Tapi)	Chandrabhaga (Amravati)	28.33	0.00	0.00	28.33	36.45	77.71
	Purna (Achalpur)	17.64	0.00	1.67	15.97	28.98	55.10
	UWPC Amravati	**45.97**	**0.00**	**1.67**	**44.29**	**65.43**	**67.69**
Deficit		**170.32**	**40.91**	**77.92**	**80.86**	**652.80**	**12.39**
Normal							
Upper Godavari	Shivna Takali	3.37	0.00	0.00	3.37	19.10	17.63
	AIC Abad	**3.37**	**0.00**	**0.00**	**3.37**	**19.10**	**17.63**
Painganga	Borgaon	0.34	0.00	0.22	0.12	1.39	8.63
	Goki	5.28	0.00	0.52	4.76	16.39	29.01
	Koradi	1.22	0.00	3.82	0.00	0.95	0.00
	Lower Pus	0.00	8.50	0.01	0.00	8.11	0.00
	Saikheda	8.79	0.00	8.79	0.00	7.37	0.07
	Waghadi	4.13	0.00	1.37	2.76	10.68	25.84
	AIC Akola	**19.76**	**8.50**	**14.73**	**7.64**	**44.89**	**17.02**
Painganga	Pen Takli	0.00	7.38	7.47	0.00	9.45	0.00
	BIPC Buldhana	**0.00**	**7.38**	**7.47**	**0.00**	**9.45**	**0.00**
Upper Godavari	Ambadi	2.19	0.00	0.51	1.68	7.06	23.73
	Dheku	0.00	0.00	0.00	0.00	9.38	0.00
	Kolhi	0.69	0.00	0.25	0.44	0.74	58.75
	Narangi	0.00	0.00	0.00	0.00	0.00	0.00
	Tembhapuri	6.47	0.00	0.00	6.47	14.17	45.66
	CADA Abad	**9.35**	**0.00**	**0.77**	**8.58**	**31.36**	**27.37**
Middle Tapi (Satpuda)	Abhora	4.17	0.00	1.71	2.46	6.02	40.94
	Aner	14.96	0.00	3.62	11.34	59.20	19.16
	Karwand	3.36	0.00	0.82	2.54	20.73	12.25
	Malangaon	5.42	0.00	5.21	0.21	11.33	1.85
	Panzara	0.51	0.00	0.00	0.51	23.79	2.14
	Sonwad	1.33	0.00	1.41	0.00	5.99	0.00
	Suki	21.53	0.00	0.00	21.53	39.85	54.03

Indicator VII: Percentage of Unutilized water to Live Storage - Page 5 of 8

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Suki Pickup Wier	0.00	0.00	2.38	0.00	0.00	0.00
	CADA Jalgaon	**51.28**	**0.00**	**15.14**	**38.60**	**166.91**	**23.12**
Upper Godavari	Adhala	1.54	0.00	1.05	0.49	10.98	4.44
	Alandi	1.93	0.00	0.00	1.93	20.84	9.24
	Bhojapur	0.00	0.00	0.53	0.00	2.38	0.00
	Ghatshil Pargaon	0.00	0.00	0.00	0.00	1.19	0.00
	Mandohol	1.43	0.00	0.71	0.72	6.39	11.27
	Waldevi	5.56	0.00	3.91	1.65	28.45	5.80
	CADA Nashik	**10.46**	**0.00**	**6.21**	**4.78**	**70.23**	**6.81**
Upper Bhima	Chilhewadi	0.14	0.00	0.54	0.00	17.45	0.00
	Visapur	0.85	0.00	7.18	0.00	5.81	0.00
	CADA Pune	**0.99**	**0.00**	**7.72**	**0.00**	**23.26**	**0.00**
Wardha	Amalnalla	3.87	0.00	1.61	2.26	6.07	37.21
	Dham	7.22	0.00	0.63	6.59	60.77	10.84
	Dongargaon (Wardha)	0.94	0.00	0.31	0.63	4.33	14.53
	Pothra1	2.13	0.00	2.18	0.00	33.22	0.00
	CIPC	**14.16**	**0.00**	**4.73**	**9.48**	**104.39**	**9.08**
	Chandrapur						
Middle Tapi (Satpuda)	Bhokar (Mangrul)	5.19	0.00	0.59	4.60	6.41	71.83
	Mor	3.83	0.00	1.05	2.78	7.91	35.12
	JIPC Jalgaon	**9.02**	**0.00**	**1.64**	**7.38**	**14.32**	**51.54**
Lower Wainganga	Dongargaon (Chandrapur)	0.00	0.00	0.00	0.00	2.69	0.00
	Jam	4.57	0.00	0.66	3.92	24.18	16.20
	Kar	2.79	0.00	0.24	2.55	21.06	12.12
	NIC Nagpur	**7.37**	**0.00**	**0.90**	**6.47**	**47.93**	**13.50**
Painganga	Dongargaon (Nanded)	4.39	0.00	0.19	4.20	6.17	68.07
	Loni	3.20	0.00	0.08	3.12	4.55	68.71
	Nagzari	2.31	0.00	0.27	2.04	4.82	42.35
	NIC Nanded	**9.91**	**0.00**	**0.54**	**9.37**	**15.54**	**60.27**
Upper Godavari	Manikpunj	0.00	0.00	2.60	0.00	4.61	0.00
	NIPC Dhule	**0.00**	**0.00**	**2.60**	**0.00**	**4.61**	**0.00**
Upper Bhima	Andra Khore	0.00	0.00	0.00	0.00	0.00	0.00
	Kasarsai	4.46	1.32	1.83	1.31	16.06	8.16
	Nazare	2.64	0.00	1.29	1.36	16.63	8.16
	Shetphal	3.44	0.00	1.36	2.09	18.06	11.54
	Wadiwale	0.00	0.00	0.00	0.00	30.39	0.00

Indicator VII: Percentage of Unutilized water to Live Storage -

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Storage15Oct	Percent Unutilise
	PIC Pune	**10.55**	**1.32**	**4.48**	**4.75**	**81.14**	**5.86**
Painganga	Ekbhuji	0.64	1.08	0.17	0.00	5.24	0.00
	Sonal	0.40	0.00	0.00	0.40	1.11	36.04
	WIC Washim	**1.04**	**1.08**	**0.17**	**0.40**	**6.35**	**6.30**
Painganga	Adan	0.00	0.00	1.46	0.00	2.52	0.00
	Nawargaon	0.00	0.00	0.30	0.00	2.07	0.00
	YIC Yavatmal	**0.00**	**0.00**	**1.76**	**0.00**	**4.59**	**0.00**
Normal		**147.25**	**18.28**	**68.85**	**100.82**	**644.06**	**15.65**
Surplus							
Middle Wainganga	Bagheda	0.00	0.00	0.00	0.00	0.43	0.00
	Betekar Bothli	0.00	0.00	0.00	0.00	0.00	0.00
	Bodalkasa	0.23	0.00	0.24	0.00	1.99	0.00
	Chandpur	0.00	0.00	0.02	0.00	0.68	0.00
	Chandrabhaga (Nagpur)	1.10	0.62	0.31	0.17	6.42	2.61
	Chorakhmara	0.46	0.00	0.02	0.45	1.11	40.56
	Chulband	2.14	0.00	2.13	0.00	3.57	0.11
	Kanolibara	4.61	1.73	0.04	2.84	20.33	13.98
	Kesarnala	0.29	0.37	0.33	0.00	3.16	0.00
	Khairbanda	0.96	0.00	0.10	0.86	1.95	44.08
	Khekara Nalla	4.06	2.32	1.57	0.17	23.18	0.73
	Kolar	8.01	4.06	0.76	3.19	31.32	10.17
	Makardhokada-Saiki	0.61	0.00	0.00	0.61	13.50	4.48
	Managadh	0.00	0.00	0.00	0.00	0.35	0.00
	Mordham	0.00	0.49	0.03	0.00	3.50	0.00
	Pandharbodi	0.28	0.38	0.02	0.00	3.57	0.00
	Rengepar	0.07	0.00	0.02	0.05	1.34	3.66
	Sangrampur	0.52	0.00	0.52	0.00	0.27	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	6.50	0.63	6.52	0.00	3.25	0.00
	Wunna	4.23	2.20	0.48	1.54	15.09	10.22
	CADA Nagpur	**34.06**	**12.81**	**13.11**	**9.87**	**135.02**	**7.31**
Middle Wainganga	Chandai	0.00	2.51	0.35	0.00	5.33	0.00
	Chargaon	0.32	0.00	0.00	0.32	16.04	1.97
	Labhansarad	0.92	0.00	0.04	0.89	3.96	22.38
	Pakadigundam	0.68	0.00	0.20	0.48	2.14	22.57

Indicator VII: Percentage of Unutilized water to Live Storage -

(Medium / 2009-10) Unit: MCum

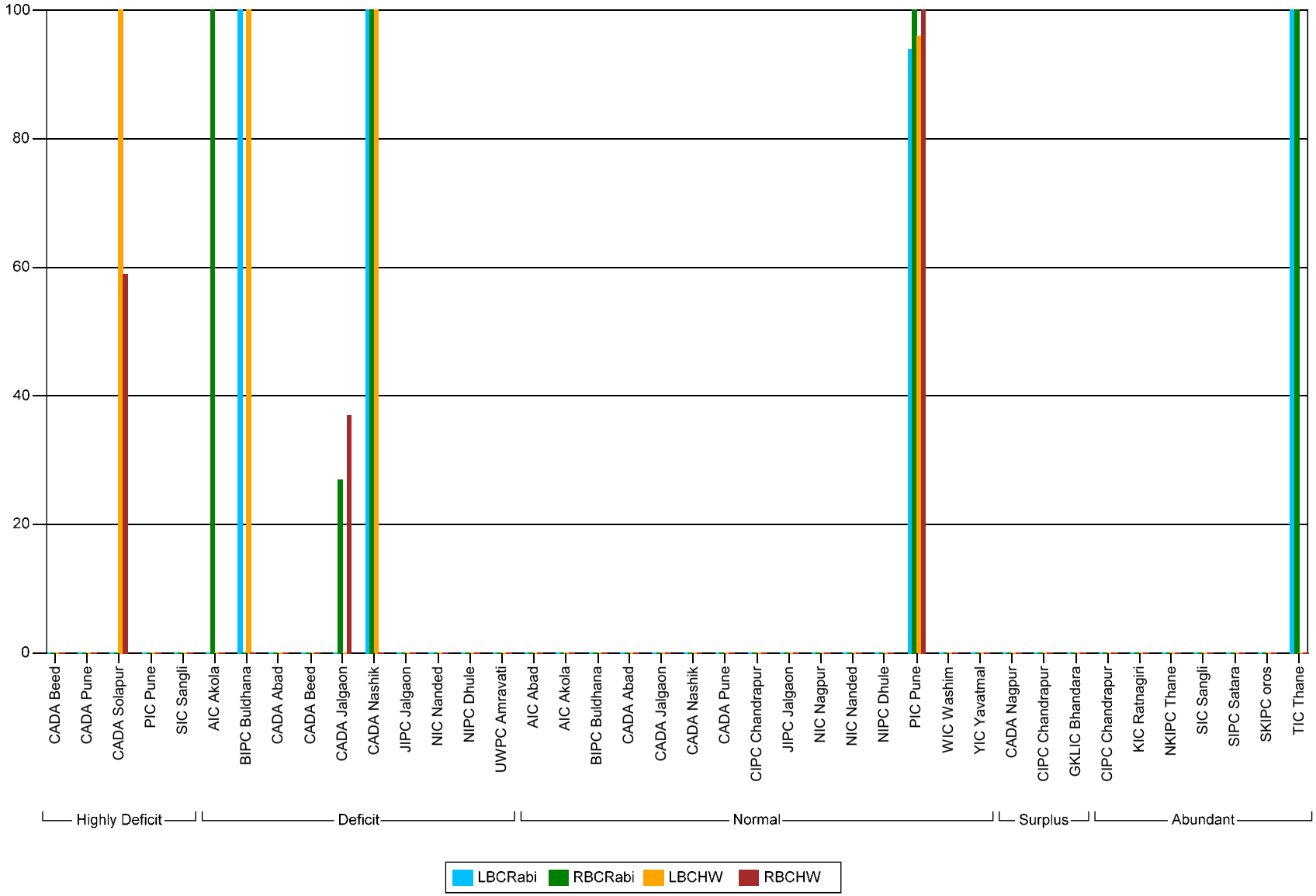
Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Storage15Oct	Percent Unutilise
	Panchadhara Complex	0.78	0.00	0.64	0.24	9.56	1.46
	CIPC	**2.69**	**2.51**	**1.22**	**1.93**	**37.03**	**5.20**
	Chandrapur						
Middle Wainganga	Katangi	0.00	0.00	0.00	0.00	5.59	0.00
	GKLIC	**0.00**	**0.00**	**0.00**	**0.00**	**5.59**	**0.00**
	Bhandara						
Surplus		**36.75**	**15.32**	**14.32**	**11.80**	**177.64**	**6.64**
Abundant							
Lower Wainganga	Ghorazari	3.79	0.00	4.29	0.00	3.49	0.00
	Naleshwar	0.00	0.70	0.64	0.00	1.08	0.00
	CIPC	**3.79**	**0.70**	**4.93**	**0.00**	**4.57**	**0.00**
	Chandrapur						
Vashishthi	Natuwadi	6.34	0.00	2.49	3.85	26.86	14.34
	KIC Ratnagiri	**6.34**	**0.00**	**2.49**	**3.85**	**26.86**	**14.34**
South Konkan	Gad Nadi	1.43	0.00	1.65	0.00	14.70	0.00
	Hetwane	81.96	0.00	4.30	77.66	132.36	58.67
	NKIPC Thane	**83.39**	**0.00**	**5.94**	**77.66**	**147.06**	**52.81**
Upper Krishna (W)	Chikotra	9.38	0.00	2.98	6.40	32.89	19.46
	Chitri	17.62	0.00	8.82	8.80	53.41	16.48
	Dhamni	0.00	0.00	0.00	0.00	0.00	0.00
	Ghataprbha	38.64	0.00	23.07	15.57	38.64	40.30
	Jangamhatti	5.28	0.00	9.47	0.00	34.83	0.00
	Kadvi	18.59	0.00	0.00	18.59	70.56	26.35
	Kasari	34.72	35.32	7.23	0.00	77.97	0.00
	Krishna Canal & Khodshi Backwater	7.74	7.74	36.61	0.00	8.35	0.00
	Kumbhi	14.73	15.11	0.00	0.00	76.04	0.00
	Morna (Sangli)	0.00	4.31	0.00	0.00	16.64	0.00
	Patgaon	53.28	0.00	26.60	26.68	105.99	25.17
	Yeoti Masoli	2.70	1.43	1.68	0.00	6.88	0.00
	SIC Sangli	**202.68**	**63.91**	**116.46**	**76.04**	**522.19**	**14.56**
Upper Krishna (W)	Morna	0.00	0.00	0.00	0.00	0.00	0.00
	SIPC Satara	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
South Konkan	Deoghar	44.08	0.00	0.51	43.57	63.89	68.20
	Nardave	0.00	0.00	0.00	0.00	0.00	0.00
	SKIPC oros	**44.08**	**0.00**	**0.51**	**43.57**	**63.89**	**68.20**
North Konkan	Rajanalla Complex	43.10	0.00	8.04	35.06	212.07	16.53
	Vaitarna	69.09	103.07	7.21	0.00	232.20	0.00

Indicator VII: Percentage of Unutilized water to Live Storage -

(Medium / 2009-10) Unit: MCum

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Wandri	7.69	1.27	5.55	0.87	35.18	2.47
	TIC Thane	**119.88**	**104.34**	**20.80**	**35.93**	**479.45**	**7.50**
Abundant		**460.16**	**168.95**	**151.13**	**237.06**	**1244.02**	**19.06**
Medium		**910.85**	**258.49**	**352.21**	**486.71**	**3162.73**	**15.39**

Indicator VIII : Conveyance Efficiency of Main Canals - Medium



Indicator VIII: Conveyance Efficiency of Main Canals - Page 1 of 7

(Medium Projects / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Highly Deficit					
Sina	Banganga	0.00	0.00	0.00	0.00
	Benitura	0.00	0.00	0.00	0.00
	Chandani	0.00	0.00	0.00	0.00
	Harni	0.00	0.00	0.00	0.00
	Kada	0.00	0.00	0.00	0.00
	Kadi	0.00	0.00	0.00	0.00
	Kambli	0.00	0.00	0.00	0.00
	Khandala	0.00	0.00	0.00	0.00
	Khandeshwar	0.00	0.00	0.00	0.00
	Khasapur	0.00	0.00	0.00	0.00
	Kurnoor	0.00	0.00	0.00	0.00
	Mehkari	0.00	0.00	0.00	0.00
	Ramganga	0.00	0.00	0.00	0.00
	Ruti	0.00	0.00	0.00	0.00
	Sakat	0.00	0.00	0.00	0.00
	Talwar	0.00	0.00	0.00	0.00
	Turori	0.00	0.00	0.00	0.00
	CADA Beed	**0.00**	**0.00**	**0.00**	**0.00**
Upper Krishna (E)	Yeralwadi	0.00	0.00	0.00	0.00
	CADA Pune	**0.00**	**0.00**	**0.00**	**0.00**
Remaining Bhima+ Man	Ashti	0.00	0.00	0.00	0.00
	Bori	0.00	0.00	0.00	0.00
	Buddhihal	0.00	0.00	0.00	0.00
	Ekrukh	0.00	0.00	0.00	0.00
	Hingani (Pangaon)	0.00	0.00	64.00	0.00
	Jawalgaon	0.00	0.00	71.00	0.00
	Mangi	0.00	0.00	78.00	59.00
	CADA Solapur	**0.00**	**0.00**	**30.43**	**8.43**
Remaining Bhima+ Man	Andhali	0.00	0.00	0.00	0.00
	Khairy	0.00	0.00	0.00	0.00
	Mhaswad	0.00	0.00	0.00	0.00
	Nher	0.00	0.00	0.00	0.00
	Ranand	0.00	0.00	0.00	0.00
	Sina	0.00	0.00	0.00	0.00
	Tisangi	0.00	0.00	0.00	0.00
	PIC Pune	**0.00**	**0.00**	**0.00**	**0.00**

Indicator VIII: Conveyance Efficiency of Main Canals - Page 2 of 7

(Medium Projects / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Remaining Bhima+ Man	Dodda Nalla	0.00	0.00	0.00	0.00
	Sankh	0.00	0.00	0.00	0.00
	Siddhewadi	0.00	0.00	0.00	0.00
	SIC Sangli	**0.00**	**0.00**	**0.00**	**0.00**
Highly Deficit		**0.00**	**0.00**	**6.09**	**1.69**
Deficit					
Purna (Tapi)	Dnyanganga	0.00	0.00	0.00	0.00
	Mas	0.00	0.00	0.00	0.00
	Morna (Akola)	0.00	0.00	0.00	0.00
	Nirguna	0.00	100.00	0.00	0.00
	Paldhag	0.00	0.00	0.00	0.00
	Sapan	0.00	0.00	0.00	0.00
	Shahnoor	0.00	0.00	0.00	0.00
	Uma	0.00	0.00	0.00	0.00
	AIC Akola	**0.00**	**12.50**	**0.00**	**0.00**
Purna (Tapi)	Mun	117.00	0.00	113.00	0.00
	Torna	288.00	0.00	114.00	0.00
	Utawali	0.00	0.00	0.00	0.00
	BIPC Buldhana	**135.00**	**0.00**	**75.67**	**0.00**
Middle Tapi (South)	Ajanta Andhari	0.00	0.00	0.00	0.00
	Anjana Palashi	0.00	0.00	0.00	0.00
	Gadadgad	0.00	0.00	0.00	0.00
	Galhati	0.00	0.00	0.00	0.00
	Girja	0.00	0.00	0.00	0.00
	Jui	0.00	0.00	0.00	0.00
	Kalyan Girija	0.00	0.00	0.00	0.00
	Karpara	0.00	0.00	0.00	0.00
	Khelna	0.00	0.00	0.00	0.00
	Lahuki	0.00	0.00	0.00	0.00
	Masoli	0.00	0.00	0.00	0.00
	Pir Kalyan	0.00	0.00	0.00	0.00
	Purna Nevpur	0.00	0.00	0.00	0.00
	Sukhana	0.00	0.00	0.00	0.00
	Upper Dudhana	0.00	0.00	0.00	0.00
	CADA Abad	**0.00**	**0.00**	**0.00**	**0.00**
Manjra	Belpara	0.00	0.00	0.00	0.00
	Bindusara	0.00	0.00	0.00	0.00

Indicator VIII: Conveyance Efficiency of Main Canals -

(Medium Projects / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
	Bodhegaon	0.00	0.00	0.00	0.00
	Borna	0.00	0.00	0.00	0.00
	Devarjan	0.00	0.00	0.00	0.00
	Gharni	0.00	0.00	0.00	0.00
	Kundalika	0.00	0.00	0.00	0.00
	Mahasangvi	0.00	0.00	0.00	0.00
	Raigavan	0.00	0.00	0.00	0.00
	Renapur	0.00	0.00	0.00	0.00
	Rui	0.00	0.00	0.00	0.00
	Sakol	0.00	0.00	0.00	0.00
	Sangameshwar (Dokewadi)	0.00	0.00	0.00	0.00
	Saraswati	0.00	0.00	0.00	0.00
	Sindphana	0.00	0.00	0.00	0.00
	Tawarja	0.00	0.00	0.00	0.00
	Terna	0.00	0.00	0.00	0.00
	Tiru	0.00	0.00	0.00	0.00
	Waghe Babhulgaon	0.00	0.00	0.00	0.00
	Wan (Beed)	0.00	0.00	0.00	0.00
	Whati	0.00	0.00	0.00	0.00
	CADA Beed	**0.00**	**0.00**	**0.00**	**0.00**
Girna	Agnavati	0.00	0.00	0.00	0.00
	Bhokarbari	0.00	0.00	0.00	0.00
	Bori (Jalgaon)	0.00	0.00	0.00	0.00
	Burai	0.00	0.00	0.00	0.00
	Hiwara	0.00	0.00	0.00	0.00
	Jamkhedi	0.00	0.00	0.00	0.00
	Kanoli	0.00	0.00	0.00	0.00
	Manyad	0.00	28.00	0.00	38.00
	Rangawali	0.00	0.00	0.00	0.00
	Tondapur	0.00	0.00	0.00	0.00
	CADA Jalgaon	**0.00**	**2.80**	**0.00**	**3.80**
Girna	Haranbari	0.00	69.00	0.00	0.00
	Kelzar	686.00	0.00	0.00	0.00
	Nagya Sakya	806.00	564.00	122.00	0.00
	CADA Nashik	**497.33**	**211.00**	**40.67**	**0.00**
Middle Tapi (Satpuda)	Bahula	0.00	0.00	0.00	0.00

Indicator VIII: Conveyance Efficiency of Main Canals - Page 4 of 7

(Medium Projects / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
	JIPC Jalgaon	**0.00**	**0.00**	**0.00**	**0.00**
Manjra	Karadkhed	0.00	0.00	0.00	0.00
	Kudala	0.00	0.00	0.00	0.00
	Kundrala	0.00	0.00	0.00	0.00
	Pethwadaj	0.00	0.00	0.00	0.00
	NIC Nanded	**0.00**	**0.00**	**0.00**	**0.00**
Middle Tapi (South)	Prakasha Barrage	0.00	0.00	0.00	0.00
	Shivan	0.00	0.00	0.00	0.00
	NIPC Dhule	**0.00**	**0.00**	**0.00**	**0.00**
Purna (Tapi)	Chandrabhaga (Amravati)	0.00	0.00	0.00	0.00
	Purna (Achalpur)	0.00	0.00	0.00	0.00
	UWPC Amravati	**0.00**	**0.00**	**0.00**	**0.00**
Deficit		**27.49**	**11.03**	**5.06**	**0.55**
Normal					
Upper Godavari	Shivna Takali	0.00	0.00	0.00	0.00
	AIC Abad	**0.00**	**0.00**	**0.00**	**0.00**
Painganga	Borgaon	0.00	0.00	0.00	0.00
	Goki	0.00	0.00	0.00	0.00
	Koradi	0.00	0.00	0.00	0.00
	Lower Pus	0.00	0.00	0.00	0.00
	Saikheda	0.00	0.00	0.00	0.00
	Waghadi	0.00	0.00	0.00	0.00
	AIC Akola	**0.00**	**0.00**	**0.00**	**0.00**
Painganga	Pen Takli	0.00	0.00	0.00	0.00
	BIPC Buldhana	**0.00**	**0.00**	**0.00**	**0.00**
Upper Godavari	Ambadi	0.00	0.00	0.00	0.00
	Dheku	0.00	0.00	0.00	0.00
	Kolhi	0.00	0.00	0.00	0.00
	Narangi	0.00	0.00	0.00	0.00
	Tembhapuri	0.00	0.00	0.00	0.00
	CADA Abad	**0.00**	**0.00**	**0.00**	**0.00**
Middle Tapi (Satpuda)	Abhora	0.00	0.00	0.00	0.00
	Aner	0.00	0.00	0.00	0.00
	Karwand	0.00	0.00	0.00	0.00
	Malangaon	0.00	0.00	0.00	0.00
	Panzara	0.00	0.00	0.00	0.00
	Sonwad	0.00	0.00	0.00	0.00

Indicator VIII: Conveyance Efficiency of Main Canals - Page 5 of 7

(Medium Projects / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
	Suki	0.00	0.00	0.00	0.00
	Suki Pickup Wier	0.00	0.00	0.00	0.00
	CADA Jalgaon	**0.00**	**0.00**	**0.00**	**0.00**
Upper Godavari	Adhala	0.00	0.00	0.00	0.00
	Alandi	0.00	0.00	0.00	0.00
	Bhojapur	0.00	0.00	0.00	0.00
	Ghatshil Pargaon	0.00	0.00	0.00	0.00
	Mandohol	0.00	0.00	0.00	0.00
	Waldevi	0.00	0.00	0.00	0.00
	CADA Nashik	**0.00**	**0.00**	**0.00**	**0.00**
Upper Bhima	Chilhewadi	0.00	0.00	0.00	0.00
	Visapur	0.00	0.00	0.00	0.00
	CADA Pune	**0.00**	**0.00**	**0.00**	**0.00**
Wardha	Amalnalla	0.00	0.00	0.00	0.00
	Dham	0.00	0.00	0.00	0.00
	Dongargaon (Wardha)	0.00	0.00	0.00	0.00
	Pothra1	0.00	0.00	0.00	0.00
	CIPC Chandrapur	**0.00**	**0.00**	**0.00**	**0.00**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0.00	0.00	0.00	0.00
	Mor	0.00	0.00	0.00	0.00
	JIPC Jalgaon	**0.00**	**0.00**	**0.00**	**0.00**
Lower Wainganga	Dongargaon (Chandrapur)	0.00	0.00	0.00	0.00
	Jam	0.00	0.00	0.00	0.00
	Kar	0.00	0.00	0.00	0.00
	NIC Nagpur	**0.00**	**0.00**	**0.00**	**0.00**
Painganga	Dongargaon (Nanded)	0.00	0.00	0.00	0.00
	Loni	0.00	0.00	0.00	0.00
	Nagzari	0.00	0.00	0.00	0.00
	NIC Nanded	**0.00**	**0.00**	**0.00**	**0.00**
Upper Godavari	Manikpunj	0.00	0.00	0.00	0.00
	NIPC Dhule	**0.00**	**0.00**	**0.00**	**0.00**
Upper Bhima	Andra Khore				
	Kasarsai	0.00	0.00	0.00	0.00
	Nazare	0.00	100.00	0.00	100.00
	Shetphal	95.00	0.00	96.00	0.00
	Wadiwale	0.00	0.00	0.00	0.00
	PIC Pune	**23.75**	**25.00**	**24.00**	**25.00**

Indicator VIII: Conveyance Efficiency of Main Canals - Page 6 of 7

(Medium Projects / 2009-10) Unit: %

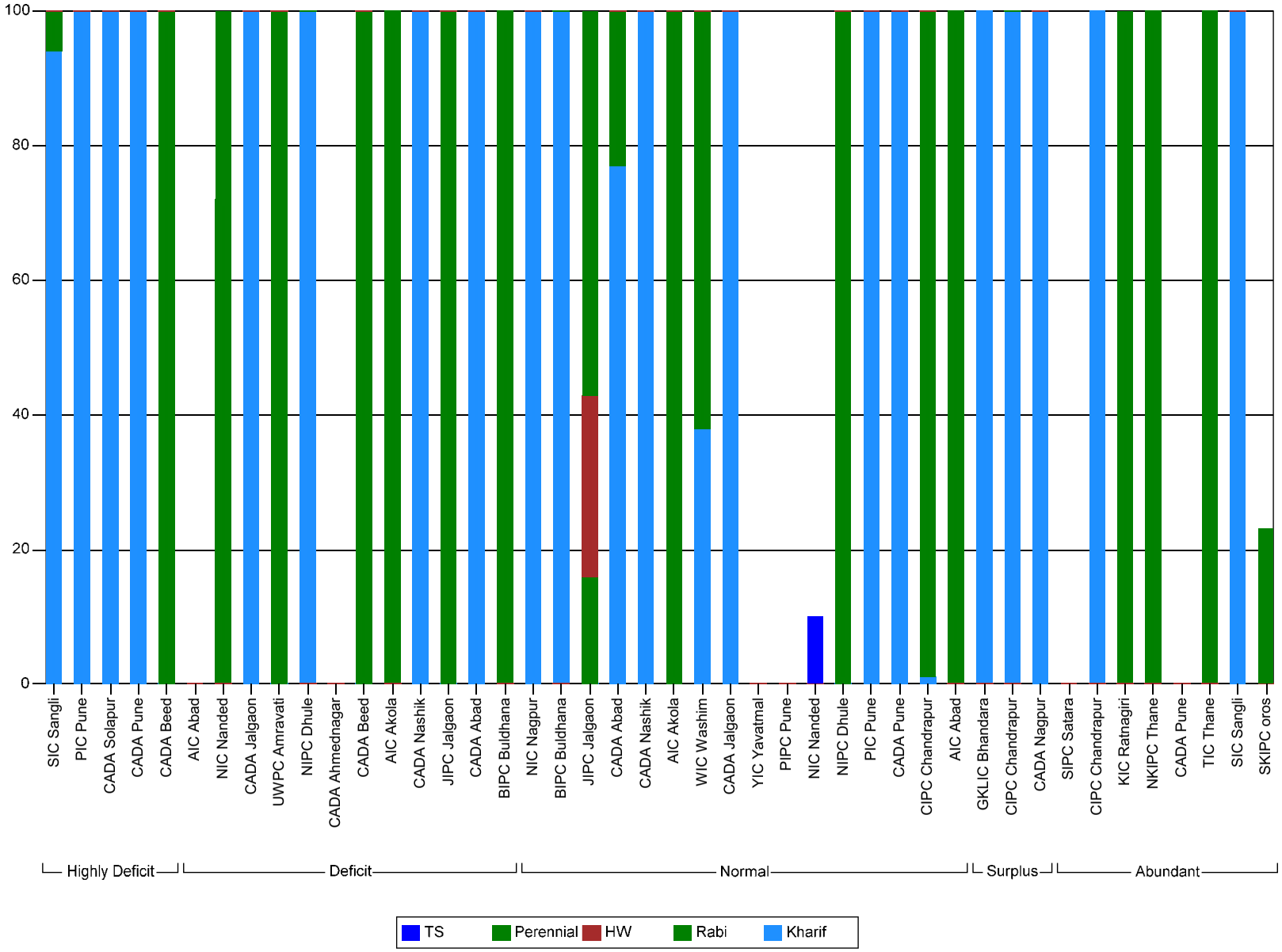
Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Painganga	Ekbhuji	0.00	0.00	0.00	0.00
	Sonal	0.00	0.00	0.00	0.00
	WIC Washim	**0.00**	**0.00**	**0.00**	**0.00**
Painganga	Adan	0.00	0.00	0.00	0.00
	Nawargaon	0.00	0.00	0.00	0.00
	YIC Yavatmal	**0.00**	**0.00**	**0.00**	**0.00**
Normal		**1.90**	**2.00**	**1.92**	**2.00**
Surplus					
Middle Wainganga	Bagheda	0.00	0.00	0.00	0.00
	Betekar Bothli	0.00	0.00	0.00	0.00
	Bodalkasa	0.00	0.00	0.00	0.00
	Chandpur	0.00	0.00	0.00	0.00
	Chandrabhaga (Nagpur)	0.00	0.00	0.00	0.00
	Chorakhmara	0.00	0.00	0.00	0.00
	Chulband	0.00	0.00	0.00	0.00
	Kanolibara	0.00	0.00	0.00	0.00
	Kesarnala	0.00	0.00	0.00	0.00
	Khairbanda	0.00	0.00	0.00	0.00
	Khekara Nalla	0.00	0.00	0.00	0.00
	Kolar	0.00	0.00	0.00	0.00
	Makardhokada-Saiki	0.00	0.00	0.00	0.00
	Managadh	0.00	0.00	0.00	0.00
	Mordham	0.00	0.00	0.00	0.00
	Pandharbodi	0.00	0.00	0.00	0.00
	Rengepar	0.00	0.00	0.00	0.00
	Sangrampur	0.00	0.00	0.00	0.00
	Sorna	0.00	0.00	0.00	0.00
	Tekepar LIS	0.00	0.00	0.00	0.00
	Umri	0.00	0.00	0.00	0.00
	Wunna	0.00	0.00	0.00	0.00
	CADA Nagpur	**0.00**	**0.00**	**0.00**	**0.00**
Middle Wainganga	Chandai	0.00	0.00	0.00	0.00
	Chargaon	0.00	0.00	0.00	0.00
	Labhansarad	0.00	0.00	0.00	0.00
	Pakadigundam	0.00	0.00	0.00	0.00
	Panchadhara Complex	0.00	0.00	0.00	0.00
	CIPC Chandrapur	**0.00**	**0.00**	**0.00**	**0.00**

Indicator VIII: Conveyance Efficiency of Main Canals - Page 7 of 7

(Medium Projects / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Middle Wainganga	Katangi	0.00	0.00	0.00	0.00
	GKLIC Bhandara	**0.00**	**0.00**	**0.00**	**0.00**
Surplus		**0.00**	**0.00**	**0.00**	**0.00**
Abundant					
Lower Wainganga	Ghorazari	0.00	0.00	0.00	0.00
	Naleshwar	0.00	0.00	0.00	0.00
	CIPC Chandrapur	**0.00**	**0.00**	**0.00**	**0.00**
Vashishthi	Natuwadi	0.00	0.00	0.00	0.00
	KIC Ratnagiri	**0.00**	**0.00**	**0.00**	**0.00**
South Konkan	Gad Nadi	0.00	0.00	0.00	0.00
	Hetwane	0.00	0.00	0.00	0.00
	NKIPC Thane	**0.00**	**0.00**	**0.00**	**0.00**
Upper Krishna (W)	Chikotra	0.00	0.00	0.00	0.00
	Chitri	0.00	0.00	0.00	0.00
	Dhamni				
	Ghataprbha	0.00	0.00	0.00	0.00
	Jangamhatti	0.00	0.00	0.00	0.00
	Kadvi	0.00	0.00	0.00	0.00
	Kasari	0.00	0.00	0.00	0.00
	Krishna Canal & Khodshi Backwater	0.00	0.00	0.00	0.00
	Kumbhi	0.00	0.00	0.00	0.00
	Morna (Sangli)	0.00	0.00	0.00	0.00
	Patgaon	0.00	0.00	0.00	0.00
	Yeoti Masoli	0.00	0.00	0.00	0.00
	SIC Sangli	**0.00**	**0.00**	**0.00**	**0.00**
Upper Krishna (W)	Morna				
	SIPC Satara				
South Konkan	Deoghar	0.00	0.00	0.00	0.00
	Nardave				
	SKIPC oros	**0.00**	**0.00**	**0.00**	**0.00**
North Konkan	Rajanalla Complex	23.00	398.00	0.00	0.00
	Vaitarna	0.00	0.00	0.00	0.00
	Wandri	98.00	100.00	0.00	0.00
	TIC Thane	**40.33**	**166.00**	**0.00**	**0.00**
Abundant		**6.05**	**24.90**	**0.00**	**0.00**

Indicator IX : Actual Cropping Pattern - Medium



Indicator IX: Actual Cropping Pattern - Page 1 of 8

(Medium / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Highly Deficit						
Sina						
	Banganga	0.00	0.00	78.67	21.33	0.00
	Benitura	0.00	5.00	60.62	6.25	28.13
	Chandani	0.00	0.00	69.68	30.32	0.00
	Harni	0.00	0.00	60.07	0.00	39.93
	Kada	0.00	0.00	100.00	0.00	0.00
	Kadi	0.00	0.00	64.42	28.83	6.75
	Kambli	0.00	0.00	98.11	0.00	1.89
	Khandala	0.00	16.99	31.81	0.00	51.20
	Khandeshwar	0.00	0.00	60.40	39.60	0.00
	Khasapur	0.00	0.00	72.63	27.37	0.00
	Kurnoor	0.00	3.79	58.91	10.63	26.66
	Mehkari	0.00	4.17	15.00	32.50	48.33
	Ramganga	0.00	0.00	69.51	30.49	0.00
	Ruti	0.00	0.00	53.69	18.72	27.59
	Sakat	0.00	0.00	60.75	39.25	0.00
	Talwar	0.00	0.00	61.33	37.33	1.33
	Turori	0.00	0.00	0.00	0.00	0.00
	CADA Beed	0.00	1.26	64.83	23.57	10.34
Upper Krishna (E)						
	Yeralwadi	34.83	0.00	52.16	11.79	1.23
	CADA Pune	34.83	0.00	52.16	11.79	1.23
Remaining Bhima+ Man						
	Ashti	13.11	0.00	22.81	15.87	48.20
	Bori	0.00	0.00	56.87	3.16	39.97
	Buddhihal	7.68	0.00	72.19	19.38	0.76
	Ekrukh	5.17	0.00	68.07	6.46	20.31
	Hingani (Pangaon)	10.66	0.56	37.89	29.02	21.87
	Jawalgaon	13.51	0.00	38.39	30.43	17.66
	Mangi	0.00	0.00	28.04	36.11	35.85
	CADA Solapur	7.56	0.14	43.08	23.71	25.51
Remaining Bhima+ Man						
	Andhali	15.97	0.00	36.10	41.53	6.39
	Khairy	26.87	0.00	35.30	20.95	16.88
	Mhaswad	12.39	0.00	37.06	45.87	4.69
	Nher	19.26	0.00	59.82	20.36	0.55
	Ranand	34.59	0.00	43.68	18.02	3.70
	Sina	16.42	0.00	44.60	35.54	3.44
	Tisangi	19.23	0.00	63.98	0.80	15.99

Indicator IX: Actual Cropping Pattern - Page 2 of 8

(Medium / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	PIC Pune	17.84	0.00	45.33	30.69	6.13
Remaining Bhima+ Man						
	Dodda Nalla	4.01	0.00	40.80	55.18	0.00
	Sankh	3.81	0.00	57.46	15.56	23.17
	Siddhewadi	12.27	0.00	46.69	11.10	29.93
	SIC Sangli	7.94	0.00	48.07	23.41	20.58
Highly Deficit						
Deficit						
Purna (Tapi)						
	Dnyanganga	0.00	0.00	58.33	0.00	41.67
	Mas	0.00	7.17	92.83	0.00	0.00
	Morna (Akola)	0.00	2.22	83.11	0.00	14.67
	Nirguna	0.00	2.30	94.61	0.00	3.09
	Paldhag	0.00	29.25	63.64	0.00	7.11
	Sapan	0.00	0.00	100.00	0.00	0.00
	Shahnoor	0.00	0.00	94.36	0.00	5.64
	Uma	0.00	100.00	0.00	0.00	0.00
	AIC Akola	0.00	2.91	92.05	0.00	5.04
Purna (Tapi)						
	Mun	0.00	5.04	94.46	0.00	0.50
	Torna	0.00	5.04	94.46	0.00	0.50
	Utawali	0.00	5.04	94.46	0.00	0.50
	BIPC Buldhana	0.00	5.04	94.46	0.00	0.50
Middle Tapi (South)						
	Ajanta Andhari	100.00	0.00	0.00	0.00	0.00
	Anjana Palashi	2.59	32.69	48.22	0.00	16.50
	Gadadgad	0.00	26.34	33.95	0.62	39.09
	Galhati	10.36	33.49	24.14	2.59	29.42
	Girja	23.45	18.58	50.88	0.00	7.08
	Jui	6.13	55.83	33.74	0.00	4.29
	Kalyan Girija	0.00	34.68	62.78	0.00	2.53
	Karpara	0.00	30.31	58.01	7.81	3.88
	Khelna	4.91	20.50	67.61	0.44	6.54
	Lahuki	29.66	13.79	47.59	0.00	8.97
	Masoli	14.35	4.78	22.61	0.00	58.26
	Pir Kalyan	0.00	0.00	0.00	0.00	0.00
	Purna Nevpur	4.47	22.76	58.55	11.97	2.24
	Sukhana	0.00	11.29	72.44	0.00	16.27
	Upper Dudhana	1.09	37.09	56.00	0.73	5.09
	CADA Abad	5.62	25.40	52.06	3.35	13.57

Indicator IX: Actual Cropping Pattern - Page 3 of 8

(Medium / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Manjra						
	Belpara	0.00	0.00	44.04	36.70	19.27
	Bindusara	0.00	14.29	73.40	0.00	12.32
	Bodhegaon	0.00	48.78	3.05	3.66	44.51
	Borna	0.00	4.13	16.94	0.00	78.93
	Devarjan	0.00	0.00	0.00	0.00	0.00
	Gharni	0.00	0.00	0.00	0.00	0.00
	Kundalika	0.00	9.47	18.11	5.29	67.13
	Mahasangvi	0.00	5.63	86.15	0.00	8.23
	Raigavan	0.00	0.00	0.00	0.00	100.00
	Renapur	0.00	4.66	33.33	0.47	61.55
	Rui	0.00	0.00	0.00	0.00	0.00
	Sakol	0.00	0.00	0.00	0.00	0.00
	Sangameshwar (Dokewadi)	0.00	0.00	51.85	25.93	22.22
	Saraswati	0.00	9.86	3.29	0.47	86.38
	Sindphana	0.00	11.06	82.74	2.88	3.32
	Tawarja	0.00	0.00	0.00	0.00	0.00
	Terna	0.00	0.00	0.00	0.00	0.00
	Tiru	0.00	0.00	0.00	0.00	0.00
	Waghe Babhulgaon	0.00	0.00	89.89	0.00	10.11
	Wan (Beed)	0.00	1.95	5.01	0.56	92.48
	Whati	0.00	0.00	0.00	0.00	0.00
	CADA Beed	0.00	6.62	42.79	9.28	41.32
Girna						
	Agnavati	9.17	39.83	34.96	5.73	10.32
	Bhokarbari	40.37	9.91	49.36	0.00	0.37
	Bori (Jalgaon)	30.99	20.48	38.11	9.34	1.09
	Burai	29.78	2.97	63.37	3.62	0.26
	Hiwara	17.62	29.72	37.95	0.72	13.99
	Jamkhedi	0.00	0.00	98.33	0.00	1.67
	Kanoli	26.27	0.24	47.52	25.98	0.00
	Manyad	10.80	13.87	60.92	7.76	6.64
	Rangawali	16.02	18.99	32.80	19.01	13.18
	Tondapur	39.16	35.14	16.27	2.21	7.23
	CADA Jalgaon	20.73	14.88	49.54	8.87	5.98
Girna						
	Haranbari	0.00	0.00	89.61	6.21	4.18
	Kelzar	0.00	0.00	88.09	6.26	5.66
	Nagya Sakya	9.81	0.00	49.00	41.19	0.00
	CADA Nashik	2.23	0.00	79.97	14.16	3.64

Indicator IX: Actual Cropping Pattern - Page 4 of 8

(Medium / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Middle Tapi (Satpuda)						
	Bahula	0.00	24.83	36.13	27.47	11.57
	JIPC Jalgaon	0.00	24.83	36.13	27.47	11.57
Manjra						
	Karadkhed	0.00	0.00	0.00	0.00	0.00
	Kudala	0.00	28.75	32.50	0.00	38.75
	Kundrala	0.00	48.00	36.80	0.00	15.20
	Pethwadaj	0.00	0.00	0.00	0.00	0.00
	NIC Nanded	0.00	40.49	35.12	0.00	24.39
Middle Tapi (South)						
	Prakasha Barrage	21.24	38.91	39.85	0.00	0.00
	Shivan	0.00	0.00	100.00	0.00	0.00
	NIPC Dhule	15.98	29.28	54.74	0.00	0.00
Purna (Tapi)						
	Chandrabhaga (Amravati)	0.00	2.87	97.13	0.00	0.00
	Purna (Achalpur)	0.00	0.00	50.89	1.92	47.19
	UWPC Amravati	0.00	1.91	81.72	0.64	15.73
Deficit						
Normal						
Upper Godavari						
	Shivna Takali	0.00	52.10	47.90	0.00	0.00
	AIC Abad	0.00	52.10	47.90	0.00	0.00
Painganga						
	Borgaon	0.00	63.46	35.58	0.96	0.00
	Goki	0.00	15.96	83.43	0.00	0.61
	Koradi	0.00	0.00	100.00	0.00	0.00
	Lower Pus	0.00	7.18	77.44	5.64	9.74
	Saikheda	0.00	0.00	0.00	0.00	0.00
	Waghadi	0.00	2.10	97.90	0.00	0.00
	AIC Akola	0.00	16.95	79.89	1.08	2.07
Painganga						
	Pen Takli	17.80	26.95	54.08	0.00	1.17
	BIPC Buldhana	17.80	26.95	54.08	0.00	1.17
Upper Godavari						
	Ambadi	0.00	9.22	84.04	6.21	0.53
	Dheku	12.96	11.11	44.44	20.37	11.11
	Kolhi	0.00	5.98	47.01	47.01	0.00
	Narangi	0.00	0.00	0.00	0.00	0.00
	Tembhapuri	3.04	34.80	29.59	2.10	30.46
	CADA Abad	3.30	24.43	45.35	7.46	19.46
Middle Tapi (Satpuda)						
	Abhora	4.46	21.16	27.15	1.27	45.95

Indicator IX: Actual Cropping Pattern - Page 5 of 8

(Medium / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Aner	25.38	11.31	42.76	6.68	13.87
	Karwand	27.31	0.00	43.77	28.92	0.00
	Malangaon	34.05	0.00	54.64	0.20	11.10
	Panzara	37.24	0.00	62.43	0.06	0.27
	Sonwad	41.77	0.00	58.23	0.00	0.00
	Suki	0.00	0.00	0.00	0.00	0.00
	Suki Pickup Wier	10.33	14.38	25.68	0.00	49.62
	CADA Jalgaon	27.08	6.19	46.36	5.22	15.15
Upper Godavari						
	Adhala	26.13	0.00	53.22	10.00	10.65
	Alandi	10.78	0.00	30.32	1.22	57.69
	Bhojapur	0.00	0.00	91.72	1.40	6.88
	Ghatshil Pargaon	0.00	0.00	70.38	29.62	0.00
	Mandohol	0.00	0.00	66.67	33.33	0.00
	Waldevi	0.00	0.00	100.00	0.00	0.00
	CADA Nashik	10.95	0.00	56.41	7.79	24.85
Upper Bhima						
	Chilhewadi	0.00	0.00	100.00	0.00	0.00
	Visapur	25.37	0.50	37.24	11.73	25.16
	CADA Pune	24.45	0.48	39.52	11.30	24.25
Wardha						
	Amalnalla	0.00	0.00	0.00	0.00	0.00
	Dham	0.00	1.89	87.66	0.09	10.35
	Dongargaon (Wardha)	0.00	24.54	74.93	0.00	0.52
	Pothra1	0.06	4.53	95.42	0.00	0.00
	CIPC Chandrapur	0.02	4.40	89.35	0.06	6.18
Middle Tapi (Satpuda)						
	Bhokar (Mangrul)	0.00	0.00	0.00	0.00	0.00
	Mor	0.00	0.00	3.18	5.37	91.45
	JIPC Jalgaon	0.00	0.00	3.18	5.37	91.45
Lower Wainganga						
	Dongargaon (Chandrapur)	68.25	6.75	25.00	0.00	0.00
	Jam	0.00	0.00	98.29	0.97	0.74
	Kar	0.00	0.00	78.61	21.39	0.00
	NIC Nagpur	8.37	0.83	81.36	9.09	0.35
Painganga						
	Dongargaon (Nanded)	0.00	100.00	0.00	0.00	0.00
	Loni	0.00	0.00	0.00	0.00	0.00
	Nagzari	0.00	0.00	0.00	0.00	0.00
	NIC Nanded	0.00	100.00	0.00	0.00	0.00
Upper Godavari						

Indicator IX: Actual Cropping Pattern -

(Medium / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Manikpunj	0.00	0.00	64.41	35.59	0.00
	NIPC Dhule	0.00	0.00	64.41	35.59	0.00
Upper Bhima						
	Andra Khore					
	Kasarsai	32.51	0.00	25.81	27.15	14.53
	Nazare	18.17	0.00	68.19	10.92	2.73
	Shetphal	29.16	0.00	41.22	4.08	25.54
	Wadiwale	63.01	0.00	13.67	9.25	14.07
	PIC Pune	38.20	0.00	35.48	10.61	15.71
Painganga						
	Ekbhuji	7.84	0.41	89.28	1.86	0.62
	Sonal	0.00	100.00	0.00	0.00	0.00
	WIC Washim	7.68	2.42	87.47	1.82	0.61
Painganga						
	Adan	0.00	0.00	0.00	0.00	0.00
	Nawargaon	0.00	0.00	0.00	0.00	0.00
	YIC Yavatmal	0.00	0.00	0.00	0.00	0.00
Normal						
Surplus						
Middle Wainganga						
	Bagheda	100.00	0.00	0.00	0.00	0.00
	Betekar Bothli	100.00	0.00	0.00	0.00	0.00
	Bodalkasa	100.00	0.00	0.00	0.00	0.00
	Chandpur	100.00	0.00	0.00	0.00	0.00
	Chandrabhaga (Nagpur)	0.25	0.00	81.83	1.97	15.96
	Chorakhmara	100.00	0.00	0.00	0.00	0.00
	Chulband	99.79	0.00	0.00	0.00	0.21
	Kanolibara	0.00	17.42	80.49	2.09	0.00
	Kesarnala	0.00	0.00	97.53	2.47	0.00
	Khairbanda	100.00	0.00	0.00	0.00	0.00
	Khekara Nalla	0.00	0.00	100.00	0.00	0.00
	Kolar	1.02	7.62	78.69	6.96	5.70
	Makardhokada-Saiki	0.00	0.00	100.00	0.00	0.00
	Managadh	100.00	0.00	0.00	0.00	0.00
	Mordham	0.64	0.00	82.83	1.56	14.96
	Pandharbodi	100.00	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	90.81	0.00	9.19	0.00	0.00

Indicator IX: Actual Cropping Pattern - Page 7 of 8

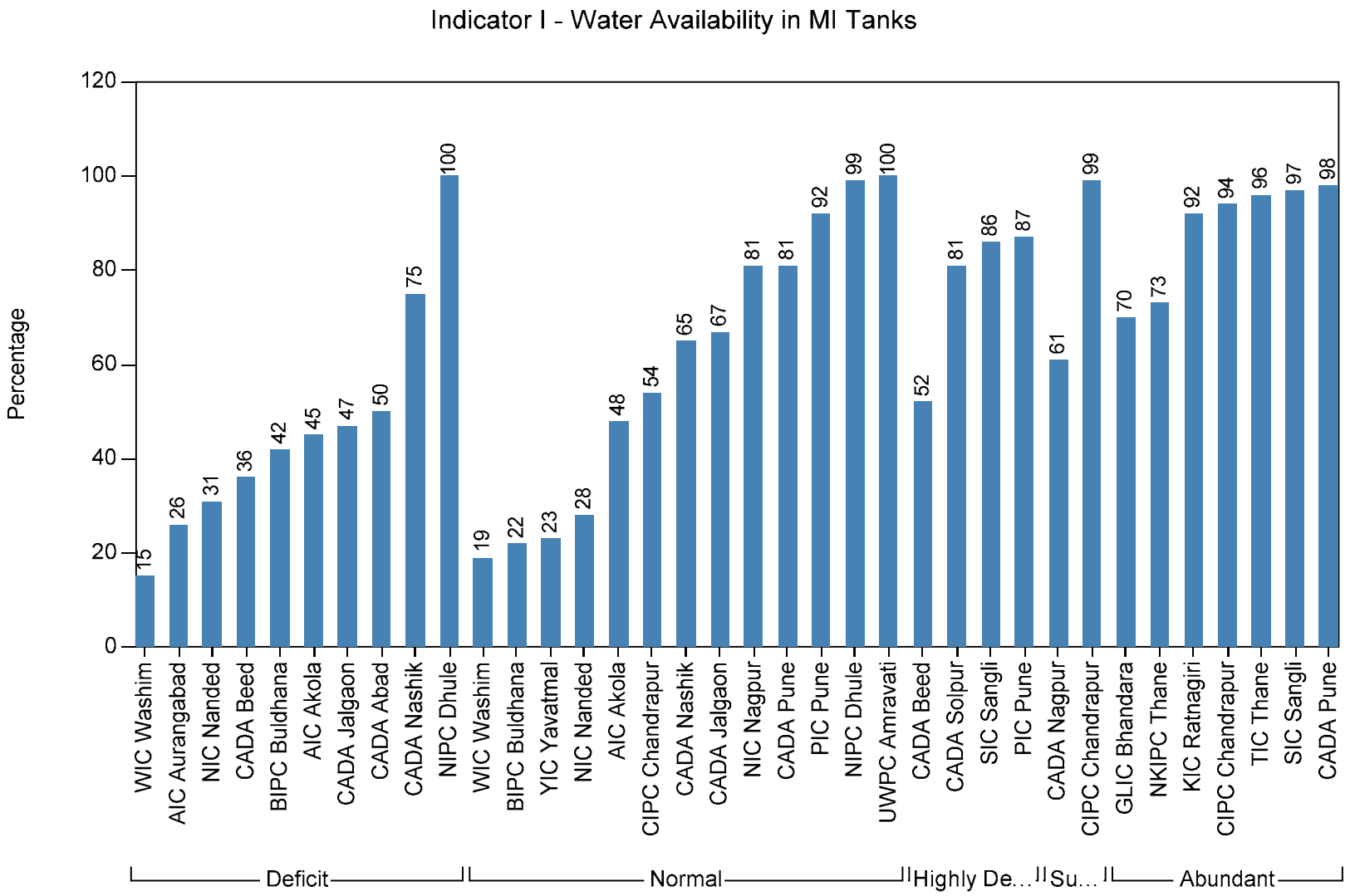
(Medium / 2009-10) Unit: %

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Umri	2.21	12.21	80.30	5.28	0.00
	Wunna	33.33	0.00	33.33	33.33	0.00
	CADA Nagpur	77.71	1.32	19.90	0.53	0.54
Middle Wainganga						
	Chandai	86.67	0.00	13.33	0.00	0.00
	Chargaon	100.00	0.00	0.00	0.00	0.00
	Labhansarad	0.00	0.00	100.00	0.00	0.00
	Pakadigundam	0.00	0.00	0.00	0.00	0.00
	Panchadhara Complex	0.00	1.59	98.26	0.00	0.14
	CIPC Chandrapur	64.23	0.33	35.41	0.00	0.03
Middle Wainganga						
	Katangi	100.00	0.00	0.00	0.00	0.00
	GKLIC Bhandara	100.00	0.00	0.00	0.00	0.00
Surplus						
Abundant						
Lower Wainganga						
	Ghorazari	100.00	0.00	0.00	0.00	0.00
	Naleshwar	100.00	0.00	0.00	0.00	0.00
	CIPC Chandrapur	100.00	0.00	0.00	0.00	0.00
Vashishthi						
	Natuwadi	0.00	0.00	95.23	0.00	4.77
	KIC Ratnagiri	0.00	0.00	95.23	0.00	4.77
South Konkan						
	Gad Nadi	0.00	0.00	0.00	0.00	0.00
	Hetwane	0.00	0.00	98.44	0.00	1.56
	NKIPC Thane	0.00	0.00	98.44	0.00	1.56
Upper Krishna (W)						
	Chikotra	0.00	0.00	34.50	0.00	65.50
	Chitri	0.00	0.00	10.40	0.91	88.70
	Dhamni					
	Ghataprbha	0.00	0.00	11.90	0.00	88.10
	Jangamhatti	0.00	0.00	27.51	1.16	71.32
	Kadvi	0.00	0.00	46.20	7.19	46.61
	Kasari	0.00	0.00	19.97	3.18	76.84
	Krishna Canal & Khodshi Backwater	31.67	0.00	34.02	5.39	28.91
	Kumbhi	0.00	0.00	12.88	0.00	87.12
	Morna (Sangli)	0.00	0.00	44.70	0.00	55.30
	Patgaon	0.00	0.00	11.32	3.55	85.14
	Yeoti Masoli	0.00	0.00	90.46	0.00	9.54
	SIC Sangli	5.89	0.00	25.11	2.39	66.62
Upper Krishna (W)						

Indicator IX: Actual Cropping Pattern - Page 8 of 8

(Medium / 2009-10) Unit: %

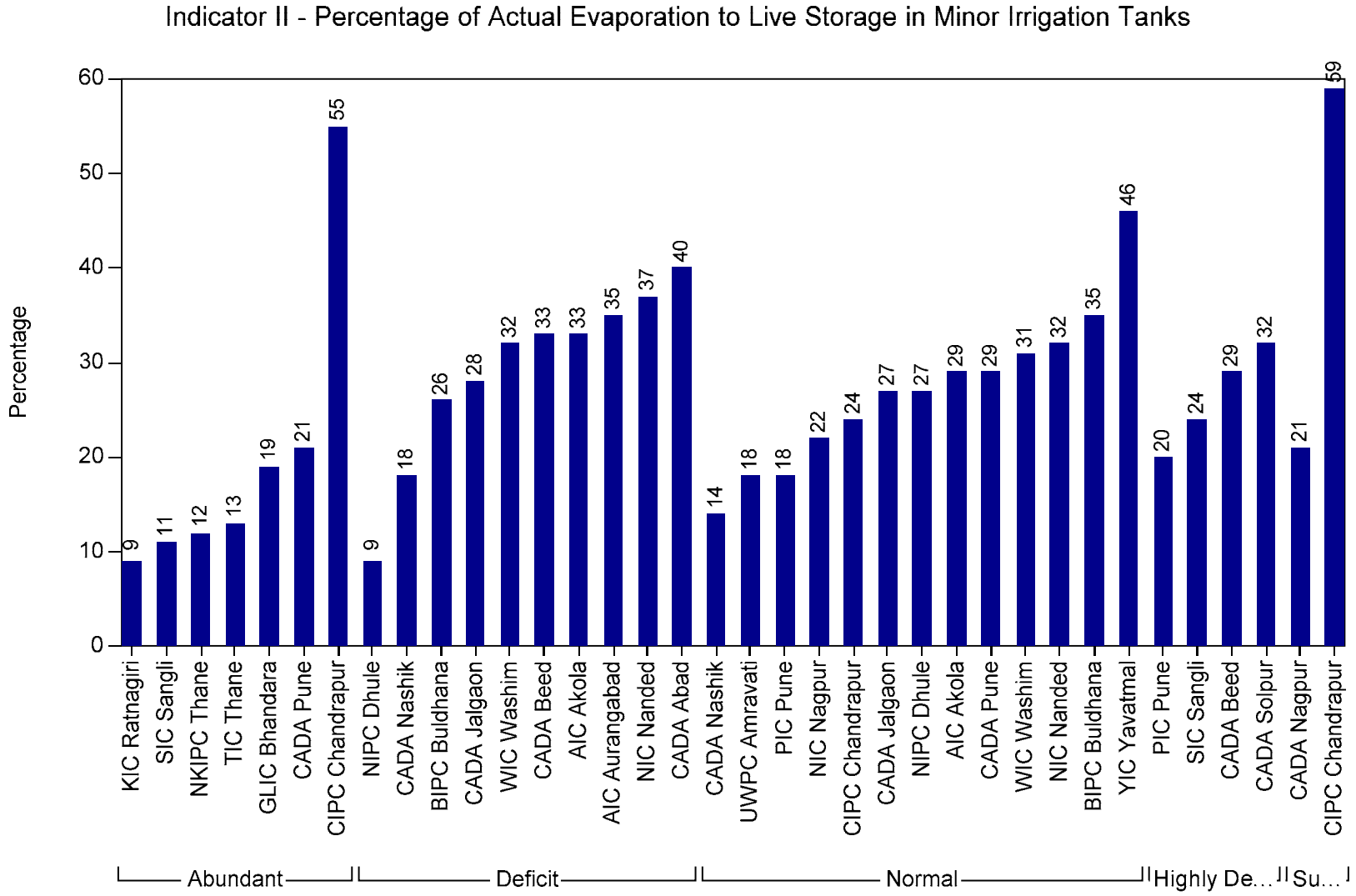
Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Morna					
	SIPC Satara					
South Konkan						
	Deoghar	0.00	0.00	0.00	0.00	100.00
	Nardave					
	SKIPC oros	0.00	0.00	0.00	0.00	100.00
North Konkan						
	Rajanalla Complex	0.00	0.00	0.00	0.00	100.00
	Vaitarna	0.00	0.00	84.09	0.00	15.91
	Wandri	0.00	0.00	100.00	0.00	0.00
	TIC Thane	0.00	0.00	96.81	0.00	3.19
Abundant						


Indicator I - Water Availability in MI Tanks
Percentage
120
100
80
60
40
20
0
15
26
31
36
42
45
47
50
75
100
19
22
23
28
48
54
65
67
81
81
92
99
100
52
81
86
87
61
99
70
73
92
94
96
97
98
WIC Washim
AIC Aurangabad
NIC Nanded
CADA Beed
BIPC Buldhana
AIC Akola
CADA Jalgaon
CADA Abad
CADA Nashik
NIPC Dhule
WIC Washim
BIPC Buldhana
YIC Yavatmal
NIC Nanded
AIC Akola
CIPC Chandrapur
CADA Nashik
CADA Jalgaon
NIC Nagpur
CADA Pune
PIC Pune
NIPC Dhule
UWPC Amravati
CADA Beed
CADA Solpur
SIC Sangli
PIC Pune
CADA Nagpur
CIPC Chandrapur
GLIC Bhandara
NKIPC Thane
KIC Ratnagiri
CIPC Chandrapur
TIC Thane
SIC Sangli
CADA Pune
Deficit
Normal
Highly De...
Su...
Abundant

Indicator I: Water Availability in MI Tanks (2009-10) - Page 1 of 1

Unit: Mcum

Circle	MLStorage	Design Live Storage	Percentage
CADA Beed	170.34	328.62	51.83
CADA Solpur	88.71	109.17	81.26
SIC Sangli	127.39	148.75	85.64
PIC Pune	52.07	59.88	86.96
Highly Deficit	**438.51**	**646.42**	**76.42**
WIC Washim	4.71	30.45	15.47
AIC Aurangabad	41.51	156.74	26.48
NIC Nanded	27.43	88.63	30.95
CADA Beed	144.18	396.71	36.34
BIPC Buldhana	29.70	70.46	42.15
AIC Akola	84.79	187.78	45.15
CADA Jalgaon	37.99	81.36	46.69
CADA Abad	92.25	183.16	50.37
CADA Nashik	83.12	110.96	74.91
NIPC Dhule	1.40	1.40	100.00
Deficit	**547.08**	**1307.65**	**46.85**
WIC Washim	25.91	133.74	19.37
BIPC Buldhana	5.28	23.77	22.21
YIC Yavatmal	20.20	87.81	23.00
NIC Nanded	36.54	128.63	28.41
AIC Akola	117.85	246.60	47.79
CIPC Chandrapur	16.02	29.73	53.88
CADA Nashik	55.88	85.89	65.06
CADA Jalgaon	150.16	223.15	67.29
NIC Nagpur	24.37	30.15	80.83
CADA Pune	41.74	51.58	80.92
PIC Pune	153.68	166.57	92.26
NIPC Dhule	14.37	14.51	99.04
UWPC Amravati	9.88	9.88	100.00
Normal	**671.88**	**1232.01**	**60.01**
CADA Nagpur	159.13	261.41	60.87
CIPC Chandrapur	36.43	36.89	98.75
Surplus	**195.56**	**298.30**	**79.81**
GLIC Bhandara	11.39	16.35	69.66
NKIPC Thane	71.25	97.65	72.96
KIC Ratnagiri	92.82	100.90	91.99
CIPC Chandrapur	84.60	90.01	93.99
TIC Thane	176.66	184.65	95.67
SIC Sangli	153.93	159.10	96.75
CADA Pune	12.22	12.52	97.60
Abundant	**602.87**	**661.18**	**88.38**
Grand Total:	**2456**	**4146**	**65**


Indicator II - Percentage of Actual Evaporation to Live Storage in Minor Irrigation Tanks
Percentage
0
10
20
30
40
50
60
9
11
12
13
19
21
55
9
18
26
28
32
33
33
35
37
40
14
18
18
22
24
27
27
29
29
31
32
35
46
20
24
29
32
21
59
KIC Ratnagiri
SIC Sangli
NKIPC Thane
TIC Thane
GLIC Bhandara
CADA Pune
CIPC Chandrapur
NIPC Dhule
CADA Nashik
BIPC Buldhana
CADA Jalgaon
WIC Washim
CADA Beed
AIC Akola
AIC Aurangabad
NIC Nanded
CADA Abad
CADA Nashik
UWPC Amravati
PIC Pune
NIC Nagpur
CIPC Chandrapur
CADA Jalgaon
NIPC Dhule
AIC Akola
CADA Pune
WIC Washim
NIC Nanded
BIPC Buldhana
YIC Yavatmal
PIC Pune
SIC Sangli
CADA Beed
CADA Solpur
CADA Nagpur
CIPC Chandrapur
Abundant
Deficit
Normal
Highly De...
Su...

Indiacator II: Percentage of Actual Evaporation to Live Storage in Minor Irrigation Tank (2009-10) - Page 1 of 2

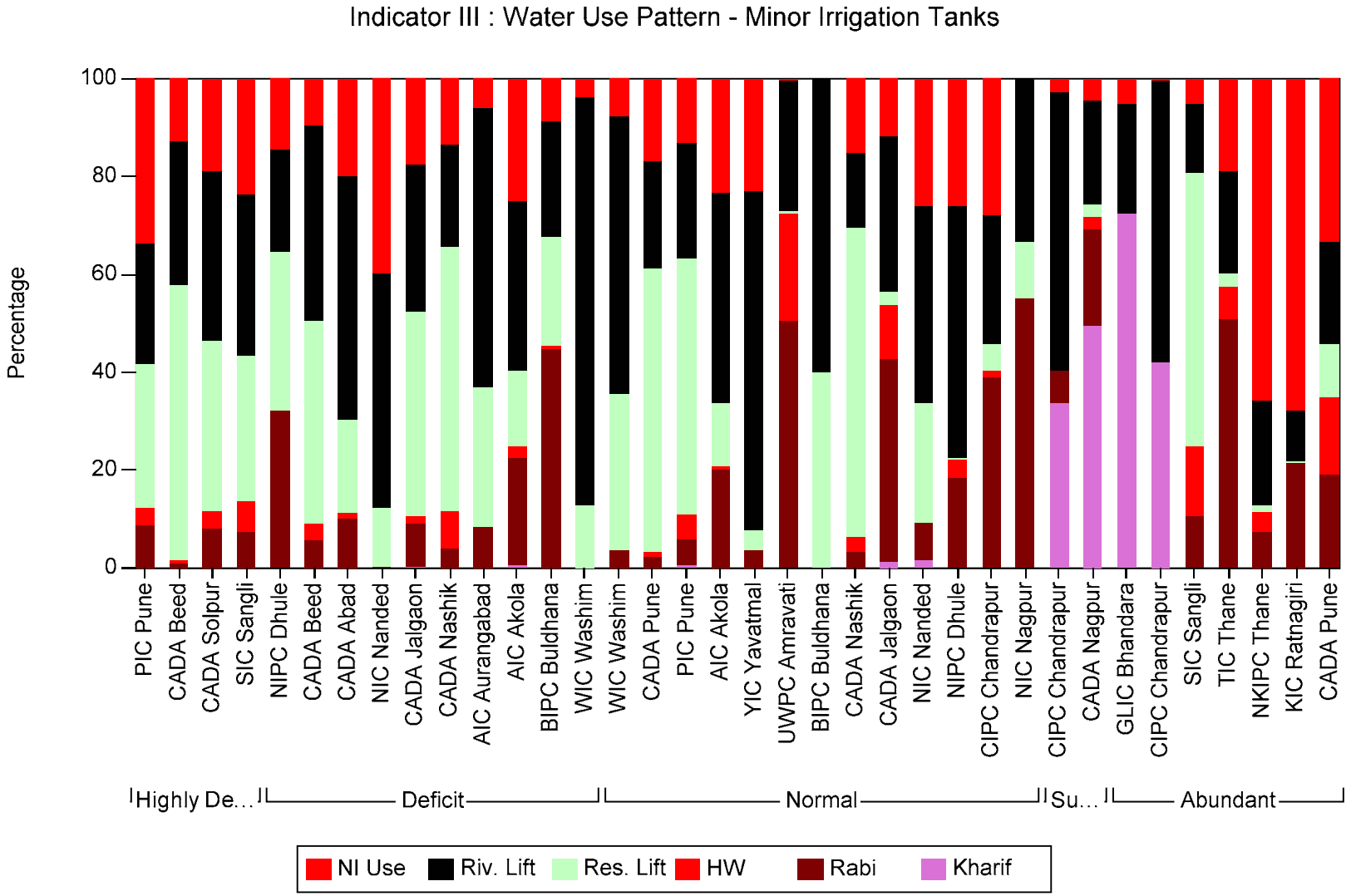
Unit: Mcum

Circle	Evaporation Loss	MLStorage Observed	Percentage
PIC Pune	10.42	52.07	20.01
SIC Sangli	31.00	127.39	24.33
CADA Beed	49.65	170.34	29.15
CADA Solpur	28.78	88.71	32.44
Highly Deficit	**119.85**	**438.51**	**26.48**
NIPC Dhule	0.13	1.40	9.29
CADA Nashik	14.76	83.12	17.76
BIPC Buldhana	7.76	29.70	26.13
CADA Jalgaon	10.82	37.99	28.48
WIC Washim	1.53	4.71	32.48
CADA Beed	47.80	144.18	33.15
AIC Akola	28.22	84.79	33.28
AIC Aurangabad	14.46	41.51	34.83
NIC Nanded	10.27	27.43	37.44
CADA Abad	36.81	92.25	39.90
Deficit	**172.56**	**547.08**	**29.27**
CADA Nashik	7.57	55.88	13.55
UWPC Amravati	1.78	9.88	18.02
PIC Pune	28.07	153.68	18.27
NIC Nagpur	5.46	24.37	22.40
CIPC Chandrapur	3.90	16.02	24.34
CADA Jalgaon	39.93	150.16	26.59
NIPC Dhule	3.84	14.37	26.72
AIC Akola	33.60	117.85	28.51
CADA Pune	11.94	41.74	28.61
WIC Washim	7.95	25.91	30.68
NIC Nanded	11.82	36.54	32.35
BIPC Buldhana	1.85	5.28	35.04
YIC Yavatmal	9.29	20.20	45.99
Normal	**167.00**	**671.88**	**27.01**
CADA Nagpur	32.75	159.13	20.58
CIPC Chandrapur	21.53	36.43	59.10
Surplus	**54.28**	**195.56**	**39.84**
KIC Ratnagiri	7.95	92.82	8.56
SIC Sangli	16.64	153.93	10.81
NKIPC Thane	8.49	71.25	11.92
TIC Thane	22.41	176.66	12.69
GLIC Bhandara	2.22	11.39	19.49
CADA Pune	2.57	12.22	21.03
CIPC Chandrapur	46.58	84.60	55.06
Abundant	**106.86**	**602.87**	**19.94**

Indiacator II: Percentage of Actual Evaporation to Live Storage in Minor Irrigation Tank (2009-10) -

Unit: Mcum

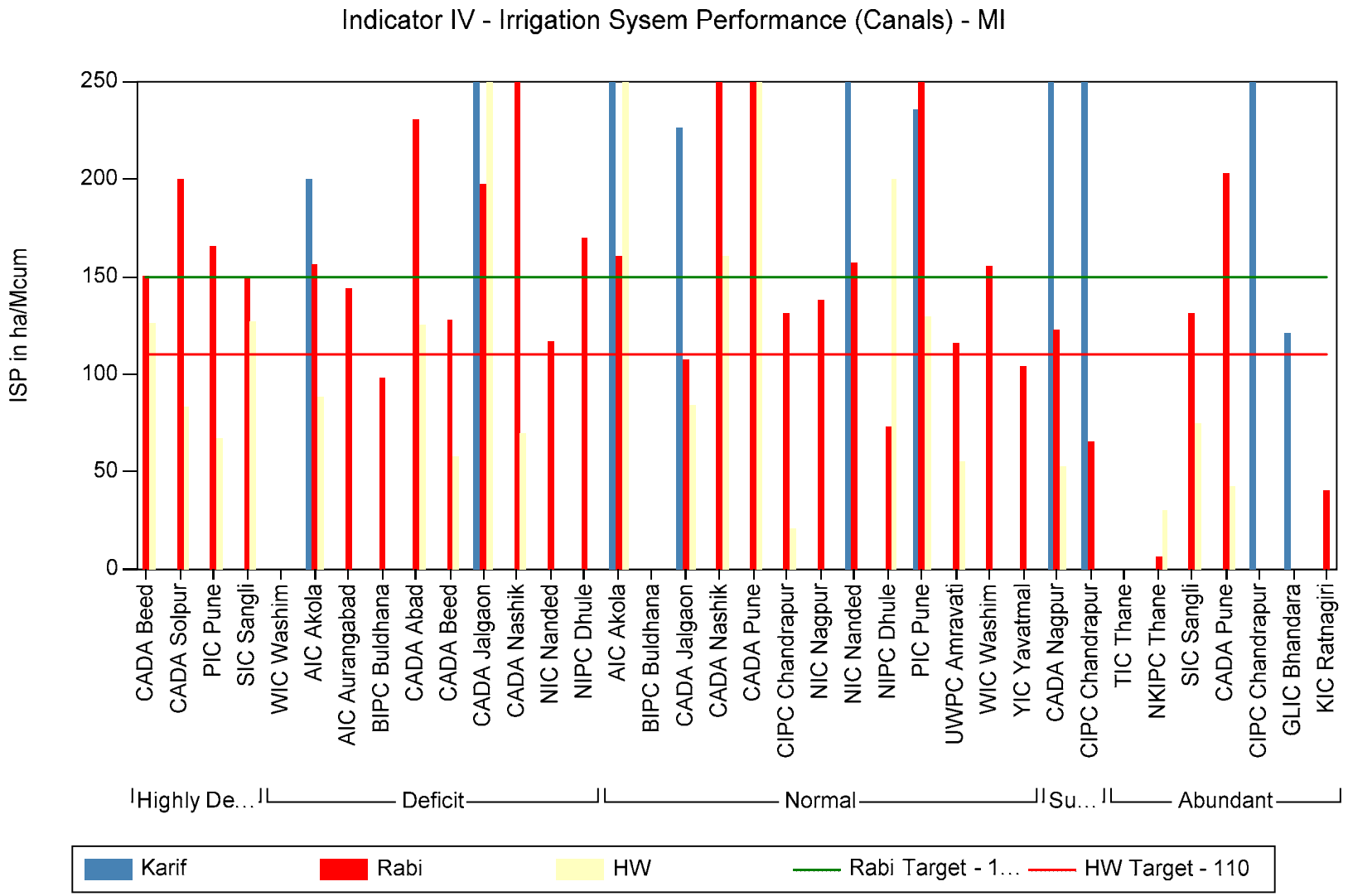
Circle	Evaporation Loss	MLStorage Observed	Percentage
Grand Total:	**621**	**2456**	**27**


Indicator III : Water Use Pattern - Minor Irrigation Tanks
Percentage
100
80
60
40
20
0
PIC Pune
CADA Beed
CADA Solpur
SIC Sangli
NIPC Dhule
CADA Beed
CADA Abad
NIC Nanded
CADA Jalgaon
CADA Nashik
AIC Aurangabad
AIC Akola
BIPC Buldhana
WIC Washim
WIC Washim
CADA Pune
PIC Pune
AIC Akola
YIC Yavatmal
UWPC Amravati
BIPC Buldhana
CADA Nashik
CADA Jalgaon
NIC Nanded
NIPC Dhule
CIPC Chandrapur
NIC Nagpur
CIPC Chandrapur
CADA Nagpur
GLIC Bhandara
CIPC Chandrapur
SIC Sangli
TIC Thane
NKIPC Thane
KIC Ratnagiri
CADA Pune
Highly De...
Deficit
Normal
Su...
Abundant
NI Use
Riv. Lift
Res. Lift
HW
Rabi
Kharif

Indicator III: Water Use Pattern - Minor Irrigation Tank (2009-10) - Page 1 of 1

Unit: Mcum

Circle	Kharif	Rabi	HW	Reservoir	Nluse	Evaporation	Leakage	Total
PIC Pune	0.00	3.77	1.57	12.50	3.48	10.42	14.47	46.21
CADA Beed	0.00	1.83	1.04	94.85	11.39	49.65	21.68	180.44
CADA Solpur	0.00	6.72	3.11	28.78	1.54	28.78	15.80	84.73
SIC Sangli	0.00	6.82	6.21	27.96	3.88	31.00	22.35	98.21
Highly Deficit	**0.00**	**19.14**	**11.93**	**164.08**	**20.29**	**119.85**	**74.30**	**409.59**
NIPC Dhule	0.00	0.20	0.00	0.20	0.00	0.13	0.09	0.62
CADA Beed	0.00	6.58	4.08	49.87	12.72	47.80	11.28	132.34
CADA Abad	0.00	7.45	0.96	13.84	4.65	36.81	14.80	78.51
NIC Nanded	0.00	0.06	0.00	2.55	1.02	10.27	8.46	22.35
CADA Jalgaon	0.10	3.19	0.62	15.02	5.51	10.82	6.39	41.65
CADA Nashik	0.00	2.73	5.58	38.17	3.50	14.76	9.52	74.26
AIC Aurangabad	0.00	2.08	0.00	7.27	4.62	14.46	1.50	29.93
AIC Akola	0.48	17.78	1.89	12.36	3.29	28.22	20.11	84.13
BIPC Buldhana	0.00	14.56	0.22	7.24	0.21	7.77	2.84	32.83
WIC Washim	0.00	0.00	0.00	0.24	2.17	1.53	0.07	4.01
Deficit	**0.58**	**54.63**	**13.35**	**146.76**	**37.69**	**172.57**	**75.05**	**500.62**
WIC Washim	0.00	0.50	0.00	4.49	7.26	7.95	1.08	21.28
CADA Pune	0.00	1.16	0.66	31.65	4.13	11.94	9.28	58.82
PIC Pune	0.68	6.50	5.93	62.63	7.28	28.07	15.64	126.72
AIC Akola	0.02	15.85	0.36	10.17	4.36	33.60	18.29	82.66
YIC Yavatmal	0.00	0.48	0.00	0.57	3.06	9.29	3.10	16.49
UWPC Amravati	0.00	3.33	1.45	0.05	0.00	1.78	0.01	6.62
BIPC Buldhana	0.00	0.00	0.00	1.24	0.15	1.85	0.00	3.24
CADA Nashik	0.00	1.65	1.56	31.31	2.07	7.57	7.52	51.67
CADA Jalgaon	1.41	52.33	14.08	3.21	14.90	39.93	14.86	140.72
NIC Nanded	0.45	2.27	0.00	7.03	0.71	11.82	7.54	29.82
NIPC Dhule	0.00	1.39	0.30	0.00	0.00	3.84	1.95	7.48
CIPC Chandrapur	0.00	5.77	0.19	0.80	0.35	3.90	4.11	15.12
NIC Nagpur	0.00	9.01	0.00	1.85	2.81	5.46	0.00	19.13
Normal	**2.56**	**100.24**	**24.53**	**155.01**	**47.08**	**166.98**	**83.37**	**579.77**
CIPC Chandrapur	12.66	2.55	0.00	0.00	0.00	21.53	1.04	37.78
CADA Nagpur	76.05	30.77	3.24	4.03	3.99	32.75	6.89	157.72
Surplus	**88.71**	**33.32**	**3.24**	**4.03**	**3.99**	**54.28**	**7.94**	**195.50**
GLIC Bhandara	7.18	0.00	0.00	0.00	0.62	2.22	0.52	10.54
CIPC Chandrapur	34.07	0.00	0.00	0.00	0.00	46.58	0.10	80.75
SIC Sangli	0.00	12.33	16.76	65.19	0.90	16.64	5.73	117.55
TIC Thane	0.00	54.54	7.12	2.80	15.17	22.41	20.20	122.24
NKIPC Thane	0.00	2.88	1.67	0.48	4.96	8.49	25.98	44.46
KIC Ratnagiri	0.00	16.11	0.00	0.20	2.44	7.95	50.68	77.38
CADA Pune	0.00	2.35	1.96	1.32	0.00	2.57	4.08	12.28
Abundant	**41.25**	**88.21**	**27.51**	**69.98**	**24.09**	**106.86**	**107.31**	**465.20**
Grand Total:	**133**	**296**	**81**	**540**	**133**	**621**	**348**	**2151**


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
AIC Akola
AIC Aurangabad
BIPC Buldhana
CADA Abad
CADA Beed
CADA Jalgaon
CADA Nashik
NIC Nanded
NIPC Dhule
AIC Akola
BIPC Buldhana
CADA Jalgaon
CADA Nashik
CADA Pune
CIPC Chandrapur
NIC Nagpur
NIC Nanded
NIPC Dhule
PIC Pune
UWPC Amravati
WIC Washim
YIC Yavatmal
CADA Nagpur
CIPC Chandrapur
TIC Thane
NKIPC Thane
SIC Sangli
CADA Pune
CIPC Chandrapur
GLIC Bhandara
KIC Ratnagiri
Highly De...
Deficit
Normal
Su...
Abundant
Karif
Rabi
HW
Rabi Target - 1...
HW Target - 110

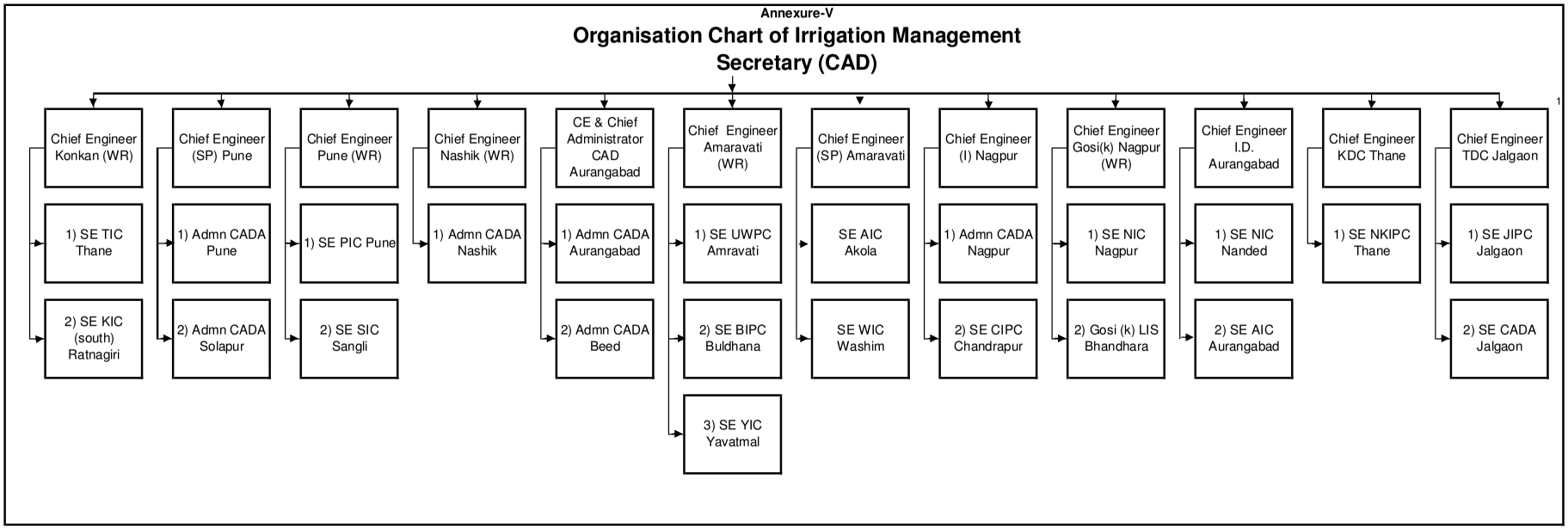
Indicator IV - Irrigation System Performance.

Unit: Ha/Mcum

Circle	Karif	Rabi	HW
CADA Beed	0.00	150.33	125.77
CADA Solpur	0.00	199.93	82.80
PIC Pune	0.00	165.68	67.10
SIC Sangli	0.00	149.40	126.73
Highly Deficit		**166.33**	**100.60**
WIC Washim	0.00	0.00	0.00
AIC Akola	200.00	156.86	87.83
AIC Aurangabad	0.00	144.23	0.00
BIPC Buldhana	0.00	98.59	0.00
CADA Abad	0.00	230.47	125.00
CADA Beed	0.00	127.66	58.09
CADA Jalgaon	500.00	197.49	264.52
CADA Nashik	0.00	252.38	70.07
NIC Nanded	0.00	116.67	0.00
NIPC Dhule	0.00	169.55	0.00
Deficit	**350.00**	**192.97**	**121.10**
AIC Akola	450.00	160.38	416.67
BIPC Buldhana	0.00	0.00	0.00
CADA Jalgaon	226.24	107.55	83.81
CADA Nashik	0.00	285.33	161.09
CADA Pune	0.00	307.76	257.58
CIPC Chandrapur	0.00	131.20	21.05
NIC Nagpur	0.00	138.21	0.00
NIC Nanded	293.33	157.71	0.00
NIPC Dhule	0.00	72.66	200.00
PIC Pune	235.29	316.62	129.77
UWPC Amravati	0.00	115.78	55.30
WIC Washim	0.00	156.00	0.00
YIC Yavatmal	0.00	104.17	0.00
Normal	**301.22**	**187.16**	**165.66**
CADA Nagpur	373.09	122.72	52.78
CIPC Chandrapur	299.21	65.49	0.00
Surplus	**336.15**	**122.72**	**52.78**
TIC Thane	0.00	0.00	0.00
NKIPC Thane	0.00	6.58	29.73
SIC Sangli	0.00	131.22	74.46
CADA Pune	0.00	202.98	42.35
CIPC Chandrapur	443.44	0.00	0.00
GLIC Bhandara	120.75	0.00	0.00
KIC Ratnagiri	0.00	40.01	0.00
Abundant	**282.10**	**113.59**	**48.85**
Grand Total:	**87**	**133**	**70**

Annexure-V

Organisation Chart of Irrigation Management



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 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
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 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
	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															