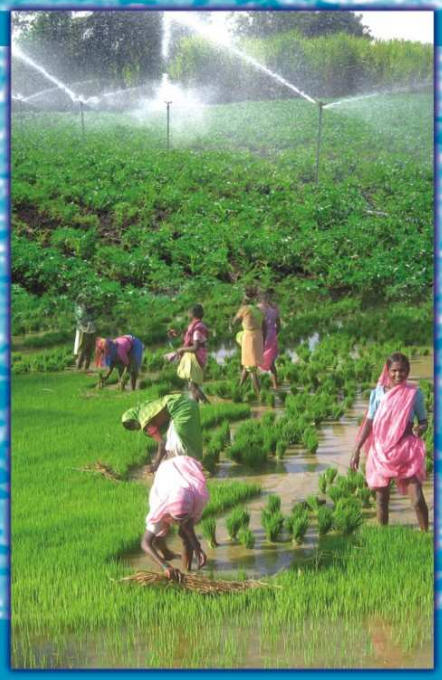
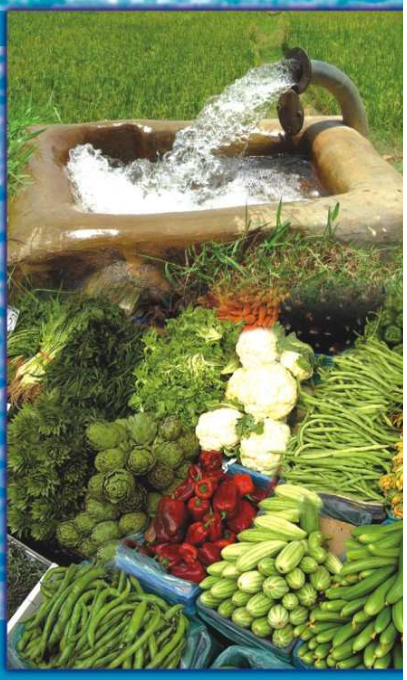
सत्यमेव जयते

Report On
WATER AUDITING OF IRRIGATION PROJECTS IN MAHARASHTRA STATE 2007-2008





WATER RESOURCES DEPARTMENT
Government Of Maharashtra, India
March 2009

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Report on
Water Audit of Irrigation Projects in Maharashtra
2007-08

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Government of Maharashtra
Water Resources Department
March 2009

FOREWORD

Water is a precious natural resource, basic human need, & key element in development. The geographical area of Maharashtra is divided into five main river basins with 25 Sub-basins. The 45% area of state is deficit & highly deficit in water resource. So efforts should be made for efficient utilization of available water.

A water audit determines the amount of water used in different sectors, lost in evaporation & transit losses in distribution system. Water auditing of irrigation projects, is necessary to see that the water use, evaporation & other losses are as per design. If there is any variation, water auditing enables to locate the reason for the same & facilitate suitable corrective measures.

Large number of Irrigation projects are constructed in Maharashtra to tap the water resources of the state. Irrigation potential to the tune of 4.331 Mha. is created by the end of June 2007 through 66 Major, 233 Medium & 2777 state sector minor irrigation projects. During last five years irrigation potential utilisation status improved from 1.685 Mha. to 2.764 Mha.

Water Resources Department has concentrated its efforts for efficient, economical & optimum use of available water in the storages with farmers participation in irrigation management. Water Auditing of irrigation projects is one of the sector improvement programme being implemented since 2003-04.

I, personally appreciate the sincere efforts taken by Shri R.B. Shukla, Chief Engineer and his office team for preparation of this report & an innovative attempt to analyse water account so as to have at a glance current Irrigation status at different administrative levels.

I also appreciate the co-operation extended by the Director General WALMI Aurangabad for printing this report before the scheduled period.

Comments & suggestions on this report will be appreciated.

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ABBREAVITIONS

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

Executive summary

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

Area is divided in to five major river basins. The Maharashtra water & Irrigation Commission (1999), has proposed delination of five river basins in to 25 sub basins. Classification of sub basins for planning on the basis of naturally available quantum of water is done in five plan groups.

Irrigation potential to the tune of 4.331 Mha is created by the end of June 2007 through 66 Major, 233 Medium & 2777 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**

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

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

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

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

During 2007-08, water accounts of 52 major projects (having 73 reservoirs), 199 medium projects (having 201 reservoirs) & 1756 State sector minor projects were audited. The water audit report is limited to these projects only. The decrease in total Nos of major projects is due to grouping of reservoirs in a complex project. The storages in the reservoirs in State on 15th October were as follows.

Sr. No.	Percent Storage	Major	Medium	Minor
1	80 to 100	42	127	1421
2	50 to 80	5	28	221
3	Below 50	5	44	114

There is increase of 36 projects over last year for water auditing.

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

Plan group	Water availability(Cum)/ha	Major (Reservoir)	Medium (Reservoir)	Minor	Total
Highly Deficit	Below 1500	1	36	324	361
Deficit	1501-3000	15	70	801	886
Normal	3001-8000	39	48	230	317
Surplus	8001-12000	7	30	86	123
Abundant	Above 12000	11	17	315	343
Total		**73**	**201**	**1756**	**2030**

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

Nine indicators,as mentioned below, were used for water auditing of Major projects in water Audit report of 2007-08.

I. Water Availability in Reservoirs on 15th October

II. Percentage of Actual Evaporation to Live Storage

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

III. Target and Achievement of Irrigation Potential Utilisation

IV. Water Use Pattern

V. Irrigation System Performance (For Canals)

VI. Percentage of Planned & Actual Non-Irrigation Use

VII. Percentage of Balance Unutilized Water to Live Storage.

VIII. Conveyance efficiency of main Canals

IX. Actual cropping pattern

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

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

I. Water Availability in Tanks on 15th October.

II. Percentage of Actual Evaporation to maximum Live Storage

III. Water Use Pattern

IV. Irrigation System Performance

After consolidating and analyzing the Water Accounts of 52 Major, 199 Medium and 1756 Minor Projects in the light of information supplied by the concerned field offices, the main observations are as listed below:

There is wide variation in actual evaporation to projected evaporation from 26% to 205%. The Vishnupuri, Mukane, Bhandardara, Bhama Asked and Jayakwadi Stage-I has less than 50% evaporation. The Katepurna, Itiadoh, Kanher, Dina & Tulsi has grater than 125% evaporation.

Actual irrigation water use on many projects was more than anticipated water use in PIP of the project. Still, the PIP of the following major projects were not yet prepared.

1) Darna 2) Goutami Godavari 3) Mukane 4) N.M. Weir 5) Bhama Asked 6) Bagh Complex 7) Itiadoh 8) Dhom 9) Kanher.

Also for 40 medium projects PIP is not prepared. For this indicator such projects are not taken in to account.

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

Annual actual Area irrigated on canal, reservoir, and river lift (of Major and Medium projects) as compared to PIP was 96 %. However the achievement on some projects (Pus, Chaskaman, Arunavati, Upper Penganga etc) was below 50% of the set target in PIP.

On the contrary achievement on Chanakapur (140), Hatnoor (278%), and Pench (152%) was much excessive over the planned area in PIP. Achievement on these projects is satisfactory but care should also be taken while preparing the PIP by considering the realistic availability of water. Irrigation System Performance attained on certain projects in Rabbi (Jayakwadi stage I & II, Purna, Arunavati, Pus, Hatnur, Lowor Wunna, Upper Penganga etc) was below the 75% of the state norms.

Irrigation System Performance observed in HW on Manar, manjara, Ghod, Wan, Chaskaman was satisfactory as compared to the state target. On rest of the projects there is a scope to improve the performance.

Realisation of good conveyance efficiency on main canals of some projects (Jayakwadi stage I & II, Purna, Pus, Upper Penganga, Kanher) but low ISP in either Rabbi or HW season suggest more transit losses on distribution system of the respective projects.

It is insisted that, field officers should sort out the realistic reasons for more transit lossess on distribution system and take suitable action for improvement.

Percentage of Leakages on MI projects is excessively high. (25% of the water used for irigation) There are number of projects where total available water is lost in evaporation and leakages.

Water Use:

At state level during the irrigation year 2007-08, actual live storage of 24442 Mcum was available on15th October 2007 against total design live storage of 27773 Mcum. On 52 Major, 199 Medium & 1756 Minor projects considered together (13272 + 2044+ 1490), 16806 Mcum of water was used on canals; Reservoir & River lift for irrigation purpose. Total Non Irrigation water use was (2942+228+115) 3285 Mcum, which is 13 % of the actual live storage. The total irrigation use is 69% of the actual live storage.

Water use on reservoir of all types of projects was (820+420+604) 1844 Mcum which is 9.11 % of the total irrigation water use.

Total Water loss on account of evaporation was 2473 Mcum (13 % of live storage), 781 Mcum (24%) & 624 Mcum (22%) on Major, Medium& Minor projects respectively. Total loss of water on account of evaporation at state level was 3878 Mcum (16%).

Data collected about 52 Major & 199 Medium projects Shows that, a gross Preliminary Irrigation Programme of (1205775 + 295230) 1501005 Ha. was framed during the irrigation year. Against the target, actual area irrigated was 1469322 ha (98 %).

Annual average ISP observed at the state level (excluding MI projects) was 96 ha/Mcum.

Unutilized storages at the end of irrigation year (excluding inflow in HW & design carry over), on Major and Medium projects were 1261 Mcum and 369 Mcum respectively. The total unutilized storage as compared to 15th October 2007 live storage was 7.5%.

Conclusions

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

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

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

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

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

Field officers are required to concentrate on full utilisation of available water.

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Chapter-1

Introduction

1.1.1 Background

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

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

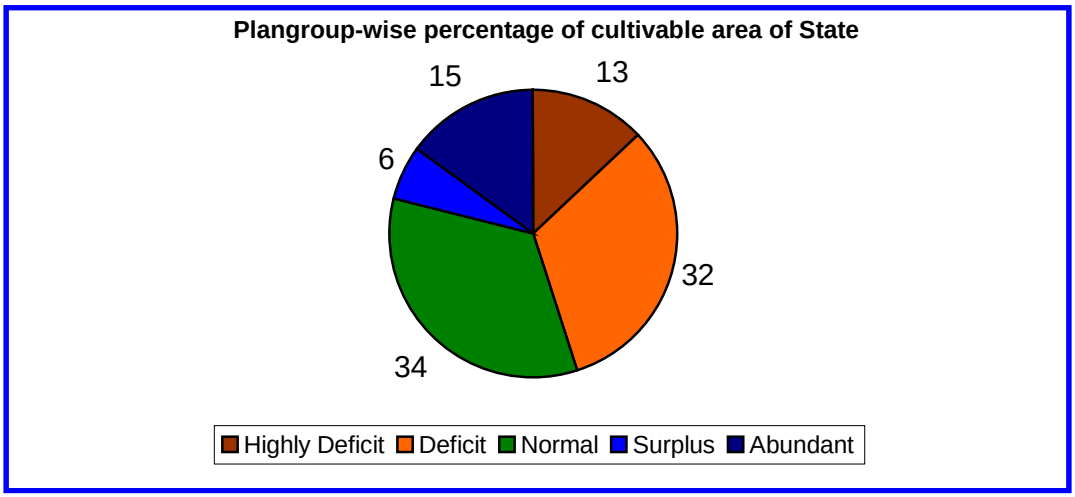
The sub basins are as follows:

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

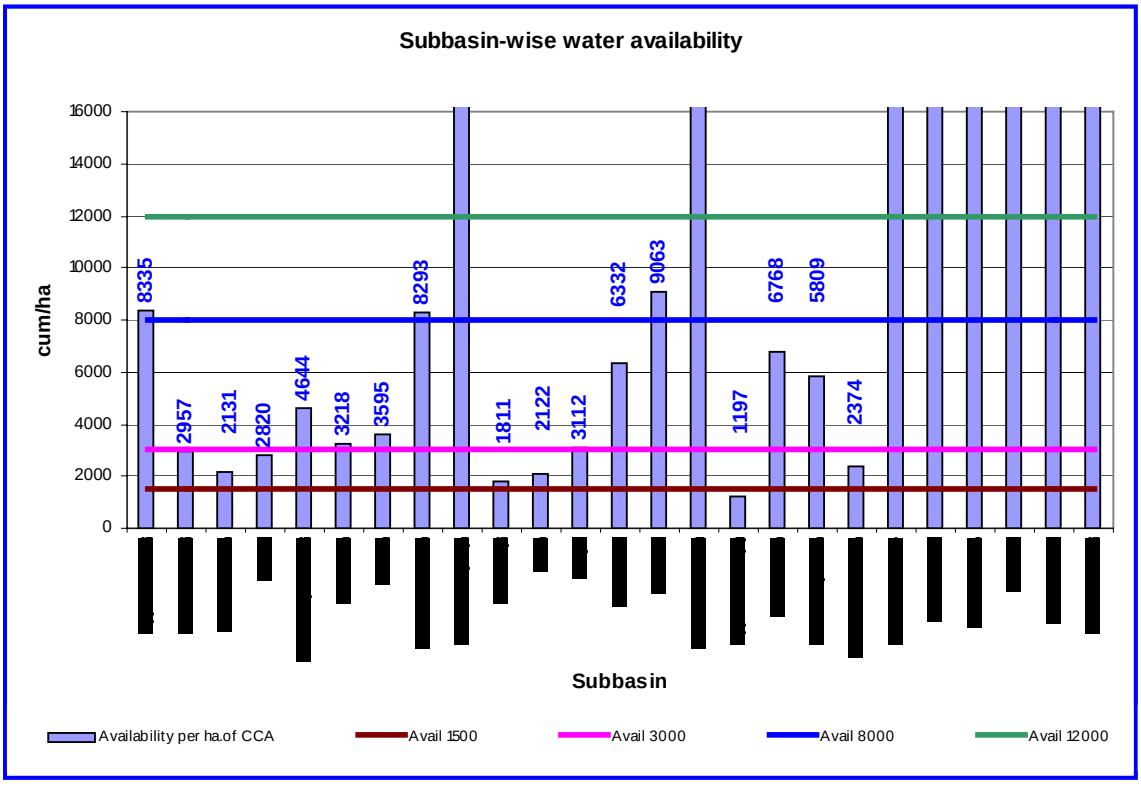
Sr. No.	River Basin	Names of Sub basins	Abbreviated name	classification for planning on the basis of availability of natural water per unit CCA
Sr. No.	River Basin	Names of Sub basins	Abbreviated name	classification for planning on the basis of availability of natural water per unit CCA
III	Narmada	14)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

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

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



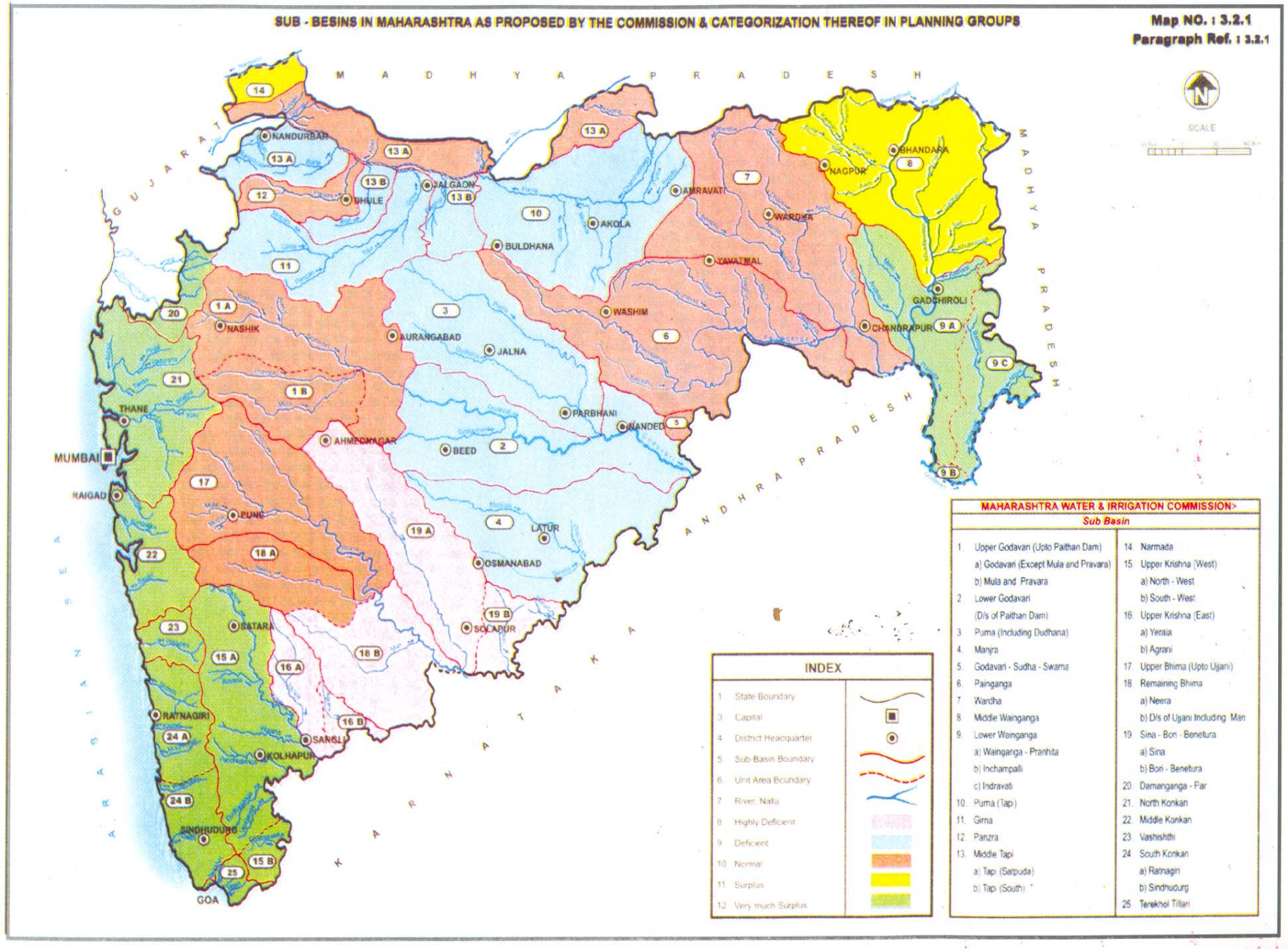
A graph showing basin-wise availability of water is shown below.



From above graph it is seen that, there are eight sub basins from highly deficit & deficit plan group, which has water availability less than 3000 cum per unit CCA which is a minimum basic water requirement for agriculture. However, these sub basins along with other sub basins are likely to get suffered more in near future considering continuous increase in Non irrigation water use due to growth in population & industrialization. Water Auditing as mentioned in state water policy is an efficient management tool to check & curb the excessive losses, improve Irrigation System performance. The State has already started Water auditing of irrigation projects since last 5 years. Rise in Non irrigation water use from 3267Mcum to 5541 Mcum in last 11 years underlines the urgency of water auditing in Non irrigation water use sector also.

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

Map NO. : 3.2.1
Paragraph Ref. : 3.2.1



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 - Swarna
6. Painganga
7. Wardha
8. Middle Wainganga
9. Lower Wainganga
   a) Wainganga - Pranhita
   b) Inchampalli
   c) Indravati
10. Purna (Tap)
11. Girna
12. Panzra
13. Middle Tapi
    a) Tap (Satpuda)
    b) Tap (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 Ujani)
18. Remaining Bhima
    a) Neera
    b) D/s of Ujani 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 leakage & the cost of this lost utility. Comprehensive Water Audit can give a detailed profile of distribution system & water users, there by facilitating easier & effective management resources and improved reliability.

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

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

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

1.3.0 Water Auditing Scenario:

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

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 4.331 Mha is created by the end of June 2007 through 66 Major, 233 Medium & 2777 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**

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
(Ref: Irrigation Status Report, 2007-08 GOM)										

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

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

1.5.0 Administrative set up for Irrigation Management

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

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

1.6.0 Water Audit Procedure

1.6.1 Checking Water Account

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

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

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

iv) 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.

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

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

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

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

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

1.6.2 Inspection of Irrigation offices

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

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

i) Daily lake level & water storage register.

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

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

iv) Agency-wise non irrigation water use register.

v) Register for leakages through dam.

vi) Record of measurement of irrigated area

vii) Crop-wise area assessed.

viii) Revenue recovered

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

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

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

1.7.0 Water Audit Report 2007-08

1.7.1 During 2007-08, water accounts of 52 major projects (having 73 reservoirs), 199 medium projects (having 201 reservoirs) & 1756 State sector minor projects were received and audited. The water audit report is limited to these projects only. The decrease in total Nos of major projects is due to grouping of reservoirs in a complex project.

At present, there are 63 divisions which are looking after the irrigation management mainly of completed projects in the State. There are many projects

under construction where partial irrigation potential is created. On these projects irrigation is managed by construction organization only. Obviously, Water accounts of such projects are not received; hence those projects are not covered in this report.

1.7.2 The annual office inspection Programme for 2008-09 is prepared and communicated to respective management circles. The inspection of management division/ Sub-division / section offices is in progress. The status of inspection (Audit year 2007-08) from September 2008 till December 2008 is as below:

Water audit unit No.	Number of Divisions	
	Total	Inspected
1	20	7
2	21	6
3	22	6
Total	63	19

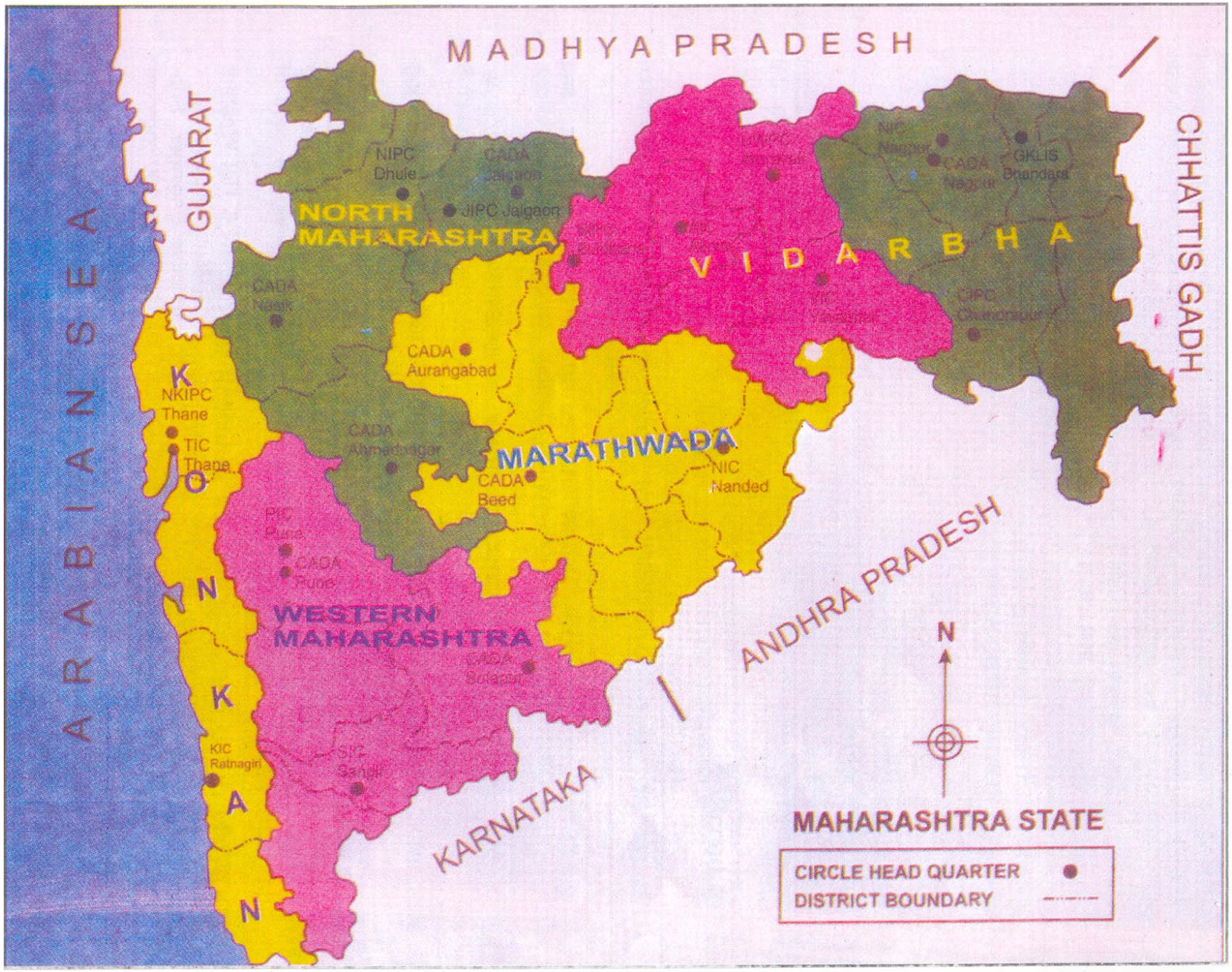
1.8.0 Supporting activities taken for improvement in IWM

1.8.1 Guidelines for efficient and economical use of water

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

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

MAP SHOWING LOCATION OF IRRIGATION CIRCLES



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

Important Government Resolutions / Circulars related with Water Account and Irrigation Management.		
Sr. No.	Particulars	Details of Acts / GRs / Circulars
1	Maharashtra Irrigation Act 1976	
2	Maharashtra Management of Irrigation System by Farmers Act 2005	
3	Maharashtra Water Resources Regulatory Authority Act 2005	
4	Percentage checking of Cropped Area by Executive Engineer, Sub Divisional Engineer & Section Officer	P.W.D. Hand Book No. 25, Item No. 10.
5	Silt accumulation in live storage	Circular BKs 1091 / 468 / 91 / IMP dated 5.5.1992
6	Setting up Canal Advisory Committees	GR (Marathi) CME / 1099 / 179 / 99 IM (P) dated 22.8.2000.
7	Guidelines for Water Use in Reservoirs	GR Misc./ 10 (19/2000 IMP) dated 7.3.2001
8	Farmers' Participation in Irrigation Water Management	GR WUS / 1991 / 417 / IMP dated 5.7.2001 and 23.7.2001

Sr. No.	Particulars	Details of Acts / GRs / Circulars
9	Account of Water in Reservoirs	GR (Marathi) Misc. 11(760/01 IMP) dated 5.12.2001
10	Guidelines for sanction to lifting water from reservoir, canal, notified river etc.	GR (Marathi) Misc. 10.01/ (378/2001) IM (P) Dated 21.11.2002
11	Irrigation Management and Irrigation Sanctions	Misc. / 10 / 87 / 2001 / IMP dated 31.3.2003
12	Maharashtra State Water Policy 2003	GR Misc. 1002 / 250 / 2002 IM(P) dated 30.7.2003
13	Water Account and Audit Procedure	CDA / 1002 / 226 / 2002 CAD(W) dated 26.6.2003, 12.11.2003 and 14.9.2005
14	Non Irrigation water supply, agreement and assessment of water revenue for NI water use	GR (Marathi) NIWS / 10 / 2001 / (713/2001) dated 11.06.03 and NIWS / 10 / 1001 (713/2001) dated 20.05.2004
15	Watershed Development Works can be taken in tail command if water does not reach the tail end.	GR (Marathi) EGS-1005 / 142 / EGS-6, dated 6.9.2005

Sr. No.	Particulars	Details of Acts / GRs / Circulars
16	Keeping & maintaining office records ,documents, files about IWM	Misc/2004(140/04)IM(P) Dt.29/1/2005
17	Measurement book for NI use & bill recording	Misc/WSR/1006/(135/06) IM(P) Dt.27/4/2006
18	Increase in water rates for NI use	WSR/2006/(396/03) IM(P) Dt.31/7/2006
19	Subsidy in M&R grants to WUA	WUA 1007/(323/2007) IM(P) Dt.22/6/2007
20	50% Concession in water rates for Wheat, Rice, Gram crops under central Govt.food security programme	Misc/2007/(561/2007) IM(P) Dt.11/1/2008

Chapter-2

Annual Water Accounts 2007-08

2.1.0 Rainfall during 2007-08

The State received rains from South-West Monsoon from 13 June 2007. Rainfall received during the period from 13 June to 31th October 2007 was more than normal rainfall. As per standards specified by IMD, out of 355 Talukas in the state, in 52 Taluka the rainfall received was deficient (between 41 to 80%) whereas in 189 Talukas it was normal (81 to 120%). It was more than 120% of average rainfall in 114 Talukas.

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

Sr. No.	Percent Storage	Major	Medium	Minor
1	80 to 100	42	127	1421
2	50 to 80	5	28	221
3	Below 50	5	44	114

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

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

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

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

Though irrigation potential of 4.331 Mha is created through 3076 projects, the water accounts of 2007 projects were received in MWRDC office and the same were scrutinized. There is increase of 36 projects over last year for auditing.

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

Plan group	Major (Reservoir)	Medium (Reservoir)	Minor	Total
Highly Deficit	1	36	324	361
Deficit	15	70	801	886
Normal	39	48	230	317
Surplus	7	30	86	123
Abundant	11	17	315	343
Total	**73**	**201**	**1756**	**2030**

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

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

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

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

2.2.0 About this report:

Nine indicators were used for water auditing of Major and Medium projects in water Audit report of 2006-07.

For water audit report 2007-08, the nine indicators are selected for major projects. Those are;

I. Water Availability in Reservoirs on 15th October

II. Percentage of Actual Evaporation to Live Storage

II (A) Percentage of Actual Evaporation to Projected Evaporation.

III. Target and Achievement of Irrigation Potential Utilisation

IV. Water Use Pattern

V. Irrigation System Performance (For Canals)

VII. Percentage of Planned & Actual Non-Irrigation Use

VII. Percentage of Balance Unutilized Water to Live Storage.

VIII. Conveyance efficiency of main Canals

X. Actual cropping pattern

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

For Major projects additional indicator number II (A) is introduced as per instructions by Government.

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 maximum Live Storage

III. Water Use Pattern

IV. Irrigation System Performance

2.2.1 Water Availability in Reservoirs:

The availability of water in the reservoirs depend upon the rainfall in the catchments, storages created on the upstream, watershed development works completed in the catchments. Moreover, for major reservoirs, which perform as flood control measures also, the reservoir filling is governed by reservoir operation schedule and earlier floods are required to be let out in the rivers and reservoir filling is expected at the end of monsoon. This indicator gives percentage of live storage available on the on-set of Rabi season i.e. on 15th October (15th December for projects in Konkan region) for use to the designed live storage of the project.

2.2.2 Percentage of Actual Evaporation to Live Storage:

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

2.2.3 Target and Achievement of Irrigation Potential Utilisation:

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

2.2.4 Water Use Pattern:

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

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

2.2.5 Irrigation System Performance:

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

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

2.2.6 Percentage of Planned & Actual Non Irrigation Use

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

2.2.7 Percentage of Balance Unutilized Water to Live Storage

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

2.2.8 Conveyance Efficiency of main Canals

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

2.2.9 Actual Cropping pattern

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

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Chapter-3

Observations and Conclusions

Major Projects

Indicator I: Water Availability in Reservoirs

Highly deficit Plangroup:

CADA Solapur: (Bhima) Ujjani project is having 110% live storage due to increase in height of dam.

Deficit Plangroup:

AIC Akola: Actual Live storage percentage with 15th October design storage on projects under AIC Akola (Katepurna, Nalganga) was 93 % & 47% during the irrigation year 2007-08.

BIPC Buldhana: Wan project under BIPC was also 100% full on 15th of October.

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

CADA Beed: Manjra project has received 98% live storage for the year 2007-08, whereas in both Majalgaon and Lower Terna have received 83% . In the year 2006-07 all the three projects had 100% yield.

CADA Jalgaon & CADA Nashik: Girna project under CADA Jalgaon & Chankapur project under CADA Nashik received 99 % & 100% live storage respectively.

NIC Nanded: Manar has received 97% live storage which has slightly decreased from 99% (2006-07). Whereas in Purna project yield has come down to 49% in 2007-08 from 100% in 2006-07.

In Vishnupuri Project yield received is 35% which is lesser than last year

Normal Plangroup:

AIC Akola & YIC Yeotmal: Each, Arunawati & Pus project was 64% & 100 % full on 15th of October.

CADA Jalgaon & CADA Nashik: All the projects under these circles are having consistency in availability. The percentage of live storage varies from 90 to 100%.

CADA Pune: In Ghod and Kukdi projects the availability of water is 100% last year also it was 100%.

CIPC Chandrapur: 100% Live Storage was available during this year for Bor project. Live storage was comparatively more compared to its last year's storage. (69%)

NIC Nanded: In Upper Penganga project the yield for the project has decreased from 100% (2006-07) to 90% (2007-08).

PIC Pune: All the projects are having consistency in availability of water. Overall availability of water was 99% only Bhama Askhed is having 38% availability of water this year, Last year it was 27%.

UWPC Amrawati: Upper Wardha project was 100% full on 15th October.

CADA Nagpur: During the irrigation year, Lower Wunna project had 99% designed live storage. Last year this was 100%

Surplus Plan group:

CADA Nagpur: On and average live storage of Bagh, Itiadoh & Pench project on 15th October was 81 %. Among these projects, Bagh had 63 % of designed live storage, whereas Pench & Itiadoh projects had 78% & 95% designed live storage respectively.

Abundant Plangroup:

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

CIPC Chandrapur: Percentages of actual live storage to designed live storage on Asolamendha & Dina project were 100% & 68 % respectively. During last year storages in Asolamendha & Dina were 65% & 78% respectively.

SIC Sangli:- Dudhganga, Warna, Tulsi & Radhanagri, projects are having 99 to 100 % live storage since last three years.

TIC Thane:- Projects under this Circle having live storages during 2007-08 are as under, Bhatsa (84%), Kal-Amba (77%), Surya (61%). During the last year overall live storage in the above said projects was 38%.

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

Highly deficit plan group:-

CADA Solapur: On Bhima (Ujjani) Project percentage of evaporation to live storage is 26% it is reduced by 3% compared with last year.

Deficit Plangroup:

AIC Akola: Percentage of evaporation as compared to 15th October live storage on projects Katepurna & Nalganga under Akola Irrigation Circle was 23% which is more than project report & 27% respectively. Irrigation water use in HW & reservation of part storage for Non Irrigation use may be the prime reasons for higher percentage of evaporation of above projects. In Nalganga project the % evaporation seems to be increased due to lesser live storage (47%) in this year compared to last year (100%).

BIPC Buldhana: Though 100% of storage on 15th October was carried to HW season for HW irrigation & NI water use, the Evaporation percentage with respect to live storage on wan project was reported as 6% only. This indicates that, there are some discrepancies in evaporation data collection. Project authorities are advised to explore the current procedure and rectify it whereever necessary.

CADA Aurangabad: Jayakwadi project stage-I has 14% evaporation losses that are within the permissible limit.There is slight reduction in evaporation over last years 16%.

CADA Beed: Percentage of evaporation in Lower Terna, Manjra & Majalgaon has 46, 34 & 32 respectively,In Lower Terna & Manjra project the higher % of evaporation is due to incorrect mesh factor i.e.1.444 instead of 1.144. In Manjra Project there is lesser utilisation of water in Rabi season and more in HW season whereas in Lower Terna project 16% unutilised water also affected the percentage of evaporation. The field officers are required to be more vigilant for proper utilisation of water and calculate the evaporation losses with correct factors.

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

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

NIC Nanded: In Manar project the actual evaporation is 17 % which has though slightly increased over last year (15%), is within the permissible limit. In Vishnupuri the evaporation losses though seems to be more (36%) compared to live storage as on 15 th Oct,as the project is being regenerated continuously from Godavari river even after 15th Oct.

Normal Plangroup:

YIC Yeotmal: In case of Arunawati project, evaporation is high as much as 30%. Last year also, the ratio was 30%. The ratio was 34% & 30% since last two years. There fore, field officers were suggested to confirm the evaporation rate by verifying the procedure for data collection and empirical constants used while evaluating the evaporation loss. However, the data received for the year 2007-08 confirms that project authorities have not taken any requisite action regarding the matter so far.

AIC Akola: Evaporation percentage as compared to live storage in case of Pus project (15%) appears to be in normal range.

CADA Jalgaon: In Hatnur project, the percentage of evaporation is 40, which is in conformity with the projected value (42%). More non irrigation use (113.37 Mcum) &

27.58 Mcum water use in hot weather season on reservoir lift has contributed to more evaporation.

CADA Nashik: In all the projects under CADA Nashik, the percentage of evaporation is varying from 2% to 12%, which are in conformity with the projected values.

CADA Pune: In Ghod and Kukdi projects the percentage of evaporation is 24 and 17.5 percent respectively. The overall percentage of evaporation is increased from 16.5% to 20.75% this year as compared to last year.

CIPC Chandrapur: On Bor project, 30% of live storage created on 15th October was unutilized at the end of Rabi Season. Still the percentage of evaporation with respect to live storage is just 7% only. The low percentage of evaporation shows that, the evaporation data collection is erroneous. These facts were brought to the notice of field officers last year also. However, it appears that field officers have not taken suitable action for getting the accurate evaporation data.

NIC Nanded: In Upper penganga project the percentage of evaporation is 14% for 2007-08 which is within the permissible limit.

PIC Pune: Khadakwasla, Pawna, N.R.B.C. (Veer) and N.L.B.C. (Bhatghar) all the projects are having 7 to 9 percent evaporation lossess. Last year it was 8 to 9%. In Bhama, Askhed the evaporation losses is 7% as compared to 21% of last years evaporation losses. In Chaskaman project the evaporation losses is 5%.

UWPC Amravati: Evaporation losses (18%) on Upper Wardha project under UWPC Amarawati commensurate with the project report.

CADA Nagpur: Out of 189.815 Mcum Live storage created on Lower Wunna project, 35.933 Mcum of water is lost through evaporation. The ratio of evaporation to live storage works out to 19% which is on higher side to some extent. But less in comparison to last year (22%) data. Field officers are expected to explore the reasons for high rate of evaporation data recorded at the project.

Surplus Plan group:

CADA Nagpur: Evaporation losses on Bagh & Pench & Itiadoh projects are 15.37 & 8% & 29% respectively. Bagh, Pench & Itiadoh projects are from same meteorological area and had more or less same water use conditions evaporation losses are more for Itiadoh project. Project Authorities may explore the reasons for different rate of evaporation.

Abundant Plangroup:

CADA Pune : In Dhom and Kanher projects have 9% and 10% evaporation losses respectively which decreased by 1% in Dhom project.

SIC Sangli:- Projects under this Circle, those are Dhudhgana (4%), Warna(3%), Tulsi (19%), Radhanagri (7%) evaporation, % reduced by 2% on Tulshi and 2% increased in Radhanagari project,

CIPC Chandrapur: Evaporation losses on Asolamendha (29%) as compared to 15th October storage (56.38 Mcum) are comparatively high. In asolamendha project the % evaporation is reduced due to 100% live storage in this year against 65% live storage of last year.

TIC Thane:- Projects under this Circle, those are Bhatsa (3%), Kalamba (3%), Surya (8%).

Indicator III: Target & achievement of Irrigation potential utilisation.

Highly deficit plan group:-

CADA Solapur: Total area irrigated during the irrigation year on Bhima (Ujjani) project is 99% of PIP.

Deficit Plangroup:

AIC Akola: Total area irrigated during the irrigation year on projects under the circle is 90% of the PIP. If projects under the circle are considered individually, it appears that achievement on Nalganga project is 62% of the Preliminary Irrigation Programme that of Katepurna is 118% Project Authorities were advised previously to sort out the realistic reasons for not achieving the target. In Nalganga project it appears that action is not taken.

BIPC Buldhana: Wan project authorities are also again advised to determine the real causes for low (65%) achievement in irrigated area against the set PIP.

CADA Aurangabad & CADA Beed : The achievement of PIP target in Jayakwadi project stage-I (combinely PLBC & PRBC) is 68%.

CADA Beed: The percentage of achievement to PIP target in respect of Majalgaon & Manjra is 68% & 99% respectively, where as in Lower Terna, the achievement is13% more than PIP target, this is due to more irrigated area in rabi season against the provision in PIP.

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

CADA Nashik: In Chankapur project under CADA Nashik, total area irrigated is 1.4 times more than the total area as per PIP. This is mainly due to increased irrigation on canal in Rabi season (130%) & 131 ha area irrigated in H.W. season against provision of 43 ha.in PIP.

NIC Nanded: The achievement of PIP target in Vishnupuri , Manar & Purna is 92%, ,108% 114% respectively which is good.

AIC Aurangabad : The percentage achievement of NMCanal(express canal) PIP target is very low i.e., 18%.,being an ongoing project.

Normal Plangroup:

YIC Yeotmal: According to field officers, canal system has reduced discharge carrying capacity, particularly at tail portion of the system due to deteriorated condition. There fore**,** on Arunavati project, total area Irrigated is just 42% of the PIP.

AIC Akola: Performance of Pus project is quite unsatisfactory as irrigated area is 27% of the PIP.

CADA Jalgaon: In Hatnur Project,the area considered in PIP was fully irrigated.

CADA Nashik: In all the projects except Bhandardara the area considered in PIP was fully irrigated. However, in Bhandardara Project, the actual area irrigated was 90% of that considered in PIP.

CADA Pune: In Kukdi project the 98.5% area is utilised as compare to P.I.P. area. But in Ghod project it is 91%.

CIPC Chandrapur: Percentage of actual area irrigated to PIP is 42%. It is less as compared to last year's irrigation (51%)

NIC Nanded: In Upper Penganga project the achievement is very low just 28%. The field officers are required to be more attentive to increase irrigated area in rabi & HW seasons, to achieve the PIP target by utilizing maximum available water. This trend was observed last year also.

PIC Pune: In Khadakwasla, Pawna the average 100% utilization of area as compare to P.I.P. but in chastkaman it is only 45% and in NRBC and NLBC it is 95%.

UWPC Amravati: On Upper Wardha project, though PIP was framed for 29000 ha area, actual area irrigated is 19406 ha only, which is 67 % of the set target. Low demand for cotton which has more shares in the Rabi sown area & striking numbers of wells in command area may be responsible for low achievement in area irrigated on canals & reservoir. Project Authorities are advised to motivate people to take water for cotton also.

CADA Nagpur: Total area irrigated on Lower Wunna project is 6000 ha against 10905 ha as planned in PIP works out to 49% only. It is less as area irrigated during last year (8549 ha.)

Surplus Plan group:

CADA Nagpur: Total area irrigated on projects under the circle is 129773 ha as against 132172 ha irrigated during last year.

Abundant Plangroup:

CADA Pune: In Dhom and Kanher projects the P.I.P. area figures were not available.

CIPC Chandrapur: Asolamendha & Dina projects under this circle are predominantly kharif paddy grown projects & irrigation is on agreement basis. There fore, actual area irrigated is 93% & 98% of planned area in PIP.

SIC Sangli:- The performance of the projects under this Circle are as under, Warna (71%), Tulsi (61%), Radhanagari (95%). & Dhudhganga (69%).

TIC Thane:- The performance of the projects under this Circle are as under Bhatsa (86%), Kal-Amba (100%) & Surya (63%).

Indicator – IV: Water Use Pattern

Highly deficit plan group:-

CADA Solapur: Performance of the Bhima (Ujjani) Project of water use, are as under, i.e. on irrigation on canal, canal lift, Reservoir lift River lift, NI use, and loses etc. with respect to P.I.P.

Evaporation is 4% Less than PIP Provision.

NI use is 3% less than PIP Provision.

Water provision for irrigation is made on canal in (PIP) and part utilization of it is on reservoir & river lift. Overall water utilization is 12% more with respect to (PIP) provisions.

Deficit Plangroup:

AIC Akola: Out of 80.495 Mcum of gross utilization on Katepurna project, 34 Mcum & 21.75 Mcum of water is used for irrigation & Non irrigation purpose respectively. On Nalganga project 24.89 Mcum water is used for irrigation.

BIPC Buldhana: On Wan project, more than 82% of total water utilization is for irrigation purpose. Water use each in Rabi & HW season.

CADA Beed: In Jayakwadi project stage-II (Majalgoan) the actual use in kharif and rabi is more than PIP, whereas it is less than PIP in HW.

In Lower Terna project the utilization is fairly tallies with PIP.

In Manjra project water used in Rabi by canal flow is 150% of PIP where as NI use is reduced to 65 % of PIP

CADA Aurangabad & CADA Beed: In Jayakwadi project stage-I the utilisation in kharif season is more than the PIP provision, the actual use for irrigation by canal in Rabi is less than PIP.

NIC Nanded: In Manar project water utilisation by canal flow for irrigation is 81% of total utilisation. Utilisation in HW is against the PIP

In Purna project water utilisation by canal in Rabi & HW is more by 40% & 15% respectively than the provision in PIP, where as NI use is reduced by 30%.Field officers should vigilant in preparing the realistic PIP & fulfill it accordingly .

In Vishnupuri project the water utilisation by canal flow is only in rabi season.

AICAurangabad: In NMCanal only 65% of water is being utilized against the PIP provision.Though the project is ongoing, proper watch on water use & irrigated area is needed.

CADA Jalgaon: In Girna project, the major water use (51%) is in Rabi season.

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

Normal Plangroup:

YIC Yeotmal: Water utilised 59% to total storage for irrigation on Arunavati project.

AIC Akola: On Pus project, 66% of total storage (548.14Mcum) is utilised (59.979 Mcum) is for canal Irrigation & reservoir lift is 16.598 Mcum.

CADA Jalgaon: In Hatnur project, the water use for irrigation by reservoir lift with compared to annual water use by canals is lowered from 66% (2006-07) to 48% (2007-08) with increase in area under flow irrigation.

CADA Nashik: In Darna, 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.

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

CIPC Chandrapur: On Bor project, water use for irrigation in Rabi & HW is 61.79 & 23.48 Mcum respectively. It indicates more HW utilisation compared to last year (15.13 Mcum)

NICNanded: In Upper penganga the water utilisation by canal flow in rabi season is 45% of total utilisation.

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

In NRBC and NLBC projects the water use for irrigation in all seasons is good.

UWPC Amrawati: On Upper Wardha project 60% of Total storage (548.14 Mcum) is utilised (327.038 Mcum) in Rabbi & HW Season which is comparatively less than previous Irrigation year though the project is 100% full of storage on 15th October. Water use for Irrigation on reservoir lift is 16.598 Mcum.

CADA Nagpur: On Lower Wunna project, 57% of total utilization of water (115.44 Mcum) is predominantly for irrigation in Rabi & HW season. Water use for irrigation purpose on canal in Rabi is 51.069 Mcum.

Surplus Plan group:

CADA Nagpur: Bagh, Itiadoh, & Pench projects are paddy predominant projects. Most of the water is used for Kharif & HW paddy crop only. Project wise water use for irrigation as compared to gross use on Bagh, Itiadoh & Pench is 90%, 82% & 89% respectively. On Pench project percentage of irrigation water use in Kharif, Rabi & HW is about 27%, 48%, & 16% of total water use respectively. 213.87 Mcum water is used for Non irrigation purpose on Pench project.

Abundant Plangroup:

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

SIC Sangli:- On Dhudhganga project NI use 21% Less than PIP provision, & most of the irrigation done on river lift against the water provision made on canal utilization in (PIP). Same situation like Dhudhganga project, has been observed on Warna, Tulsi, & Radhanagari projects under this Circle.

CIPC Chandrapur: Kharif season is the principle season on Asolamendha & Dina projects. Irrigation water utilization for Kharif paddy on these projects is 69.283 & 28.942 Mcum respectively.

TIC Thane:- On Bhatsa & Surya Project NI is 19% more & 8 % Less than the PIP provisions.

Indicator – V: Irrigation System Performance (Canals)

Highly deficit plan group:-

CADA Solapur: Performance regarding irrigation efficiencies on Bhima (Ujjani) project in Kharif, Rabi & H.W. is 33, 53 & 44 Ha/Mcum respectively.

Irrigation efficiencies on canal utilization needs to be improved compared with the state target. Reason stated for lower down efficiency is that providing more nos. of rotation. This year three rotation given as per field requirement, last year with two rotation irrigation were done.

Deficit Plangroup:

AIC Akola: On Katepurna project, ISP observed in Rabi season is 151 ha/ Mcum which is appreciable compared to the state norm. However, ISP realized in HW is quite high (389ha/Mcum). On Nalganga project, ISP observed in Rabi season is100ha/Mcum. It is again advised to Project Authorities to explore the reasons for low realization of ISP in Rabbi Season as IWM over large portion of command area is handed over to WUA & water is supplied on volumetric basis.

BIPC Buldhana: ISP of Wan project is 105 Ha/ Mcum which very less than state Norm where as ISP in HW season is very high than the state Norm (151ha/Mcum). Late sowing of wheat in Rabi & irrigation rotations up to first rotation of HW may be the reason for ISP in Rabi & HW

CADA Beed: All the three projects i.e., Majalgaon, Manjra & Lower Terna, the ISP have not reached the State target specially performance of Majalgaon is very poor in both Rabi & HW season. The field officers have to take more efforts to achieve the targets.

CADA Aurangabad & CADA Beed : In Jayakwadi project stage-I the irrigation system performance is low (Rabi 68 ha/Mcum & HW 48 ha/Mcum) than the required norms 150 & 110 ha/Mcum respectively, performance is lowered as compared to the last year (87 & 68 ha/Mcum), the field officers have to take more efforts to achieve the targets.

NIC Nanded: In Purna project the performance is of required norms and in Manar project it is 75% to required norms for rabi. The field officers have to take efforts to achieve the required norms.

AIC Aurangabad:The ISP of NM canal flow is very low i.e., 29 &13 ha/Mcum.in Rabi and HW respectively.

CADA Jalgaon: In Girna project, the ISP is lowered from 66ha/Mcum (2006-07) to 65ha/Mcum(2007-08) in Rabi season.However there is increase in the irrigation system performance in H.W. season from 70 ha/Mcum (2006-07) to 83 ha/Mcum (2007-08) . But still the ISP is below Govt norms. According to field officers, this is due to 50 to 60 years old canal system under Jamda weir & pervious strata in tail reach.

CADA Nashik: In Chankapur project, there is no irrigation in HW season. The irrigation system performance in Rabi season is improved from 142 ha/Mcum (2006-07) to 150 ha/ Mcum (2007-08) with 3 rotation.

Normal Plangroup:

YIC Yeotmal**:** ISP on Arunavati project in Rabi and HW were 34 Ha/ Mcum & 14 Ha/Mcum respectively, which are too low as compared to the state target. According to Project Authorities, due to appreciable leakages through CD works & reluctance of farmers to night irrigation, transit losses are more in the canal.

AIC Akola: In case of Lower Pus, ISP observed for Rabi & HW is 63 & 17 Ha/ Mcum respectively only. No change in ISP compared to last two years performance indicates that, Project Authorities has not taken suitable action for improving the ISP.

CIPC Chandrapur: On Bor Project, as compared to state target ISP observed in Rabi (72ha/Mcum) & HW(12ha/Mcum) is too low compared to the State norm as well as last years performance. Project Authorities are advised to take stringent action to improve the system performance.

UWPC Amravati: On Upper Wardha project, ISP realised in both Rabi (65ha/Mcum) & HW (0ha/Mcum), is appreciably below the state Norms. It is even compared to its last two year's performance. As per Project Authorities, apathy of farmers towards night irrigation & scattered irrigated area are the main causes for low performances. For improving the ISP, actions suggested in last years report (proper planning, implementation, co-ordination among concerned irrigation divisions and monitoring of day to day water rotation schedule at Circle level, promoting Night irrigation, repairs to gates etc) are necessary to curb the operational & seepage losses on the project.

CADA Nagpur: In case of Lower Wunna project, ISP observed in Rabi & HW is 111 Ha/ Mcum & 28 Ha/ Mcum respectively.

CADA Jalgaon: In Hatnur Project, the ISP is improved from 60 ha/Mcum (2006-07) to 74/Mcum (2007-08) in Rabi season. Though 4 rotations are given in Rabi season, the irrigation system performance is much below the Govt. norms (@50%). As per project authorities, the ISP is lower due to following reasons.

i) Irrigation on scattered area

ii) Bed levels of distributeries are higher than that of main canal.

iii) No Night Irrigation.

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

CADA Nashik: In Bhandardara project, there is increase in irrigation system performance in Kharif & Rabi season as compared to last year (2006-07). However there is still scope to improve the performance to achieve Govt norms.

In Kadawa project, there is no improvement in irrigation system performance in Rabi and HW season over last years 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- Major leakages through canal structures.
3- The command area is in tail reach only (Km 60 to 88).
4- Mostly the strata is pervious.

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

In Mula project, the irrigation system performance is lowered in Rabi and H.W. season, as compared to last year. As per field officers, this is due irrigation to perenial crops (Sugarcane) as per demand on form No.7 (over and above sanctioned blocks) in scattered area. Improvement in the performance is expected as the water is given to flow irrigation on volumetric basis to the WUAssociations all over the command area.

PIC Pune: In Khadakwasla project in Kharif season performance by canal is 100 ha/Mcum with two rotation, in rabi season 107 ha/Mcum and H.W. is 76 ha/Mcum with three rotation respectively.

In Chaskaman Project in rabi season the performance is 121 ha/Mcum with three rotation and in H.W. Season the performance is 102 ha/Mcum with three rotations. The performance is quite good as compare to state norms.

In NLBC the Kharif, Rabi and H.W. performance is 101 ha/Mcum, 99 ha/Mcum and 40 ha/Mcum respectively.

In NRBC the Kharif performance is 202 ha/Mcum with two rotation and 123 ha/Mcum and 108 ha/Mcum in rabi and H.W. season with three rotation in each season. As compared to last year performance in Kharif it is increased by 42 ha/Mcum in Rabi it is lowered by 13 ha/Mcum. H.W. season it is increased15 ha/Mcum.

CADA Pune: In Ghod project only one rotation was given in Kharif season and ISP comes to 176 ha/Mcum where as in rabi season with three rotations ISP is 92 ha/Mcum, in H.W. season with two rotations the ISP comes to 118 ha/Mcum. The performance is decreased in kharif and rabi season but increased in H.W. as compared to last year performance.

In Kukdi project with two rotation kharif performance is 282 ha/Mcum where as in rabi season the performance is 69 ha/Mcum with two rotations, in H.W. season the performance is 150 ha/Mcum with one rotations. In Kharif and rabi season the performance is decreased but in H.W. season it is increased by double as compared to last year performance.

NIC Nanded: In Upper Penganga project the irrigation system performance is less than 40% of required norms in both Rabi & HW season (i.e. 58 ha/Mcum & 38 ha/Mcum respectively). The field officers need to be more vigilant to improve the performance.

Surplus Plan group:

CADA Nagpur: ISP realised in kharif season on Bagh project is 254 Ha/ Mcum. On Itiadoh & Pench project, it is 148 & 155 Ha/ Mcum. On and average the ISP on these two projects for kharif season has rolled down compared to its last year performance. ISP observed in Rabi (54ha/Mcum) & HW (20ha/Mcum) season on Pench project is also too low compared to the State target. On Bagh project ISP realised in HW is 62 Ha/ Mcum. ISP is probably low as HW Paddy is the only crop irrigated which requires more water.

Abundant Plangroup:

CADA Pune: In Dhom project the kharif performance is 64 ha/Mcum, the rabi performance is 72 ha/Mcum and in H.W. it is 51 ha/Mcum.

In Kanher project there is no kharif utilization where as in rabi season the performance is 64 ha/Mcum with five rotations. In H.W. season the performance is 45 ha/Mcum with five rotations. As compared to last year the performance is increased in both the seasons.

CIPC Chandrapur: On Asolamendha & Dina project ISP observed in kharif season is 154 Ha/ Mcum & 373 Ha/ Mcum respectively.

SIC Sangli:- In Dudhganga & Warna Project ISP is 81 & 85 for Rabi season and 72 & 58 for H.W. respectively which is less than state norms & this is due to maxmimum percentage of pernnial crops which require more water.

TIC Thane:- In Bhatsa, Kal-Amba & Surya project the ISP is is 39, 32 & 51 Ha/Mcum in Kokan season respectively.

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

Indicator – VI: Percentage of Planned and Actual Non Irrigation Use

Highly deficit plan group:-

CADA Solapur: Performance of the Bhima (Ujjani) Project NI use is 97% with respect to PIP provisions made on the project.

Deficit Plangroup:

AIC Akola: Actual NI use on Katepurna project was 67% of the provisions in the project report. The same was 132% of the reservations considered in the PIP. This indicates that Project Authorities need to be more careful while preparing the PIP.

Actual NI use on Nalganga project was 89% of the provisions in the PIP.

BIPC Buldhana: On Wan project, actual NI use as compare to quota reserved in PIP is 123% only.

CADA Beed: Though in Manjra there is no provision for NI use in the project report, actual use is less than PIP. In case of Lower Terna actual use is 25% to PR.

CADA Aurangabad & CADA Beed : Though in Jayakwadi project stage-I there is no provision for NI use in the project report actual use is more than 54% of PIP provision, it shows that PIP is not prepared as per past experience.

NIC Nanded: In Manar project the actual N.I. use is 63% of PIP. The project athority should be careful in assessing the realistic demand preparing PIP. Vishnupuri has 208% NI use of PR snd 89% of PIP,Purna has no NI use in PR.

AIC Aurangabad: There is no NI use in NMcanal.

CADA Jalgaon: In Girna project, the actual NI Use is 104% than that considered in PIP.

CADA Nashik: In Chankapur project, the actual non irrigation use is lower (32.20 Mcum) than that considered in PIP (55.59Mcum). As per field officers, the provision of NI Use in PIP is inclusive of transit losses in river. How ever the actual use is at canal head of pickup weir D/s of reservoir. The total water use at reservoir head including transit losses in river works out to 58.59 Mcum.

Normal Plangroup:

YIC Yeotmal: Actual NI water use on Arunavati project was 16% of the provisions in Project report & PIP. Water reserved on account of NI use appears to have gone waste. Project authorities should exercise proper care while resaving water for NI use.

AIC Akola: On Pus project water reserved in PIP was 85% utilized during the irrigation year.

UWPC Amrawati: On Upper Wardha project actual NI water use was 58% that was considered in PIP.

CIPC Chandrapur : Actually N.I. use is Nill as compared to projected 6.350 Mcum & PIP provision 0.150 Mcum

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

On the projects, where substantial quantity of water is remained unutilized at the end of irrigation year, Field officers are required to be more careful while framing the PIP of the project, so that the storages available during the year will be fully utilized during the year only.

PIC Pune: In Khadakwasla, Pawna projects the N.I. use is more than project provision.

CADA Pune: In Ghod and Kukdi projects the N.I. use is more than project provision.

NIC Nanded: In Upper Penganga Project there is no provision for NI use, though there actual NI use is 26.615 Mcum which is only 50% of PIP provision, it shows that PIP is not realastic.

CADA Jalgaon: In Hatnur project, the actual N.I. use is higher than that considered in project report as well as in PIP (125% & 104% respectively). As per field officers, the actual NI use is as per reservation made by collector.

CADA Nashik: In Bhandardara, Gangapur & Kadwa projects, the actual non irrigation use is exceeded to the provision of PIP (219% & 112% & 415% respectively). Care should be taken while preparing the PIP so that actual N.I. use will not be excess. Sanction to the enhanced N. I. use shall be accorded by the competent authority.

Surplus Plan group:

CADA Nagpur**:** Actual NI water use on Pench project was111% of the provisions in project report. However it was 82% of the quota considered while preparing the PIP.

Abundant Plangroup:

CADA Pune: In Dhom project the N.I. use is 13% of that project provisions.

SIC (Sangli): N.I. use, on Dhudhganga, Warana, Tulsi, & Radhanagari is 21%, 61%, 13% & 95 % respectively, with comäpared to the PIP provisions.

TIC Thane: N.I. use, on Bhatsa, Kal-Amba, Surya is 118%, 8%, 92%, respectively, with compared to the PIP provisions.

Indicator – VII Percentage of balance Unutilized Water to Live Storage (15th October)

Highly deficit plan group:-

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

Deficit Plangroup:

AIC Akola: 100% water utilised in Katepurna & Nalganga project during the year. BIPC Buldana: On Wan project also 4% of available live storage was remained as unutilized storage at the end of irrigation year.

CADA Beed: In LowerTerna unutilised water is 16% by June end, as per field officers it is due to non-completion of disnet works and no demands in Kharif season.

CADA Aurangabad: In Jayakwadi project stage-I the percentage of unutilised water is 5%, which is within permissible limit.

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

Normal Plangroup:

CADA Jalgaon: In Hatnur project, the balance unutilised water at June end is only 1% of the live storage.

CADA Nashik: In Bhandardara, Darna & Kadwa projects, the percentage of balance unutilised water at June end is 3%, 9% & 2% respectively.

YIC Yeotmal : On Arunavati project unutilized storage appears to be nill.

AIC Akola: In case of Pus project, unutilized storage was 10% percent of the storage on 15th October. According to the Project Authorities, unutilized storage on the project was due to low water demand from the cultivators. However, to have full water utilization, necessary steps are needed at the field level.

UWPC Amravati: On Upper Wardha project 23% of available storage is remained unutilized at the end of irrigation year. The project is eight monthly projects. The command area is mainly traversed by Black Cotton Soil. Also the command area lies in assured rainfall zone. Therefore, practically there is very low demand for water for kharif Jowar & cotton (which contributes substantially in designed cropping pattern) kharif & Rabi season. Therefore according to project authorities water remains unutilized at the end of the irrigation year. For better water utilization, a new cropping pattern is approved by the competent authority. Preparation and implementation of PIP as per new cropping pattern along with motivating cultivators for cotton will help in utilizing available storages in future.

CIPC Chandrapur: 15% water remain unutilised which is more compared to last years performance (0 %)

CADA Nagpur: 36% of water remain unutilised which is more as compared to last year performance (0%)

PIC Pune: In Khadakwasla, Chaskaman, N.R.B.C., N.L.B.C. projects the average unutilised water is nil, but in Pawana and Bhama Askhed project it is 16 & 21% respectively.

NIC Nanded: In Upper Penganga Peroject unutilised water by June end is about 33% of live storage. The field officers should be more vigilant in preparing realistic PIP figures of irrigation and NI use, so that full utilization of available water is possible.

Surplus Plan group:

CADA Nagpur: In Itiadoh project, the unutilized storage at the end of irrigation year was very meager i.e. 0.61% of live storage on 15th October.

Abundent Plangroup:

CADA Pune: In Kanher project 9% water remained unutilised. The project authorities should pay attention for full utilisation of water.

CIPC Chandrapur: In Dina project 34% of water remain unutilisation indicates scope for more irrigation.

SIC Sangli: Percentage of unutilized water on Dudhganga, Warna, Tulsi, & Radhangari project is 32%, 23%, 9%, & 0% respectively.

TIC Thane: Percentage of unutilized water on Surya project is 0% all other major projects under this Circle i.e. Bhatsa, Kal-Amba utilized 100% water respectively.

Indicator VIII: Conveyance efficiency of main canals

Highly deficit plan group:-

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

Rabi Season		HW Season	
LBC	RBC	LBC	RBC
34%	45%	29%	37%

Deficit Plangroup:

AIC Akola: Conveyance efficiency realized on Nalganga project in Rabi seasons was 74%.

BIPC Buldhana: On Wan project it was 93% for both the seasons i.e. Rabi & HW.

CADA Aurangabad & CADA Beed: Jayakwadi stage- I the conveyance efficiency of Left Bank canal is 81% & 77% and in RBC 65 & 68% for rabi and HW season respectively.

CADA Beed: In Lower Terna project the conveyance efficiency of RBC & LBC is average 62 to 65%

In Jayakwadi stage II (Majalgaon) the conveyance efficiency is average 70% for both seasons.

In Manjra project the conveyance efficiency of both canals is ranging from 67% to75% in rabi & HW respectively. The efficiency is less in HW season for RBC (67%). The field officers are required to improve the conveyance efficiency by needful measures.

CADA Jalgaon: In Girna project, the conveyance efficiency of LBC is 60% & 57 % in Rabi and HW Season respectively and i.e. RBC is 72% in both the seasons.

CADA Nashik: In Chankapur project, the conveyance efficiency of LBC is 70 & 78% in Rabi & HW season respectively and i.e. RBC is 76% in Rabi season.

NIC Nanded: The conveyance efficiency of Manar, Purna, Vishnupuri range from 67 to 86%. The field officers are required to improve the conveyance efficiency by needful measures.

Normal Plangroup:

NIC Nanded: In Upper Penganga Project the conveyance efficiency is in the range of 83 to 90% for both canals and seasons.

CADA Jalgaon: In Hatnur project the conveyance efficiency of RBC is 60% & 27% in Rabi & HW Season respectively.

CADA Nashik: The conveyance efficiency in Rabi season ranges from 45 to 70% in all the projects under this plangroup and in HW season the conveyance efficiency ranges from 37 to 83%.

AIC Akola & CIPC Chandrapur: On the main canal system of Pus project, conveyance efficiency attained was 68% only in Rabi. Where as on Bor project's canal system, it was low i.e.Rabi 20 & HW 18%. Concerned Project Authorities are advised to focus on curbing the operational losses, seepages & leakages in the canal system by chalking out an effective action plan.

In spite of pursuance, data about conveyance efficiency was not made available by the project authorities of Arunavati, Lower Wunna & Upper Wardha of Normal plan group along with project authorities of Pench, Bagh, Itiadoh, Asolamendha & Dina projects under Surplus& Abundant Plan group.

PIC Pune: In Khadakwasla, project in rabi and H.W. season 34% and 26% conveyance efficiency obtained respectfully.

In NRBC (Veer project) the conveyance efficiency in rabi and H.W. Season is quite good i.e. 52% in rabi season and 49% in H.W. season.

CADA Pune: In Ghod project 56% conveyance efficiency is obtained in rabi season where as in H.W. it is 51%

Abundant Plangroup:

CADA Pune: In Dhom project in rabi season the conveyance efficiency of canal is 50% in H.W. it is 44%.

In Kanher project the conveyance efficiency in rabi season is 63% and in H.W. it is 65%.

Indicator IX: Actual cropping pattern.

Highly Deficit Plangroup:

CADA Solapur: 41% perennial crops, 28% Rabi crops 16% HW crops, 15% Kharif crops.

Deficit Plangroup:

AIC Akola: Rabi seasonal are the principle crops on Katepurna (96%) & Nalganga (85%) projects with 1% & 15% Two seasonal as secondary crops.

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

CADA Jalgaon: In Girna project, about 58% crops are under Rabi season. The perennial crops are about 4%, which are sugarcane and Bannana .

CADA Nashik: In Chankapur project, 61% crops are under Rabi season. However the Perennial crops are only 2% each.

CADA Aurangabad & CADA Beed: In Jayakwadi Project percentage of Rabi seasonal & Perennial crops is 42% & 18% and in HW it is 13%.

CADABeed: The percentage of Perennial crops in Majalgaon & Manjra projects is 59% & 67% respectively which is too high ,where as it is 31% in Lower Terna project. Field officers are required to divert the minds of farmers for taking Rabi & HW seasonal crops.

NICNanded: The percentage of perennial crops in Vishnupuri, Manar & Purna projects is ranges from 18 to 23%.

Normal Plangroup:

AIC Akola: Percentage of Rabi & HW seasonal on Pus projects were 66% & 17% respectively.

YIC Yeotmal: On Arunavati project Rabi and HW seasonal were 53% where as Perennial crops were on 40% of the irrigated area.

UWPC Amrawati: On Upper Wardha project, 89% crops were under Rabi season and 7 % crops were as perennial crops.

CADA Nagpur & CIPC Chandrapur: Rabi seasonal crops irrigated on Lower Wunna & Bor projects were 98% & 91% respectively.

CADA Jalgaon: In Hatnur project, major percentage of crops (45%) is under Rabi season and 19% crops (Sugercane and Banana) are under perennial.

CADA Nashik: In Bhandardara project, the percentage of crops under rabi and perennial is 59% and 19% respectively. The predominant crops under Rabi season are Wheat, Rabi Jawar, Soyabean and Gram. In perennial, the predominant crop is sugercane.

In Mula project, the percentages of crops in Kharif, Rabi and Perennial are 31%, 43% & 14% respectively.

In Darna project, the percentage of crops in Rabi and H.W. season are about 57% and 16% respectively and in Gangapur project percentage of crops in Rabi &

Perennial season is above 61% 29% respectively.

In Kadwa project, the prominent crops (60%) are under Rabi season.

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

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

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

NIC Nanded: In UPP percentage of irrigated crops in rabi is 59% and perennial is 15%.

Surplus Plan group:

CADA Nagpur: Bagh (87%), Itiadoh (67%) & Pench (56%) projects are Kharif predominant. Rabi seasonal percentage on Pench Project was 39 and HW Paddy were on 14 & 33% area on Bagh& Itiadoh projects.

Abundant Plan group

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

CADA Pune: In Dhom and Kanher projects the major irrigation crops are 52% and 50% respectively in rabi season.

SIC Sangli : All the project under this circle having predominatitly perennial crops (82%).

TIC Thane : All the project under this circle having predominatitly Kokan season crops (91%).

Medium Projects

Indicator I: Water Availability in Reservoirs on 15th October

Highly Deficit Plangroup:

CADA Beed: Mahasangvi, kada, Talwar, Ruti, Kurnoor, Turori, & Khasapur project have received 100% yield for the current year. Kadi & Khandeshwar have received 95% yield. Ramganga & Banganga have received 85% & 80% respectively. The rest of the projects have received around 30% to 63% yield.

Deficit Plangroup:

CADA Beed: Kundlika, wan, Bodhegaon, Belpara, Sindhphana, Borna, whati, Rui & Sangmeshwar have received 100% yield for the current year Saraswati, Terna & Gharni has received 98% yield. Bindusara has received 80% yield. The rest of the projects have average 40% yield.

CADA Aurangabad: None of the projects in this plan group have received 100% yield in the current year. Masoli has received the maximum yield i.e. 90%. Sukhana, Jui Lahuki & Narangi projects have received 88%, 82% & 81% respectively. The rest of the projects have very low average yield. (57% to 19%) where as in Kalyan Girija has no live storage for the current year.

NIC Nanded:- Pethwadaj, Loni projects have received yield nearly 100% for the successive years where as in Mahalingi Kudala, kundrala & Karadkhed the yield is reduced to 17%, 50%, 51% & 72% respectively over last years 100%.

CADA Solapur:- Percentage of availability of live storage Medium Projects are as below, Asti, (78%) Higni Pargaon (100%) Mangi (57%) & Jawalgaon (61%). Bori (97%)

Whereas, Bhudhihal, Ekhmkh Having very minute storages Compared with the last year, water availability in Mangi & Jawalgaon is considerably decreased this year.

PIC Pune: Khairy, Nher, Sinna, Rananad, Maswad, Tisangi and Andhali projects have 100% storage this year. Last year Maswad has 31% storage.

CADA Pune: Yeralwadi project has 100% storage this year.

CADA Jalgaon: In last year, all the (10) projects had 100% live storage available. However, in this year 6 projects are having 100% availability. Tondapur & Hiwara projects are having 67% & 39% availability respectively. Aganawati & Kanoli projects are having no availability of water in live storage.

CADA Nashik: All the (3) projects had 100% live storage in last year. However, in this year the yield is 100% in Haranbari & Nagayasakya projects and 99% in Kelzar project.

JIPC Jalgaon: In Bahula project, the availability of water is 39% only.

AIC Akola: Live storage on projects under this circle was as given below.

Dnyanganga 66%. Nirguna 69%, Shahanoor 95%, Uma 100%, Paldhag 96% during the irrigation year. Storage in Mas project was 59 %.

BIPC Buldhana: Live storages in Man 36%, Torna 16%, Pentakli & Utawali Project was 100% full.

UWPC Amravati: Chandrabhaga project had 98% live storage on 15th of October.

Normal Plangroup:

CADA Jalgaon: In all the projects except Karwand, the yield received was 100% for successive two years. The yield received in Karwand project in this year is 97%.

CADA Nashik: In all the projects, the yield was 100% for successive four years except Ghatshil pargaon. The yield received in Ghatshil pargaon in this year is 88%.

JIPC Jalgaon: In Bhokar project, the yield was 100% for successive two years. However in Mor project, the yield is increased from 48% (2006-07) to 99% (2007-08).

CADA Aurangabad. In Dheku & kolhi the yield is reduced to 51% & 35% over last years 85% & 88% respectively where as in Ambadi no yield have been received in this year has compared to last years 85%.

NIC Nanded: In Nagzari & Dongargaon have received the average yield of 97% for the successive years.

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

Borgaon, Ekbhujri, Goki, Lower pus, Waikheda, Sonal, Waghadi & Morna were 100% full. Korai & Mas were 89 % & 59% respectively (100%) full.

CIPC Chandrapur: Actual live storage on Amalnalla, Pothara & Dham projects was 100 % full.

YIC Yeotmal: Adan project under the circle was 100 % full. & Nawargaon project was 98% full.

PIC Pune: Nazre, Kasarsai and Wadiwale has respectively 100%, 93% and 98% water availability this year.

CADA Pune: Yerelwadi project have 100% water availability this year.

Surplus Plan group:

CIPC Chandrapur: Live storage on Labhansarad, Pakkadigudam was 100% where as on Chandai & Chargaon it was 89% & 92% respectively.

Abundant Plan group:

CIPC Chandrapur: Under this Plan group Naleshwar & Ghorazari project had 83% & 45% live storage respectively.

SIC Sangli:- Percentage of availability of live storages in different projects are as below, Chitri (100%), Kadvi (101 %), Khumbhi (89%), Patgaon (100%), Morna(100 %), Shidhewadi (100%), Yeoti Masoli (100%) Kasri (100%), Chikotra (86%), Jagamhatti (81%), Overall availability is (85%).

TIC Thane:- On Rajanalla complex, percentage of water availability of live storage is (364) % . This project has additional Storages feeding availability the design capacity, Wandri (92%).

NKIPC Thane: In Hetwane project storage increased to 69% as compare to 52% last year storage.

KIC Ratnagiri: In Natuwadi project the storage increased to 97% as compare to 90% last year storage.

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

Highly Deficit Plan-Group:-

CADA Solapur:- Percentage of evaporation on different projects are as below Ashti (60%), Hingni (27%), Mangi (25%), Bori (23%), Ekrukh (15%), Jawalgaon (25%), compared with last year over all percentage has been reduced by 15%.

SIC Sangli:- Percentage evaporation on different projects under this circle is to the tune of 7 to 10% only except Shankh project, which has percentage avaporation 29%.

TIC Thane:- Percentage evaporation on Wandri project is 15%. & on Rajanalla cauplex 9%.

CADA Pune: Yeralwadi project has 30% evaporation losses. It has been increased by 5% as compare to last year 25% evaporation losses.

PIC Pune: In Khalany, Nher, Sinha, Ranand, Tisangi, Maswad and Andhali projects the average evaporation losses is 28% which is very high. The field officers are advised to explore the current procedure and rectify it where ever necessary so as to have precise data.

CADA Beed: In Talwar, Kada, Khandeshwar, Ruti, Kadi, Ramganga there is a huge loss of evaporation ranging from 76% to 34%, in Kambli project evaporation is 100%, the evaporation losses seems to be more than utlisation for irrigation.

Deficit Plangroup:

CADA Jalgaon: In Tondapur & Hiwara projects, the actual evaporation seems to be 51% & 67% of the live storage as the availability in reservoirs in these projects is 67% & 39% respectively.

CADA Nashik: In Haranbari project, the actual evaporation is 155% more than the provision in the project report. Hence the field officers are required to assess the evaporation correctly.

JIPC Jalgaon: The percent evaporation of Bahula project under JIPC Jalgaon is 47% of available live storage as the water availability was less (39%).

AIC Akola: Morna, Uma, Nirguna & Mas projects had evaporation ratio more than 20 %. Where as ratio was low as 12% on Shahanoor project.

BIPC Buldhana: The ratio on Munand Utavali was on and average 25 % evaporation on Torna project was exceptionally high (43%)

UWPC Amaravati: On Chandrabhaga project the ratio was 8%.

CADA Aurangabad: In Dhamna project evaporation losses are 87% which is very high, Tembhapuri, Purna Nevpur, Galhati, Gadadgad,Jivrekha, Narangi & Bordahegaon projects the losses are high which ranges from 50% to 71%, rest of the projects have an average of 30% evaporation losses which are also to the higher side. The field officers should be vigilant and utilize the water efficiently, measurement of evaporation losses are not carefully done. Pan Evaporimeter is to installed in the periphery of the projects (50-60 sqkms).

CADA Beed: As the Tiru project has gained 100% yield in the month of Nov, the evaporation losses w.r.t. Live storage seen more than double i.e. 225%. Raigavan too has huge loss of 86%.

Tawarja ,Sakol, Gharni, Deverjan, Rui, & Renapur have losses nearly and above 50%. The field officiers should be vigilant and utilize the water efficiently.The calculation of evaporation losses should be rectified by taking correct Mesh factor as1.144 instead of 1.444.

NIC Nanded:- Mahalingi has evaporation losses of 33% and rest of the projects have the losses in permissible range of 18% to 30%.

Normal Plangroup:

CADA Jalgaon: In Abhora project, the actual evaporation is 29% of live storage and it is exceeded (227%) to the provisions of project report. As such it is required to assess the evaporation precisely.

CADA Nashik: In Alandi project, though the actual evaporation is 15% of available live storage it has been exceeded to project provision (149%).

JIPC Jalgaon: The percentage of evaporation in Bhokar & Mor projects are 21% & 13% respectively. The evaporation in Bhokar project is within the limit of projected evaporation but in case of Mor project it has been exceeded (186%) to the project provision. The field officers are required to assess the evaporation correctly.

AIC Akola: Evaporation percentage on all projects was on and average 25%. The same was exceptionally high on Lower Pus (33%), Saikheda (42%), Mas (33%).

YIC Yeotmal: Evaporation loss compared to live storage on Navargaon was exceptionally high (38%) (which is higher than Project Report), the same on Adan project was (19%).

BIPC Buldhana: Evaporation percednage on Pen Takli project was 30% of 15th October storage.

PIC Pune: In Kasarsai and Wadiwale projects the evaporation losses are 19% and 17% respectively but in Nazre project it is 39% which is very high.

CADA Pune: In Visapur project the evaporation losses is 18% which is decreased by 1% as compare to last year.

CADA Aurangabad:- In Dheku project the evaporation loss is 45% of live storage. The rest of the projects have normal evaporation losses .

NIC Nanded: In Dongargaon and Nagzari projects the evaporation losses are 32 & 24% respectively.

Surplus Plan group:

CADA Nagpur: Evaporation percentage on all projects was on and average 29%. The same was exceptionally high on Bagheda 66%, Betekar Bothali 57%, Chandpur 44%, and Sangrampur 69%. It was low on Bodalkasa 8%.

CIPC Chandrapur: Evaporation percentage on all projects was on and average 29%. The same was exceptionally high on Labhansarad 63%. It was low on Panchadhara7%

Abundant Plan group:

CIPC Chandrapur**:** On Naleshwar the ratio was as high as 52 % where as on Ghorarazari it was 29 %.

NKIPC Thane: Hetwane project has 8% of evaporation losses this year. It is decreased by 9% as compare to last year.

KIC Ratnagiri: Natuwadi project is having 3% of evaporation losses this year. It is decreased by 1% as compare to last year.

Indicator III: Target & Achievement of Irrigation potential utilisation.

Highly Deficit Plan-Group:-

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

Hingni Pargaon (80%), Mangi (93%), and Jawalgaon (93%) on Bhudhihal project 635 ha, Ashti 2858 ha. and Ekrukh 63 ha. of irrigation potential has been credited, there were no provision made in PIP.

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

PIC Pune: For seven projects average area under irrigation is 53% field officers are advised to take more efforts to enhance the area under irrigation.

CADA Beed: As PIP is not prepared for Jakapur & Benitura achievement results shows to be zero,though there is actual irrigation done. Field officers are advised to prepare the PIP before the season starts. There is a very low achievement (below 47%) in Kada ,Kadi & Ruti.In Khandeshwar, Harni, Kurnoor & Turori achievement crossover the PIP target by 34% to 85%,whereas in Khandala & Sakat it is beyond PIP target by 3 to 5 times. Field officers are advised to prepare the PIP correctly considering availability of water and probable use by all means.

It is noticed that water use & irrigated area by Reservoir lift is not considered while preparing the PIP,hence achievement to PIP target seems to be less in most of the projects.

Deficit Plangroup:

CADA Jalgaon: In Bhokarbari project, the actual area irrigated was 47% with compared to that of PIP. As per field officers, the field channels are not in existence in the tail reach of distributory No.7. As such there was no demand from the irrigators.

CADA Nashik: In all the projects, achievement of actual area irrigated is about 80 to 95% as compared to total area as per PIP.

CADA Aurangabad: As PIP is not prepared for Karpara, Pir Kalyan, Kalyan Girja,Dhamna,Jivrekha,Jui,& UpperDudhana achievement results shows to be zero, Though there is actual irrigation done.Whereas in Ajantha Andhari, Anjanapalshi,Lahuki,Girija,& Purna Nevpur it is achieved PIP target. But in case of Narangi,Tembhapuri,Sukhna the achievement is far beyond the target i.e., ranging 1.5 to 9.26 times the PIP. Field officers are advised to prepare realistic PIP considering all sources.

CADA Beed:- As PIP is not prepared for Sindhpana, Terna,& Sangmeshwar achievement results shows to be zero,though there is actual irrigation done. In Kundlika, Wan, Bodhegaon,& Borna the achievement is below 40%. Whereas in Bindusara,Sakol, Tawarja,& Devarjan achievement is beyond the PIP target,nearly 1.5 to 2 times the PIP. Field officers are advised to prepare realistic PIP considering all sources of water use.

NIC Nanded: In Mahalingi achievement is zero as the availability of water is very less i.e., 17%, PIP is not prepared. Whereas in Nagzari, Dongargoan, Loni

Karadkhed, and Kundrala the achievement is ranging from 56 to 93%. In Kudala the achievement is more than twice the PIP because of not considering irrigation through reservoir lift in PIP. Field officers are advised to prepare realistic PIP considering all sources.

AIC Akola: Total actual area irrigated on projects under this circle was 7609 ha against planned area of 11705 ha in PIP (65%). Achievement on Mas is appreciably satisfactory (118%) and same on Uma & , Paldhag were (98% & 95%) respectively. Area irrigated on Dnyanganga (76%) Nirguna (69%) but on Shahanoor i was just 25% of PIP Reasons for low potential utilisation on this project needs to be sorted out for necessary action as mentioned previously.

BIPC Buldhana: Achivement on Man & Torna was 76% & 20 % respectively where as on Utavali. It was 226%

UWPC Amrawati : Achivement on Chandrabhaga is 30% of PIP which is very low.

Normal Plangroup:

CADA Jalgaon: In Sonwad & Abhora Projects, 51% & 55% area is irrigated as compared to that considered in PIP. As per field officers, the recharge in wells in command area is increased seems last two years in Abhora project resulting reduction in demand for flow irrigation.

Field officers of Sonwad & Abhora projects, are required to assess the demand correctly while preparing PIP.

CADA Pune: In Visapur project the 89% area is brought under irrigation this year as that of PIP.

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

CADA Aurangabad:- The achievement in Kolhi and Ambadi project is zero, as the availability of water is very less, PIP is not done. In case of Dheku the achievement is 74%.

NIC Nanded : The average achievement in Nagzari and Dongargoan is 63%.

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

Boargaon 82% ,Ekburji 63%, Goki 74%, Lower Pus 43% Saikheda 26% Sonal 102% Waghadi 35% Morna 63%

YIC Yavatmal: Actual area irrigated on Adan project was 69% and Nawagaon project is 61%of the area contemplated in PIP.

BIPC Buldana: On Paintakli area irrigated was 106% of the planned area in PIP.

CIPC Chandrapur: Area irrigated on Amalnalla (103%) & Pothra (97%) was satisfactory compared to area irrigated on Dham (53%).

Surplus Plan group:

CADA Nagpur: On 6 projects, total area irrigated was 119% of the planned area in PIP. Area irrigated on Bodalkasa, Kesarnala, Kolar and Rengepar was more than

100%. It shows that, on these projects, PIP was prepared with under- utilization of available water.

CIPC Chandrapur: On Chandai, Chargaon & Labhansarad percentage of area irrigated to area considered in PIP was 103, 192 & 88 respectively. In case of Chargaon, PIP appears to be prepared with under- utilization of available water.

Abundant Plan group:

SIC Sangli:- Achievement of irrigation potential on Chitri project is (147%) againt the provision made in PIP whereas on Kadvi (28%), Kumbhi (0%), Chikotra (148%), Kasari (46%) Patgaon (61%), Morna (137%), Yeotimasoli (77%), Jagamhatti (118%).

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

Rajnalla complex (100%), & Wandri (55%).

NKIPC Thane: In Hetwane project only 17% area is brought under irrigation. Field officers are advised to take more efforts to enhance the area under irrigation.

KIC Ratnagiri: In Natuwadi project 57% area is brought under irrigation this year.

CIPC Chandrapur: Ghorazari & Naleshwar are Kharif paddy grown projects. Area irrigated is more that planned in PIP.

Indicator IV: Water Use Pattern

Highly Deficit Plangroup:

CADA Beed: Jakapur & Benitura has only reservoir lift. Khandeshwar, Kada, Ramganga, Sakat & Mahasangvi has more utilization on reservoir than on canal, chandani, has 12 times more utilization on reservoir. The field officers should be vigilant and use water judiciously in all the seasons. Efforts to be done to improve irrigation through canals by special measures.

It is noticed in the annual water account submitted by the field officers that the PIP figures of evaporation losses given in the account are of of rabbi season only, it should be given by considering the losses in all the three seasons

CADA Pune: In Yeralwadi project only rabi water utilisation is 7.58 Mcum as against 19.60 Mcum available water.

PIC Pune: In Khairy, Sinha, Nher, Anand, Maswad, Tisangi and Andhali project the most of water use is in rabi and H.W. season.

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

Deficit Plangroup:

CADA Aurangabad: In Masoli the utilization of water by reservoir lift is more than utilization on canal in all the three seasons. Ajantha Andhari, Khelna, jivrekha,&Dhamna has only reservoir lift. The trend of most of other projects is also towards the reservoir lifts.

CADA Beed:- Sakol, Masalga, Devarjan, Renapur, Rui,Sangameshwar,& Raigavan have only reservoir lifts inspite of having PIP for canal utilization. Wan, Saraswati, Borna, Tiru, Whati& Terna have more utilisation by reservoir lift than on canal inspite of PIP. There is a trend towards reservoir lift in most of projects, the field officiers are advised to use the water judiciously.

NIC Nanded:- In Mahalingi project utilization for irrigation is only by reservoir lift. Whereas in rest of the projects utilisation by canal is satisfactory.

CADA Jalgaon: In Manyad, Kanoli, Bhokarbari, Bori, & Burai projects, the utilisation of available water is reasonably good.

CADA Nashik: In Kelzar project, the major water use (47%) is on river lift.

JIPC Jalgaon: In Bahula project, the major water use (55%) is on reservoir lift.

AIC Akola: More than 46% of available water was used on canal for Rabi & HW seasons. On Nirguna Shahanoor, Uma ,Paldhag & Mas projects, Irrigation water use was predominant in Rabi season.

BIPC Buldhana: On Pentakli & Man project water use on canal in Rabi & HW season was predominant.

Normal Plangroup:

CADA Aurangabad:- Though lesser availability of water, utilization by canal and reservoir lift seems to be proportionate in Dheku project..

NIC Nanded : In all the three viz., Loni, Dongargaon & Nagzari Projects utilization by reservoir lift is negligible inspite of 100% availability of storage. It shows that accuracy is not maintained in measurements of water utilization from Reservoir lift by the field officers.

CADA Jalgaon: In Aner, Panzara & Sonwad projects, the major water use (flow irrigation) is in Rabi season (34%, 59% & 58% respectively).

CADA Nashik: In Adhala, Bhojapur & Mandohol Projects, the predominant use in flow irrigation is in Rabi Season (41%, 83% & 43% respectively).

JIPC Jalgaon: In Bhokar (Mangrul) project, inspite of 100% availability, there was no irrigation. As per field officers there was no demand from the beneficiaries. Necessary efforts should be taken by the field officers to promote the farmers for irrigation.

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

PIC Pune: In Nazre project the most of water use is in rabi season. But in Kasarsai and Wadiwale projects there is no canal utilisation this year.

AIC Akola: Goki, & Waghadi projects had more or less same irrigation water use in Rabi & HW season. However, in case of other projects water use in Rabi season is more than HW season. With irrigation through reservoir Lift.

YIC Yavatmal: More than 50% available water was used for irrigation in Rabi on canal on Adan project.

BIPC Buldhana: On Pen Takli project, 15.117 Mcum of water was used for irrigation through reservoir lift as canal system is yet to be developed.

CIPC Chandrapur: on all the three projects major irrigation was on canal in Rabi Season. About 12% water was used on Dham & Pothra for lift irrigation on reservoir.

NIC Nagpur: On Jam & Kar project more that 50% water was used for irrigation in Rabi.

Surplus Plan group:

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

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

Irrigation water use in HW season is appreciable on Chulband, Kanholibara, and Khairbanda & Khekranalla. Except Kolar project there was no irrigation water use on reservoir lift.

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

CIPC Chandrapur: 40% of available storage was utilised for catering water mainly in Rabi season.

Abundant plangroup:

NKIPC Thane: In Hetwane project most of water use for non irrigation purpose (35.99 Mcum).

KIC Ratnagiri: In Natuwadi projects the most of water use is in rabi season (22.028 Mcum).

SIC Sangli:- Trend of water use for irrigation by river lift. PIP made for irrigation on canal in rabi and H.W. seasons, and almost on all the medium projects i.e. Chtri (48.25 MM3), Kadvi (29.87 MM3), Kumbi (58.72 MM3) Chikotra (28.75), Jagamhatti (31.47 MM3) Kasari (72.34 mm3), Patgaon (60.52 MM3) Krishna –(Khodsi) (55.77 mm3) use of water for irrigation done through river letting, and then water lifting from river.

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

CIPC Chandrapur: On Ghorazari project, the available live storage is utilised in Kharif and Rabbi Seasons. However, it is predominant in kharif season. On Naleshwar project 50% of available storage is utilised for kharif season.

Indicator V: Irrigation System Performance (Canals)

Highly Deficit Plan-Group:-

CADA Beed :-In Kada, Mahasangvi. Kadi, Harni, &Kambli ISP in rabi season, and in Kada, Ramganga, Ruti, Kadi,& Kurnoor ISP is low in HW season against state norms.Whereas in Ramganga, Banganga, Khandala& Sakat ISP in rabi season is to higher side than that of norms.

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

Project	Kharif	Rabi	H.W.	Remarks
Hingni(Pargaon)	-	143	93	Canal
Mangi	-	105	-	Canal
Jawalgaon	-	111	110	Canal

CADA Pune: In Yeralwadi project the irrigation system performance on canal in rabi season is 69 ha/Mcum which is low as compare to last years value of 105 ha/Mcum.

PIC Pune: In seven projects Khainy, Sinha, Nher, Ranand, Maswad, Tisangi and Andhali the average rabi irrigation system performance is 140 ha/Mcum and H.W. it is 92 ha/Mcum which is satisfactory.

Deficit Plangroup:

CADA Aurangabad:- Except in Masoli & Sukhana the rest all projects have Zero ISP in hot weather.In Ajanta Andhari, Khelna, Jivrekha & Dhamna there is no canal irrigation, This point is already explained in the previous indicator, about the trend of using water from reservoir lift only inspite of PIP for canal. Only Lahuki, Girija, Sukhana, Gadadgad, Jui, Pirkalyan & Purna Nevpur attained the state norms for rabi ISP & Sukhana is the only project which has attained the state norms in hot weather.

CADA Beed:- Sindphana, Tiru & Terna are the only projects which attained its state target for this year in rabi . Wan, Saraswati, Gharni & Terna have achieved state norms in hot weather.The rest all projects have no ISP or either low ISP because of either no utlisation or low utilization on canals. The field officers are advised to use the water Judiciously on all the available system.

NIC Nanded:- Khardkhed & Kudala are the only projects to have attained the rabi ISP. Kundrala & Kudala have attained the state norms in hot weather. The rest of projects have very low or no ISP, this in fact because of either no utlisation or low utilization of water by canals. The field officers are advised to use the total available water Judiciously so as to achieve required ISP resulting increase in Irrigated area and production .

CADA Jalgaon: In Manyad project, the performance in rabi season was low (62 ha/Mcum) in-spite of three rotations. As per field officers, the low performance was due to major leakages through canal in km 0 to 7.

In Kanoli & Bhokarbari projects, (inspite of 3 & 4 rotations respectively in Rabi season) the irrigation system performance is below 50% of the Government norms. (47 Ha/Mcum & 50 Ha/Mcum respectively).

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

the ISP is low due to major leakages through the canal structures.

The field officers are required to be vigilant for improvement in the irrigation system performance in both the above projects.

CADA Nashik: In Haranbari project, the irrigation system performance in HW season seems to be 643 Ha/Mcum as only one rotation is given in that season.

AIC Akola: ISP realised on Nirguna in HW seaason)Shahanoor (86 ha/ Mcum) Uma 0ha/Mcum Paldhag 130ha/Mcum Rabi & HW season are low compared to the State norm.

BIPC Buldana: ISP attained on Pentakli project in Rabi season is just near to he state norm value and on Man project in Rabi season (94ha/Mcum) which is very low compared to the state norm.

UWPC Amaravati: ISP attained on Chandrabhaga was low (32 ha/Mcum in Rabi) compared to the in Rabi.

Normal Plangroup:

CADA Aurangabad:- In Dheku project Rabi ISP is 227 ha/Mcum , in rest of projects namely Kolhi & Ambadi no water use by canal since lesser availability.

NIC Nanded: The performance in Loni project seems to be better in Rabi (135 ha/Mcum) compared to Nagzari (98 ha/Mcum) and Dongargaon(37 ha/Mcum).

CADA Jalgaon: In Aner project, the irrigation system performance was 58 ha/Mcum in Rabi season & 56 ha/Mcum in HW season. The performance of Right Bank Canal is very low as compare to that of Left Bank Canal. The ISP of RBC in Rabi and HW season is 54 ha/Mcum inspite of 5 rotations in each season. More attention should given by the field officers to improve the ISP of RBCanal.

In Sonwad project, inspite of 4 rotations in Rabi season on LBC the ISP is too low i.e. 68 ha/Mcum.

In Abhora project, inspite of 5 rotations in rabi season, the irrigation system performance was 90 ha/Mcum. As per field officers, the performance is low due to demand received for irrigation was on scattered area.

CADA Nashik: In Mandohol project, the performance was as low as 50 ha/Mcum with 2 rotations in rabi season & 87 ha/Mcum with 1 rotation in HW season. As per field officers, the whole command of this project is in tail reach and the canal losses are to the tune of 80 to 85% resulting in low performance in rabi & HW season. Cement concrete lining to canal is proposed recently to minimise the canal losses.

In Bhojapur project, the irrigation system performance was 82 ha/Mcum with 2 rotations in rabi season. The ISP is lower as compared to last year (92 ha/Mcum with 2 rotations) .

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

JIPC Jalgaon: In Bhokar project, there is no flow irrigation on canals. However in Mor project, the irrigation system performance in Rabi season is 68 ha/Mcum with 3 rotations and in HW season 64 ha/Mcum with 4 rotations. The ISP in both seasons is too low as compared to Government norms. The field officers are required to be

more vigilant for improvement in the performance.

AIC Akola : ISp attained on following project i.e. Borgaon (109 ha./Mcum in Rabi) Ekburji (25 ha/Mcum in Rabi, Goki (69 ha/Mcum in Rabi (44 ha/cum in Rabi) 28 ha/Mcum in HW) Lower pus (34 ha /Mcum in HW, Saikheda (75 ha/Mcum in Rabi) 34 ha/Cum in HW, Waghadi (49 HA/cum in Rabi 30 ha /cum in HW, Morna (46 ha/cum in HW are very low compared to state norm.

YIC Yavatmal : ISP realised on Adan project (52 ha/cum in Rabi 425 ha/cum in HW & on Navergaon project 80 ha/cum in Rabi are low compared to state Norm.

CIPC Chandrapur: ISP observed on Amalnall (128 ha/Mcum) & Pothra (102 ha/Mcum) in Rabi was satisfactory compared to state target.

CADA Pune: In Visapur project Rabi and H.W. season irrigation system performance comes to 236 ha/Mcum and 257 ha/Mcum which is very good.

PIC Pune: In Nazre project the rabi season. Irrigation system performance comes to 116 ha/Mcum which is satisfactory.

Surplus Plan group:

CADA Nagpur: In HW ISP realised on Kolar (21Ha/ Mcum) Khekranalla (6Ha/ Mcum) was low as compared to the State norm.

CIPC Chandrapur: ISP realised in Rabi season on Chandai (78 ha/ Mcum), Chargaon (78 ha/ Mcum) Panchdhara (62 ha/ Mcum) was low as compared to the State norm.

Abundant Plan group:-

SIC Sangli:- (Irrigation Efficiency ha/Mcum) performance of Yeotimasoli project in Rabi season is 165 ha/Mcum.

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

TIC Thane:- (Irrigation efficiency ha/Mcum) performance of Rajnalla complex & Wandri projects in Kokan season is 105 & 55 ha/Mcum respectively.

NKIPC Thane: In Hatwane project the rabi Irrigation system performance is 22 ha/Mcum which is very low. Field officers are advised to take efforts for improvement of performance.

KIC Ratnagiri: In Natuwadi project the rabi Irrigation system performance is 6 ha/Mcum which is very low. Field officers are advised to take efforts for improvement of performance.

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

Highly Deficit Plangroup:

CADA Beed : In Kada, Mahasanvi, Talwar, Ruti, Sakat & Turori NI use is against the NIL provision in the project report. In Kurnoor NI use is 2.99 Mcum against 0.10 Mcum provision in project report ,whereas in Chandani it is 50% of the provision made in the report.

CADA Pune: In Yeralwadi project the non irrigation water use is 97% of PIP.

PIC Pune: In Nher and Andhali project the non irrigation use is more than PIP provision. In Khairy and Sinha projects 48% and 85% of N.I. Use of PIP provisions but in mahswad, Ranand and Tisangi the N.I. Use is Negligible.

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

Projects	Projected % NI use	PIP % provision
Ashti	0	10
Hingni(Pargaon)	104	90
Ekrukh	0	123
Jawalgaon	11	228

Deficit Plangroup:

CADA Aurangabad: Ajantha Andhari, Girija, Sukhana, Khelna, Jui, Dhamna,Pir Kalyan, Tembhapuri,Purna Nevpur & Narangi have NI use equivalent to PIP. This shows that the actual use is directly shown on PIP.Realistic figures is expected in framing of PIP.

CADA Beed:- In most of the projects actual NI use is against the provision in the project report. In Tawarja & Renapur project actual NI use is 61% & 34% respectively against the provision in the project report while in Raigavan it is 433%.

CADA Jalgaon: In Hiwara project, the actual NI use is 211% more than that of PIP.However in Manyad project, the actual NI use is only 39% than that considered in PIP.

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

CADA Nashik: In Haranbari project, the actual NI use is more (211%) than that anticipated in PIP.

AIC Akola: Actual non irrigation use on Nirguna was low compared to the quota reserved in(0 % of PIP) PIP of the project.

BIPC Buldhanal : Actual Non-irrigation use onf Man project is 25% Pentakli project 52% of PIP was Low compared to the Quotal reserved in PIP of the project. Low utilisation of water against NI reservation curtails the water availability for irrigation. There fore more attention is needed at project level while reserving water storages for NI use.

Normal Plangroup:

CADA Aurangabad :All the three projects have NI use equivalent to PIP & against the provision in the project report except in Dheku, this shows that the actual water use is not measured but directly shown as per PIP.

NIC Nanded: In Nagzari project actual NI use is against the provision in the project report and it is prominent.

CADA Pune: In Visapur project 100% utilisation of N.I. provisions.

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

CADA Jalgaon: In Karwand project, the actual NI use is more (149%) than that anticipated in PIP.

CADA Nashik: In Adhala project, the actual NI use is more by 137% over PIP provision.

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

AIC Akola: Actual non irrigation use on Goki projec t is 51% of PIP, where as on Lower Pus exclusive NI use is 2901 % of PIP portion Saikheda project 8%, of PIP, but on Waghadi project NI use is 567% of PIP, Morna 48% o fPIP on Koradi project excenive NI use is 120 of PIP. There fore more attention is needed at project level for reserving water storage for NI use project were just 11% 6% of the reservations considered in the PIP. There fore, more attention is needed at project level while reserving water storages for NI use in PIP

YIC Yavatmal: On Adan project NI use is 26% of PIP provision.

CIPC Chandrapur: Actual non irrigation use on Amalnala was 59% of the quota reserved in PIP of the project. Low utilization of water against NI reservation curtails the water availability for irrigation. There fore, more attention is needed at project level while reserving water storages for NI use in PIP

Surplus Plan group:

CIPC Chandrapur: Actual NI water use on Chargaon project was just 15% of the quota reserved in PIP of the project.

Abundant plangroup:

NKIPC Thane: In Hetwane project 99% of N.I. Use is achieve this year on that of PIP provisions.

KIC Ratnagiri: In Natuwadi project more than PIP provision is achieved for non irrigation use.

SIC Sangli:- Percentage of NI use compared to PIP provisions in Kadri, Chikotra, Kasari, Yeotimasoli is more than 100%. For these projects there is no provision in project report for NI use.

TIC Thane:- NI use on Rajnalla complex & Waghadi is nil.

Indicator VII: Percentage of Balance Unutilised Water to live Storage on 15th Oct.

Highly Deficit Plangroup:

CADA Beed : Almost all the projects have no unutilized water left, except Banganga whuch has 12% unutilized water.

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

PIC Pune: In Khairy, Maswad, Tisangi, Andhali, Nher and Sinha project 0 to 5% water remain unutilised. But in Ranand project 48% water remain unutilised. The field officers are required to take efforts for maximum utilisation of water.

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

Projects	Mangi	Ekrukh	Jawalgaon
% unutilized water	1%	0%	14%

Deficit Plangroup:

CADA Aurangabad: Ajanta Andhari, Jui, & Masoli, have 5, to 6% unutilized water left. Pirkalayan has 13% untilized the rest of the projects have no untilized water left, as the availability of water is low.

CADA Beed : Kundlika, Wan, Bodhegaon & Terna have around 10 to 29% unutilized water left, the rest of the projects have no untilized water left.

CADA Jalgaon:In all the projects except Bhokarbari there is no unutilised water balance at June end.In Bhokarbari Project ,the unutilised water balance at June end is 9% only.

CADA Nashik: In Haranbari & Kelzar projects, the unutilised water was 12% and 24% at June end respectively.

AIC Akola: Unutilized storage compared to 15th October storage on Shahanoor, Morna & Dnyanganga Mas , Paldhag was Nil & Nirguna was 5%

BIPC Buldana: On Pentakli project unutilised storage was 30%, on Torna & Utavali it was 40% & 64 respectively. This indicates that, more efforts are necessary to determine the real causes for under utlisation at project level to take suitable action for maximum utilisation of available live storage.

UWPC Amrawati : On Chandrabhaga project unutilised storage was 58% suitable action should be taken at project level for maximum utilisation of available storage.

Normal Plangroup:

CADA Aurangabad : All the three projects have no unutilized water left. In Ambadi project the % LS on 15 oct is -2.34 mcum (below LS).

NIC Nanded: Loni projects has 15% unutilized water.

CADA Jalgaon: In Abhora & Suki projects, the unutilised water at June end was to the tune of 35% & 42% respectively.

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

JIPC Jalgaon: In Bhokar (Mangrul) and Mor projects , the unutilised water at June end was to the tune of 63% and 31% respectively.

The field officers are required to utilize the available water fully so as the

unutilized water at June end will be as minimum as possible.

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

PIC Pune: In Nazre and wadiwale full utilisation of water is obtained this year. But in Kasarsai 1% water remain unutilised.

AIC Akola: On Waghadi project, Goki project & Saikheda project unutilised storage was 14%, 7% & 10 % respectively. On Koradi project, Borgaon project, Lower pus project, Sonal project, & Ekburji project unutilised storage percentage is 0 %

YIC Yavatmal : On Adan project unutilised storage percentage is 0 % on Nawargaon project the same is 16%.

BIPC Buldana: On Pentakli more than 47% water has remained balance. Reasons for unutilisation was attributed to non creation of projected potential

CIPC Chandrapur: Percentage of unutilized storages compared to 15th October live storage in case of Amalnalla & Dham project under CIPC Chandrapur was 18 & 7% respectively.

NIC Nagpur: On Jam & Kar 35 &8 % water has remained balance. Reasons for unutilisation were attributed to non creation of projected potential

Surplus Plan group:

CADA Nagpur: Percentage of unutilized storages compared to 15th October live storage in case of Khairbanda, Chandpur & Sorna were 23%, 7% & 8% respectively. Project authorities may explore the project wise reasons for under utilization of available storages.

Abundant plangroup:

NKIPC Thane: In Hetwane 70% water remains unutilised.

KIC Ratnagiri: In Natuwadi 1% water remains unutilised.

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

Projects	Chitri	Kodri	Kumbhi	Chikotra	Jagamhatti
% unutilized water to the live storage	20	0	0	30	17

Projects	Kasri	Patgaon	Morna	Krisna LIS
% unutilized water to the live storage	21	12	0	0

TIC Thane:- Percentage of unutilized water to the live storage on 15h October on different projects is nil.

CIPC Chandrapur: Percentage of unutilized storages compared to 15th October live storage in case of Naleshwar was (10%).

NKIPC Thane: In Hetwane project 36% of water remained unutilized at the end of year.

Indicator IX: Actual croping pattern.

High Deficit Plangroup:

CADA Pune: In yeralwadi project the major irrigation crops are in Kharif 43% and Rabi 53%.

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

CADA Beed : The most of the projects have maximum irrigation in rabi crops.

Deficit Plangroup:

AIC Akola: On all 15 projects under the circle, Rabi seasonal is predominant (79 to 98 %). On Dnyanganga, Morna & Paldhag HW & perennials were irrigated on 4 to 9% which were exceptionally high on Shahanoor project (21%).

BIPC Buldana: Rabi seasonal on Mun & Torana was 61 & 79 % of the total irrigated area.

CADA Jalgaon: In Manyad, Kanoli, Bori, Jamkhedi and Burai projects, the major percentage of irrigated crops (49 to 98%) was under rabi season.

CADA Nashik: In Haranbari, Kelzar and Nagya sakya projects, the percentage of irrigated crops under rabi season varies from 58 to 76%.

CADA Aurangabad : Except Masoli & Galhati, the trend of irrigation of rabi crops is maximum that is above 80%.

CADA Beed : The trend for irrigation for rabi over others is 50-50, in most of the projects.

NIC Nanded : In kundrala projects irrigation for perennial is 46% over other season.

Normal Plangroup:

AIC Akola: Average cropping pattern observed on projects under the circle was Rabi 69%, HW 14% & Perennials 7 %. Hw & Perennials were predominant on Goki (5%), Lower Pus (13%) & Koradi (5%).

BIPC Buldana and YIC Yavatmal: Rabi seasonal on Pentakli & Navargaon was 98 & 95 % of the total irrigated area.

CIPC Chandrapur: Rabi seasonal was predominant on Amalnala, Dham & Pothara. Its percentage was about 88 % of the total irrigated area.

CADA Jalgaon: In all the projects, the major percentage of irrigated crops (51 to 65%) is under rabi season.

CADA Nashik: In Bhojapur, Mandohol ,Ghatshil Pargaon and Waldevi projects, 57%, 72%, 66% and 55% crops are irrigated in rabi season respectively. However, in Adhala & Alandi projects, the percentage of irrigated crops in rabi season was 52% and 33% respectively.

CADA Pune: In Visapur project 58% perinial crops are taken

PIC Pune: In Nazre Kasarsai and Wadiwale projects 40 to 50% crops are in Rabi and H.W. Seasons.

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

Surplus plan group:

CADA Nagpur: Average cropping pattern observed on projects under the circle was 69% Kharif & 25 % Rabi. Kharif crops were on 100 % area on Rengepar, Tekepar (LIS), Sorna & Sangrampur.

CIPC Chandrapur: Average cropping pattern observed on 3 projects under the circle was 29 % Kharif & 69 % Rabi.

Abundant plan group:

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

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Minor Projects

Indicator I: Water Availability in Tanks

Highly Deficit Plangroup:

CADA Beed: The average availability of water in reservoirs is 61% which has slightly decreased over last year 64%.

CADA Solapur:- Over all percentage availability of water storage in M.I.Tanks is 61% of live storage capacity.

SIC Sangli:- Over all percentage of availability of water storages in M.I. Tanks under this plan group is 75% of live storage capacity.

PIC Pune: Minor projects under PIC Pune are having 86% average water availability this year.

Deficit Plangroup:

CADA Nashik: Due to satisfactory rains, average water availability is 91%.

CADA Jalgaon: The average water availability is 75%.

CADA Beed: The average availability of water has decreased to 61% with last year 78%.

CADA Aurangabad: The average availability has decreased drastically to 49% over to last years 96%.

NIC Nanded: The average availability has decreased to 56% over to last year 100%.

AIC Akola: All projects under this circle, water availability in irrigation project was 75% on 15 Th October.

BIPC Buldhana: Live storages on all the projects were 94 %.

Normal Plangroup:

CADA Jalgaon: Average water availability is 97%.

CADA Nashik: Average water availability is 97%.

NIC Nanded: The average availability of water is 61% for current year against 98% of last year.

CIPC Chandrapur: Due to satisfactory rain during monsoon average live storages in minor projects is in the range of 96 %.

AIC Akola: Due to satisfactory rains, average water availability is 86%.

BIPC Buldhana: Water availability under this circle is 100%.

YIC Yavatmal: The availability of water in minor projects is 78% this year.

CADA Nagpur: Due to satisfactory rain during monsoon average live storages in minor projects were 96 %.

NIC Nagpur: Projects under the circle were 99% full.

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

PIC Pune: Minor projects under PIC Pune having average 84% water availability this year.

CADA Pune: The availability of water in minor projects is 83% this year.

Surplus Plan Group

CADA Nagpur: Due to low rains during monsoon, average live storages built up in minor projects were 91% only.

CIPC Chandrapur: average storage in projects under the circle was 97%

Abundant Plan group:

CADA Nagpur: Due to low rains during monsoon, average live storages built up in minor projects were 87% only.

CIPC Chandrapur: Due to satisfactory rain during monsoon average live storages in minor projects was 92 %

SIC Sangli and TIC Thane:- Over all percentage of availability of water storages in M.I. tanks, are 97% & 100% respectively to its live storage capacities.

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

KIC Ratnagiri: The average water availability is 91% this year. Last year it was 97%.

CADA Pune: The water availability this year is 100%

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

Highly Deficit Plangroup:

CADA Beed: The average evaporation of the Minor projects is 15% which is less than last year (24%)

PIC Pune: The percentage of evaporation is 18% which is same as last year.

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

CADA Solapur:- 30% & under SIC Sangli : 24% respectively.

Deficit Plangroup:

CADA Nashik: The average percentage evaporation to live storage is 19%.

CADA Jalgaon: The percentage of evaporation to live storage is 11% (2007-08).

CADA Beed: The average evaporation of the Minor project is 35% which is slightly higher than last years 33%.

CADA Aurangabad: The average evaporation of the Minor projects is 22% which is less than last year 33%.

NIC Nanded: The average evaporation of the Minor projects is 25% which has retained the last years value.

AIC Akola & BIPC BULDANA: In Minor projects under these circles, the rate of evaporation is i.e.25% & 24% as evaporation is measured by using data of near by laboratory or on ad-hoc basis.

Normal Plangroup:

CADA Nashik: The percentage of evaporation to live storage is 16%.

CADA Jalgaon: The percentage of evaporation to live storage is 17%, which is increased as compared to last year i.e.2006-07 (16%).

NIC Nanded: The average evaporation of the Minor projects is 27% which has retained the last years value.

PIC Pune: The percentage of evaporation is 21% which reduces from 23% of last year.

CADA Pune: The projects are having evaporation losses of 27%.

YIC Yavatmal & NIC Nagpur: Percentage of Evaporation in case of minor projects on these circles was 28% & 39% respectively.

UWPC Amrawati: Percentage of Evaporation in case of minor projects on these circle was 20%.

AIC Akola & BIPC Buldhana: Percentage of Evaporation in case of minor projects on these circles was 23.27% & 21.74% respectively.

Abundant plangroup:

NKIPC Thane: The minor projects are having percentage of evaporation losses 13% this year.

KIC Ratnagiri: Percentage of evaporation losses is 9.5% this year. Last year it was 11%.

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

SIC Sangli & TIC Thane: Average percentage evaporation in M.I. Tank in SIC Sangli & TIC Thane is 16% & 12% respectively.

CADA Nagpur & CIPC Chandrapur**:** Evaporation percentage on projects under these circles was moderate i.e. 24 & 22% respectively.

Indicator III: Water Use Pattern

Highly Deficit Plan-Group:-

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

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

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

Deficit Plangroup:

CADA Jalgaon: The prominent use is in Rabi season on canal and on reservoir lift. The NI use is about 1% only.

CADA Nashik: 44% water is utilised for irrigation by reservoir lift.

AIC Akola: In case of Minor projects water use is predominant in Rabi season.

21 % of storage is utilised through reservoir lift. 18% water is lost through leakages.

BIPC Buldhana: In case of Minor projects water use is predominant in Rabi season. Water use through reservoir lift was 38% where as 17 % water is lost through leakages.

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

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

Normal Plangroup:

CADA Jalgaon: The prominent water use (31%) is in Rabi season by flow irrigation.

CADA Nashik: About 58% water is utilised for irrigation by reservoir lift.

AIC Akola: Water use on Rabi on projects under this circle was (172.5 Mcum) 60% of the total live storage. Water used on reservoir lift 38% 48% water is lost through leakages.

BIPC Buldhana: Water use is predominant in rabbi season on canal irrigation and reservoir lift.

YIC Yavatmal: 50 % water is utilized for irrigation in Rabi season.

Surplus Plan group:

CADA Nagpur: Water use in Kharif was predominant (60%) with 12% water use for HW paddy in HW season.

Abundant Plan group:

CADA Nagpur & CIPC Chandrapur**:** Projects under CADA Nagpur had utilised 70% water for crops in Rabi where as 60% water was used for irrigating crops in Kharif season on projects under CIPC.

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

TIC Thane: Water use for irrigation in Kokan. seasons only on canal as well as on reservoir lift.

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

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

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

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

TIC Thane: Water use efficiency i.e. ha/mm3 in Kharif season is 179, Rabi season 129 and in H.W. season 96.

Indicator IV: Irrigation system performance (Canal)

HIghly Deficit Plangroup:

CADA Beed: Performance of indicator though seems to better, it is still below the state norms in both the seasons.

CADA Solapur:- Water use efficiency i.e. ha/mm3 in Rabi season is 116 and in H.W. season is 121.

SIC Sangli: Water use for irrigation in kharif, rabi & H.W. season is mostly on reservoir lift i.e. 88, 81, & 106 (ha/Mcum) respectively.

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

Deficit Plan group:

CADA Aurangabad: The performance of Rabi is good i.e. 147ha/Mcum but in HW it is far below the state norms i.e.just 60ha/Mcum.

NIC Nanded: The performance of indicator in Rabi 111 ha/Mcum & HW 88 ha/Mcum is fairly good but still needs efforts to achieve state norms.

CADA Jalgaon: The irrigation system performance in Rabi season is 125 Ha/mcum.

CADA Nashik: The Irrigation system performance in Rabi and HW season is 127 Ha/Mcum and 131 Ha/Mcum respectively.

AIC Akola & BIPC Buldana**:** ISP observed on canals in Rabi season on projects under these circles 35 & 115 ha/Mcum.

Normal plangroup:

CADA Jalgaon: The Irrigation system performance in Rabi and HW season are 108 ha/Mcum & 163 ha/Mcum.

CADA Nashik: The system performance in Rabi and HW season are quietly good i.e. 242 Ha/Mcum & 132 Ha/Mcum respectively.

AIC Akola & BIPC Buldana: ISP observed on canals on this circle is 94 & 97% respectively.

CIPC Chandrapur: ISP observed on canals in Kharif 193, Rabi 64, H.W. 31

YIC Yavatmal**:** ISP observed in this circle in Rabi & H.W. is low i.e. 58 & 19 respectively.

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

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

Surplus Plan group

CADA Nagpur & CIPC Chandrapur: The system performance on the projects under these circles both in Rabi and HW season on canal was low i.e. 37Ha/Mcum & 29 Ha/Mcum respectively.

Abundant Plan group

SIC Sangli: Water use for irrigation in kharif, Rabi & H.W. seasons on canal and mostly on reservoir lift is 118 & 94.

TIC Thane: Water use efficiency i.e. ha/mm3 in Kharif season is 103, Rabi season 59 and in H.W. season 83.

CADA NAGPUR & CIPC Chandrapur: The system performance on the projects under CIPC both in Rabi and HW season on canal was low i.e71 Ha/Mcum & 25 Ha/Mcum respectively.

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

Chapter 4

Observations and Conclusions

After consolidating and analyzing the Water Accounts of 52 Major, 199 Medium and 1756 Minor Projects in the light of information supplied by the concerned field offices, the main observations are as listed below:

4.1 Observations

4.1.1 There is wide variation (2% to 46 %) in evaporation percentage to live storage on 15 Th October. (Bhandaradhara, Dudhaganga 4% Warna, Bhatsa 3% Kal, Amba 3% Lower Terna 46% Hatnoor 40%, Vishnupuri 36% etc).

There is wide variation in actual evaporation to projected evaporation from 26% to 205%. The Vishnupuri, Mukane, Bhandardara, Bhama Asked and Jayakwadi Stage-I has less than 50% evaporation. The Katepurna, Itiadoh, Kanher, Dina & Tulsi has grater than 125% evaporation.

4.1.2 Actual irrigation water use on many projects was more than anticipated water use in PIP of the project. Lapses in discharge measurement on account of nonfunctioning of SWF, non installation of water meter on LI Schemes/ NI schemes, along with unmeasured silt storage may be responsible for apparent excess water use.

4.1.3 Annual actual Area irrigated on canal, reservoir, and river lift (of Major and Medium projects) as compared to PIP was 96 %. However the achievement on some projects (Pus, Chaskaman, Arunavati, Upper Penganga etc) was below 50% of the set target in PIP.

On the contrary achievement on Chanakapur (140), Hatnoor (278%), and Pench (152%) was much excessive over the planned area in PIP. Achievement on these projects is satisfactory but care should also be taken while preparing the PIP by considering the realistic availability of water.

4.1.3 Irrigation System Performance attained on certain projects in Rabbi (Jayakwadi stage I & II, Purna, Arunavati, Pus, Hatnur, Lowor Wunna, Upper Penganga etc) was below the 75% of the state norms.

4.1.4 Irrigation System Performance observed in HW on Manar, manjara, Ghod, Wan, Chaskaman was satisfactory as compared to the state target. On rest of the projects there is a scope to improve the performance.

4.1.5 Realisation of good conveyance efficiency on main canals of some projects (Jayakwadi stage I & II, Purna, Pus, Upper Penganga, Kanher) but low ISP in either Rabbi or HW season suggest more transit losses on distribution system of the respective projects.

It is insisted that, field officers should sort out the realistic reasons for more transit lossess on distribution system and take suitable action for improvement.

4.1.6 Percentage of Leakages on MI projects is excessively high. (25% of the water used for irigation) There are number of projects where total available water is lost in evaporation and leakages.

4.2 **Conclusions**

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

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

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

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

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

4.2.6 Field officers are required to concentrate on full utilisation of available water.

Chapter 5

Water Auditing of Irrigation Projects at Administrative Levels – A State Preview

5.1 Conventional method of Water Audit

In the State Water Policy as well as in the Second MWIC Report, it has been categorically mentioned to plan the use of available Water Resources & implement the Irrigation Water Management considering basin or sub-basin as a unit. On account of large number of irrigation projects, since the commencement of process of Water auditing, the water account is analyzed circle wise only, referring a project in particular wherever necessary. As mentioned here before, the State's 25 sub basins are classified in to five Plan groups in accordance with the availability of water per unit ha of CCA of that sub basins. There are about 22 Circles which deals with the Irrigation Water Management. Numbers of circles, depending upon the location of a project under their jurisdiction, are related with more than one plan group. As a result, the performance of such circles obtained by analyzing the water account can not be visualized or summarized very easily. Moreover, it was experienced that such water audit report didn't give the consolidated picture of performance of such individual circle as a whole or a region.

Analysis of a circle or region as a whole is necessary for knowing the current status of that Region /circle for taking the administrative review as well as framing the action strategy at regional as well as at circle level for bringing improvement in the performances of irrigation projects.

5.2 Water Auditing at Administrative levels

There fore, in addition to the current conventional method of water audit analysis, an attempt has been made to consolidate, evaluate/analyze the water account region wise, circle wise. The results thus obtained gives the project category wise (Major/Medium/Minor), region as well as circle wise information about water availability, water use in different water use sectors, water losses along with area planned in PIP, Area actually irrigated & annual average irrigation System Performance achieved during the irrigation year.

Project category wise details about water availability, water use, Area irrigated, Irrigation System performance attained etc at different Administrative levels are given in Table 5.1 to 5.5 appended here with.

5.3 State level preview

5.3.1 Water Use:

From the information shown in above mentioned tables it appears that, at state level during the irrigation year 2007-08, actual live storage of 24442 Mcum was available against total design live storage of 27773 Mcum on 15 th October 2007. On 52 Major, 199 Medium & 1756 Minor projects considered together (13272 + 2044+ 1490), 16806 Mcum of water was used on canals; Reservoir & River lift for irrigation purpose. Total Non Irrigation water use was (2942+228+115) 3285 Mcum, which is 13 % of the actual live storage. The total irrigation use is 69% of the actual live storage.

Water use on reservoir of all types of projects was (820+420+604) 1844 Mcum which is 9.11 % of the total irrigation water use.

Total Water loss on account of evaporation was 2473 Mcum (13 % of live storage), 781 Mcum (24%) & 624 Mcum (22%) on Major, Medium& Minor projects

respectively. Total loss of water on account of evaporation at state level was 3878 Mcum (16%).

5.3.2 Area Planned and Irrigated

Data collected about 52 Major & 199 Medium projects Shows that, a gross Preliminary Irrigation Programme of (205775 + 295230) 1501005 Ha. was framed during the irrigation year. Against the target, actual area irrigated was 1469322 ha (98 %).

5.3.3 System Performance

Annual average ISP observed at the state level (excluding MI projects) was 96 ha/Mcum.

5.3.4 UnUtilised storages

Unutilized storages at the end of irrigation year (excluding inflow in HW & design carry over), on Major and Medium projects were 1261 Mcum and 369 Mcum respectively. Major project wise details are given in Table 5.5. The total unutilized storage as compared to 15th October 2007 live storage was 7.5%.

5.3.5 Water Auditing at Region/ Circle Adminstrative Level

Region, Circle wise and project wise (Major Projects) data attached in enclosed tables 5.1 to 5.5 and charts I to XVI attached herewith are self sufficient to explain the irrigation performances of any revenue region or irrigation Circle in particular. The Analysis also can be extended to respective CE'S Administrative zone by consolidating the data of concerned Circles together.

Considering the Geographical continuity of area and where more or less similar climatological condition under a Regional Chief Engineer's zone persists, the data obtained here will be helpful to concerned field officers.

Table 5.1 Project wise details of water availability, water use on Major projects (2007-08)

Circle	Project	Design Live Storage	Actual Live Storage 15ThOct	Total Irrigation Use	NI water Use	Evaporation Losses	Water Use on reservoir	Unutilized Storage	Irrigated Area (ha)		Average ISP on (ha/Mcum)
									PIP	Actual	
CIPC Chandrapur	Asolamendha	56.38	56.38	69.29	0.00	16.32	0.00	0.00	11500	10684	154
	Dina	67.54	46.10	48.29	0.00	8.50	0.00	14.92	11000	10794	373
	Bor	127.42	127.35	85.27	0.00	9.53	0.00	18.65	11100	4716	55
CADA Nagpur	Bagh Complex	268.96	221.53	297.73	4.40	34.04	2.61	0.00	N.A.	29708	90
	Itiadoh	318.85	302.98	335.41	0.00	88.53	0.00	18.42	N.A.	28249	84
	Pench Complex	1374.00	1069.31	1062.03	198.90	84.32	0.00	41.55	49801	75643	61
	Lower WunnaComplex	189.18	187.82	101.02	7.78	45.93	4.07	41.65	10905	6000	102
AIC Akola	Katepurna	86.35	80.50	34.42	21.75	18.81	1.16	0.00	6480	7667	208
	Nalganga	69.32	32.59	24.89	0.93	8.85	1.17	0.00	4572	2820	113
	Pus	91.27	91.26	59.98	1.93	13.26	5.30	8.94	11628	3995	52
UWPC Amaravati	Upper Wardha	548.14	548.14	327.04	26.76	99.66	16.59	123.73	29000	19406	59
BIPC Buldana	Wan	81.96	81.96	67.57	7.39	4.93	0.00	3.51	12830	8320	114
YIC Yeotmal	Arunawati	169.92	108.68	66.27	2.49	32.85	1.79	0.00	5300	2206	33
CADA Solapur	Bhima (Ujjani)	1517.00	1675.00	2057.00	74.00	434.00	305.00	0.00	208450	206523	100
PIC Pune	Bhama Askhed	217.10	83.52	5.16	0.39	5.96	2.17	17.51	N.A.	877	170
	Khadakwasla Complex	793.47	775.62	338.57	541.10	59.40	5.21	0.00	26174	42569	126
	Chaskaman	214.50	214.50	49.53	4.29	11.32	3.11	0.00	12525	5599	113
	Neera complex	931.94	931.92	1235.27	62.66	74.51	21.14	0.00	144074	137645	111
	Pawana	241.11	230.49	10.89	203.21	17.24	2.10	35.78	1503	1812	166
CADA Pune	Kukadi Complex	864.39	702.50	542.77	4.45	123.40	21.82	0.00	46000	44865	83
	Ghod	154.80	154.80	143.34	7.20	37.00	18.96	0.00	19500	17803	124
	Kanher	271.68	271.68	154.66	0.19	26.02	4.63	24.31	N.A.	8652	125
	Dhom	331.05	326.73	295.13	6.96	28.86	1.38	0.00	N.A.	19360	58
SIC Sangli	Dudhaganga	679.00	678.00	151.00	6.00	26.00	0.00	214.00	25050	17260	114

	Radhanagari	220.00	215.00	308.00	49.00	14.00	0.00	0.00	52440	42245	137
	Tulshi	92.00	92.00	61.00	0.00	17.00	1.00	9.00	6070	3733	61
	Warana	779.00	747.00	274.00	5.00	21.00	0.00	169.00	56810	40525	148
TIC Thane	Bhatsa	942.00	787.00	68.00	727.00	25.00	0.00	0.00	3000	2566	38
	Kal-Amba	528.00	405.00	143.00	46.00	14.00	0.00	61.00	4167	4167	29
	Surya	286.00	175.00	63.00	48.00	14.00	0.00	0.00	4400	2760	44
CADA Nashik	Chankapur	76.85	76.85	17.06	32.20	13.40	0.80	0.00	1994	2788	163
	Darna	202.43	197.36	6.58	20.69	24.65	5.35	17.06	N.A.	1814	276
	Gangapur	159.42	157.12	50.08	154.21	13.89	3.61	0.00	2229	7715	154
	Bhandardara	304.10	304.10	344.00	67.71	4.71	0.40	9.46	31660	28554	83
	Kadwa	52.91	52.91	54.18	0.83	6.49	1.27	1.25	1500	1965	36
	GautamiGodavari	33.78	30.50	0.36	0.00	2.32	0.36	0.00	N.A.	86	0
	Kashyapi	52.42	48.86	0.58	0.00	2.49	0.58	0.00	29	74	128
	Mukane	134.05	125.13	9.12	1.38	7.37	4.59	0.46	N.A.	1279	140
	Mula	608.80	608.92	638.34	39.67	65.85	6.00	0.00	31000	52735	83
	NMWeir	7.28	7.28	231.19	32.98	0.00	0.00	0.00	N.A.	18785	81
	Upper Godavari Complex	336.18	334.32	277.37	41.73	35.81	28.05	0.00	25317	25641	92
CADA Jalgaon	Girna+Panzan	525.06	519.65	378.07	66.73	65.57	7.40	0.00	29517	27306	72
	Hatnur	255.00	255.00	84.75	113.37	100.98	27.58	2.02	2500	6950	82
CADA Aurangabad	Jayakwadi Stage I	2171.00	2171.00	1358.66	201.46	312.80	209.68	118.17	140300	94873	70
CADA Beed	Jayakwadi Stage II (Majalgaon)	312.00	260.40	192.10	10.84	82.87	10.13	0.00	21970	14979	78
	Lower Terna	91.22	76.15	30.55	3.56	35.22	12.10	12.12	4100	4616	151
	Manjra	176.96	174.16	104.55	22.60	59.86	10.65	0.00	12900	12728	122
NIC Nanded	Manar	138.21	134.29	107.84	0.80	23.47	5.95	12.90	12000	12988	120
	Purna Complex	890.22	437.50	373.43	21.62	71.93	9.87	0.00	20800	23777	64
	Vishnupuri	80.79	28.67	80.65	25.22	10.28	49.01	0.00	12000	11025	137
	Upper Penganga	964.10	871.48	419.20	26.62	118.88	7.15	285.80	77000	21188	51
AIC A"bad	N.M.Canal(exp)Mukane	0.00	0.00	33.36	0.00	0.00	0.00	0.00	4680	852	26

Table 5.2

Details of Water availability, Water use and Losses on Major Project

Water:Mcum (2007-08)

Circle	Design LS	Actual Live Storage 15ThOct	Total Irrigation Use	NI water Use	Evaporation Losses	Water Use on reservoir	Unutilized Storage	Irrigated Area (ha)		Average ISP (ha/Mcum)
								PIP	Actual	
2	3	4	5	6	7	8	9	10	11	12
CADA Nagpur	2150.99	1781.64	1796.19	211.08	252.82	6.68	101.62	60706	139600	78
CIPCChandrapur	251.34	229.83	202.85	0.00	34.35	0.00	33.57	33600	26194	129
AIC Akola	246.94	204.35	119.29	24.61	40.92	7.63	8.94	22680	14482	121
YIC Yeotmal	169.92	108.68	66.27	2.49	32.85	1.79	0.00	5300	2206	33
BIPC Buldana	81.96	81.96	67.57	7.39	4.93	0.00	3.51	12830	8320	123
UWPC Amaravati	548.14	548.14	327.04	26.76	99.66	16.59	123.73	29000	19406	59
PIC Pune	2398.12	2236.05	1639.43	811.65	168.42	33.74	53.29	184276	188502	107
CADA Pune	1621.92	1455.71	1135.89	18.80	215.27	46.78	24.31	65500	90680	80
SIC Sangli	1770.00	1732.00	794.00	60.00	78.00	1.00	392.00	140370	103763	131
CADA Solapur	1517.00	1675.00	2057.00	74.00	434.00	305.00	0.00	208450	206523	100
TIC Thane	1756.00	1367.00	274.00	821.00	53.00	0.00	61.00	11567	9493	35
CADA Nashik	1968.52	1943.35	1628.86	391.40	176.98	51.01	28.23	93729	141436	87
CADA Jalgaon	780.06	774.65	462.82	180.10	166.55	34.98	2.02	32017	34256	74
CADA Aurangabad	2171.00	2171.00	1358.66	201.46	312.80	209.68	118.17	140300	94873	70
CADA Beed	580.18	510.71	327.20	37.00	177.95	33.40	12.12	38970	32323	99
NIC Nanded	2073.32	1471.94	981.12	74.26	224.56	71.98	298.70	121800	68978	70
AIC A'bad	0.00	0.00	33.36	0.00	0.00	0.00	0.00	4680	852	26

Region wise Abstract of Water availability, Water use and Losses on Major Project

Water:Mcum

State/Region	Design LS	Actual Live Storage	Total Irrigation Use	NI water Use	Evaporation Losses	Water Use on reservoir	Unutilized Storage	Irrigated Area (ha)		Average ISP (ha/Mcum)
								PIP	Actual	
1	2	3	4	5	6	7	8	9	10	11
State	20085.41	18292.01	13271.55	2941.99	2473.06	820.26	1261.21	1205775	1181887	89
Nagpur	2402.33	2011.47	1999.04	211.08	287.17	6.68	135.19	94306	165794	83
Amaravati	1046.96	943.13	580.17	61.25	178.36	26.01	136.18	69810	44414	77
Pune	7307.04	7098.76	5626.32	964.45	895.69	386.52	469.60	598596	589468	105
Konkan	1756.00	1367.00	274.00	821.00	53.00	0.00	61.00	11567	9493	35
Nashik	2748.58	2718.00	2091.68	571.50	343.53	85.99	30.25	125746	175692	84
Aurangabad	4824.50	4153.65	2700.34	312.71	715.31	315.06	428.99	305750	197026	73

Table 5.3

Details of Water availability, Water use and Losses on Medium Project

Water:Mcum Area:Ha (2007-08)

Project Type/ Region	Circle	Design LS	Actual Live Storage 15ThOct	Total Irrigation Use	NI water Use	Evaporation	Water Use on reservoir	Unutilized Storage	Irrigated Area		Average ISP (ha/Mcum)
									PIP	Actual	
1	2	3	4	5	6	7	8	9	10	11	12
Nagpur	CADA Nagpur	295.58	202.46	185.94	12.75	35.82	39.20	14.57	45117	52760	284
	CIPC Chandrapur	250.53	216.89	168.79	11.51	53.43	21.45	7.02	24930	22941	136
	NIC Nagpur	57.32	57.32	36.13	3.32	17.76	4.92	3.78	3900	2405	67
	GLIC Bhandara	9.40	9.10	4.37	0.90	2.83	0.78	0.00	1290	335	77
	Sub Total	**612.83**	**485.77**	**395.23**	**28.48**	**109.84**	**66.35**	**25.37**	**75237**	**78441**	**198**
Amaravati	AIC Akola	412.60	378.29	218.42	24.48	90.79	17.62	11.59	42660	25622	117
	BIPC Buldhana	124.50	84.87	22.05	4.10	24.01	6.02	30.40	7478	7298	331
	YIC YAVATMAL	79.72	79.42	44.82	4.42	17.15	1.84	1.93	3500	2400	54
	UWPC Amravati	76.62	75.29	5.90	0.69	10.61	0.13	36.43	500	200	34
	Sub Total	**693.44**	**617.87**	**291.19**	**33.68**	**142.56**	**25.60**	**80.35**	**54138**	**35520**	**122**
Pune	CADA Pune	45.21	45.21	38.21	4.37	10.51	8.67	0.00	6635	6727	176
	CADA Solapur	222.94	104.68	84.00	3.00	34.00	55.18	4.50	8852	11678	139
	PIC Pune	225.64	221.71	147.79	8.22	59.50	47.36	16.22	23393	20742	140
	SIC Sangli	509.49	482.56	360.00	9.00	45.00	31.00	57.38	50922	50353	140
	Sub Total	**1003.28**	**854.16**	**630.00**	**24.59**	**149.01**	**142.21**	**78.10**	**89802**	**89500**	**142**
Konkan	KIC Ratnagiri	27.23	26.37	24.89	0.74	0.92	0.00	0.37	218	125	5
	TIC Thane	101.00	101.00	48.00	0.00	26.00	0.00	53.21	3300	2802	58
	NKIPC Thane	144.98	121.37	4.20	35.99	8.33	0.00	70.17	500	87	21
	Sub Total	**273.21**	**248.74**	**77.09**	**36.73**	**35.25**	**0.00**	**123.75**	**4018**	**3014**	**39**
Nashik	CADA Nashik	175.12	173.95	104.08	20.05	25.15	16.85	9.69	14394	13989	134
	CADA Jalgaon	364.47	305.39	241.52	25.78	73.29	13.57	26.99	24952	25983	108
	JIPC Jalgaon	30.69	20.64	6.05	0.12	5.37	3.77	6.48	200	564	93
	Sub Total	**570.28**	**499.98**	**351.65**	**45.95**	**103.81**	**34.19**	**43.16**	**39546**	**40536**	**115**

Aurangabad	**CADA Aurangabad**	277.81	149.00	78.97	16.13	64.13	41.69	2.68	7536	11440	145
	CADA Beed	459.68	352.09	187.53	37.16	150.78	102.56	13.61	19953	24661	132
	NIC Nanded	63.35	48.28	31.16	4.90	12.29	5.53	1.37	5000	4050	130
	AIC Aurangabad	47.85	17.24	1.37	0.00	13.16	1.37	1.52	N.A	273	0
	Sub Total	**848.69**	**566.61**	**299.03**	**58.19**	**240.36**	**151.16**	**19.19**	**32489**	**40424**	**135**
State	**Grand Total**	**4001.73**	**3273.12**	**2044.19**	**227.62**	**780.83**	**419.50**	**369.92**	**295230**	**287435**	**141**

Region wise Abstract of Water availability, Water use, & Losses on Medium Project

Water:Mcum

Project Type/Region	Design LS	Actual Live Storage	Total Irrigation Use	NI water Use	Evaporation	Water Use on Reservoir	Unutilized Storage	Irrigated Area (PIP)	Irrigated Area (Actual)	Average ISP (ha/Mcum)
State	4002	3273	2044	228	781	419	370	295230	287435	141
Nagpur	613	486	395	28	110	66	25	75237	78441	198
Amravati	693	618	291	34	143	26	80	54138	35520	122
Pune	1003	854	630	25	149	142	78	89802	89500	142
Konkan	273	249	77	37	35	0	124	4018	3014	39
Nashik	570	500	352	46	104	34	43	39546	40536	115
Aurangabad	849	567	299	58	240	151	19	32489	40424	135

Table 5.4

Statement Showing Water Availability, Water Uses and Losses observed on Minor Projects

Water:Mcum (2007-08)

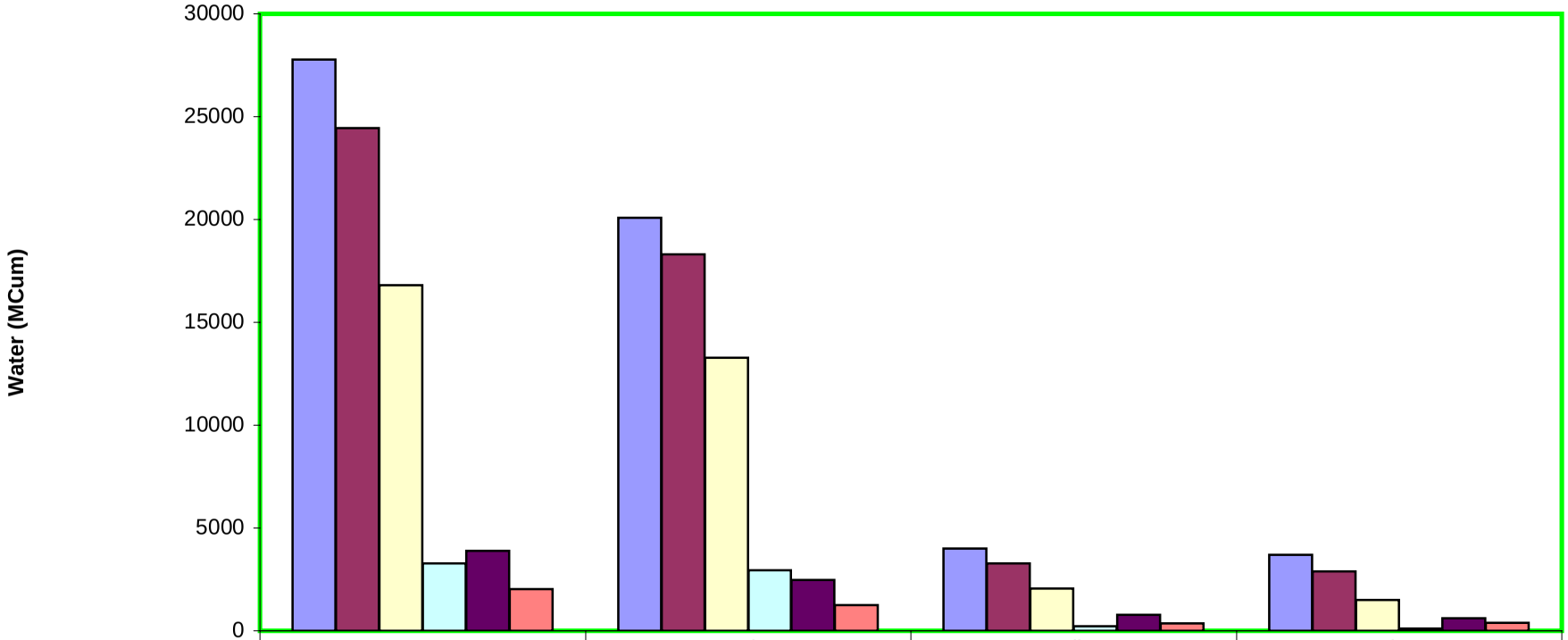
Project Type/Region	Circle	Design LS	Actual Live Storage 15th Oct	Total Irrigation Use	Evaporation	Reservoir use Irrigation	Leakages	NI water Use
Nagpur	CADA Nagpur	235	216	146	40	5	13	1
	CIPC Chandrapur	125	119	97	16	1	8	0
	NIC Nagpur	30	30	19	12	4	0	1
	GLIC Bhandara	6	6	3	2	0	0	1
	Sub Total	395	370	265	69	10	21	3
Amaravati	AIC Akola	530	436	255	103	60	66	4
	BIPC Buldhana	186	176	122	41	44	19	2
	UWPC Amravati	10	10	6	2	0	0	0
	YIC Yeotmal	88	69	27	19	3	11	0
	Sub Total	814	690	409	165	107	96	6
Pune	CADA Pune	62	54	33	13	27	12	4
	CADA Solapur	108	66	38	20	22	7	3
	PIC Pune	206	175	116	35	87	22	6
	SIC Sangli	309	268	53	27	25	24	3
	Sub Total	686	562	240	95	162	65	16
Konkan	KIC Ratnagiri	105	96	18	9	1	52	2
	TIC Thane	184	184	115	22	4	31	35
	NKIPC Thane	91	65	8	9	2	20	5
	Sub Total	380	344	140	40	7	103	42
Nashik	CADA Nashik	160	170	98	28	83	24	5
	CADA Jalgaon	135	129	66	32	18	41	20
	JIPC Jalgaon	0	0	0	0	0	0	0
	Sub Total	295	299	164	60	101	65	25
Aurangabad	CADA Aurangabad	190	90	44	23	27	14	4
	CADA Beed	628	383	168	129	160	65	16
	NIC Nanded	106	24	7	13	6	2	0
	AIC Aurangabad	194	115	53	30	24	19	2
	Sub Total	1117	612	272	196	218	100	23
State	Grand Total	**3686**	**2878**	**1490**	**624**	**604**	**449**	**115**

Table 5.5
Unutilised Storage Observed on Major Projects (2007-08)

Region	Circle	Project	Storage as on 15 th Oct. (Mcum)	Unutilised Storage (Mcum)
Amaravti	AIC Akola	Nalganga	32.59	0.00
Amaravti	AIC Akola	Pus	91.26	8.94
Amaravti	AIC Akola	Katepurna	80.50	0.00
Amaravti	BIPC Buldana	Wan	81.96	3.51
Amaravti	UWPC Amaravati	Upper Wardha	548.14	123.73
Amaravti	YIC Yeotmal	Arunawati	108.69	0.00
Aurangabad	CADA Aurangabad	Jayakwadi Stage I	2170.94	118.17
Aurangabad	CADA Beed	Lower Terna	76.15	12.13
Aurangabad	CADA Beed	Jayakwadi Stage II (Majalgaon)	260.40	0.00
Aurangabad	CADA Beed	Manjra	174.16	0.00
Aurangabad	NIC Nanded	Upper Penganga	871.48	285.80
Aurangabad	NIC Nanded	Manar	134.29	12.90
Aurangabad	NIC Nanded	Purna	437.50	0.00
Aurangabad	NIC Nanded	Vishnupuri	28.67	0.00
Konkan	TIC Thane	Surya	175.43	0.00
Konkan	TIC Thane	Bhatsa	787.26	0.00
Konkan	TIC Thane	Kal-Amba	405.21	60.78
Nagpur	CADA Nagpur	Pench	1069.21	41.55
Nagpur	CADA Nagpur	Lower Wunna	187.82	41.65
Nagpur	CADA Nagpur	Itiadoh	302.98	18.42
Nagpur	CADA Nagpur	Bagh	221.53	0.00
Nagpur	CIPCChandrapur	Dina	46.10	15.73
Nagpur	CIPCChandrapur	Asolamendha	56.38	0.00
Nagpur	CIPCChandrapur	Bor	127.35	18.65
Nashik	CADA Jalgaon	Girna	519.65	0.00
Nashik	CADA Jalgaon	Hatnur	255.00	2.02
Nashik	CADA Nashik	Darna	197.36	17.05
Nashik	CADA Nashik	Bhandardara	304.10	9.46
Nashik	CADA Nashik	Chankapur	76.85	0.00
Nashik	CADA Nashik	Mula	608.92	0.00
Nashik	CADA Nashik	Upper Godavari Complex	334.32	0.00
Nashik	CADA Nashik	Mukane	125.13	0.46
Nashik	CADA Nashik	Kadwa	52.91	1.25
Nashik	CADA Nashik	Gangapur	157.12	0.00
Nashik	CADA Nashik	NMWeir	7.28	0.00

Region	Circle	Project	Storage as on 15 th Oct. (Mcum)	Unutilised Storage (Mcum)
Nashik	CADA Nashik	Gautami	30.50	0.00
Nashik	CADA Nashik	Kashyapi	48.86	0.00
Pune	CADA Pune	Kanher	271.68	0.00
Pune	CADA Pune	Kukadi Complex	702.50	0.00
Pune	CADA Pune	Dhom	326.73	0.00
Pune	CADA Pune	Ghod	154.80	0.00
Pune	CADA Solapur	Bhima (Ujjani)	1675.14	0.00
Pune	PIC Pune	Pawana	230.49	35.78
Pune	PIC Pune	Khadakwasla	775.62	0.00
Pune	PIC Pune	Chaskaman	214.50	0.00
Pune	PIC Pune	Bhama Askhed	83.52	17.51
Pune	PIC Pune	Neera complex	931.92	0.00
Pune	SIC Sangli	Warana	746.52	169.16
Pune	SIC Sangli	Tulshi	91.92	8.59
Pune	SIC Sangli	Dudhaganga	678.09	214.23
Pune	SIC Sangli	Radhanagari	214.67	0.00
Total			**18292.10**	**1237.47**

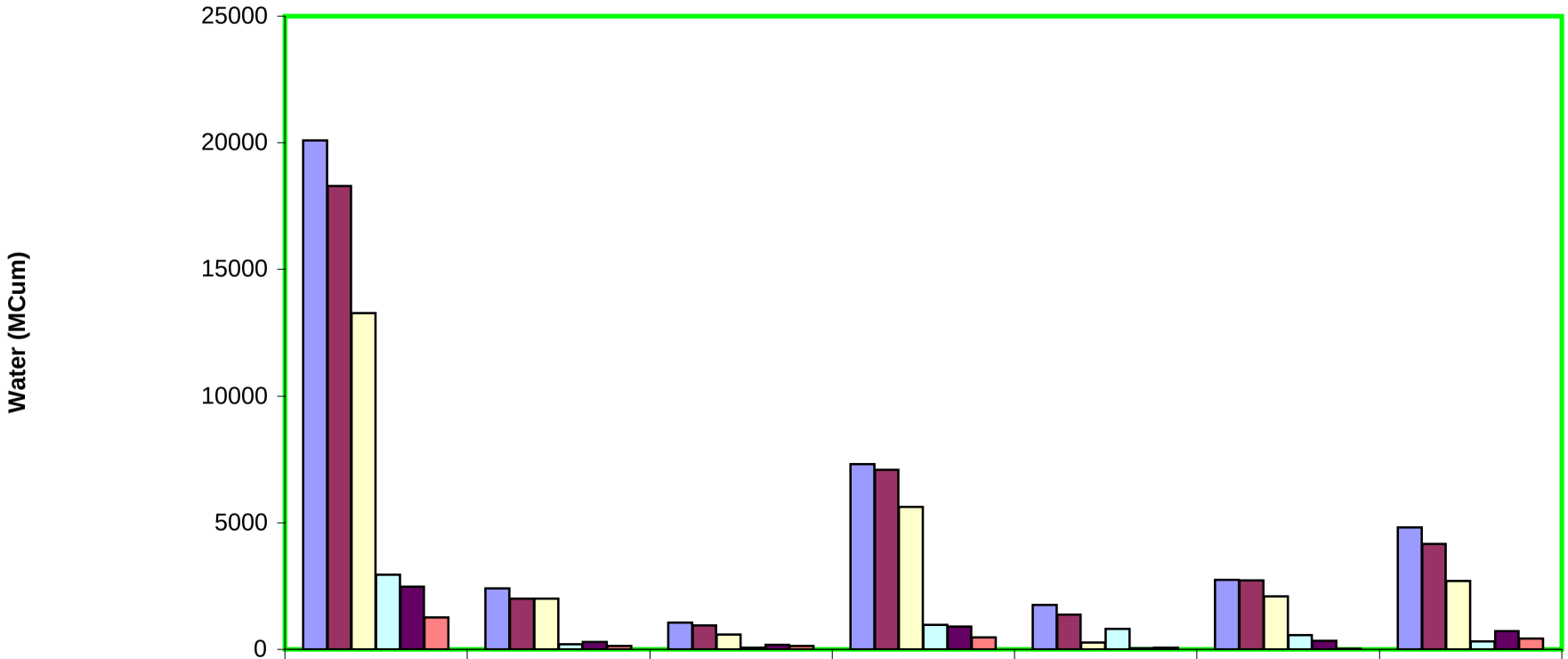
Chart I
Water Availability and Water use at State Level



	State	Major	Medium	Minor
Design LS	27773	20085	4002	3686
Actual Live Storage	24442	18292	3273	2877
Total Irrigation Use	16806	13272	2044	1490
NI water Use	3285	2942	228	115
Evaporation	3878	2473	781	624
Unutilised Storage	2026	1261	370	395

Note : Actual live storage is of 15th October 2007 and utilisation is for the period 1st July 2007 to 30th June 2008.

Chart II
Region wise Water Availability, Water Use and Water Loss (Major Project)



	State	Nagpur	Amaravati	Pune	Konkan	Nashik	Aurangabad
Design LS	20085	2402.33	1046.96	7307.04	1756.00	2748.58	4824.50
Actual Live Storage	18292	2011.47	943.13	7098.76	1367.00	2718.00	4153.65
Total Irrigation Use	13272	1999.04	580.17	5626.32	274.00	2091.68	2700.34
NI water Use	2942	211.08	61.25	964.45	821.00	571.50	312.71
Evaporation Losses	2473	287.17	178.36	895.69	53.00	343.53	715.31
Unutilised Storage	1261	135.19	136.18	469.60	61.00	30.25	428.99

Chart III

Circle wise Water Availability, Water Use (Major Project)

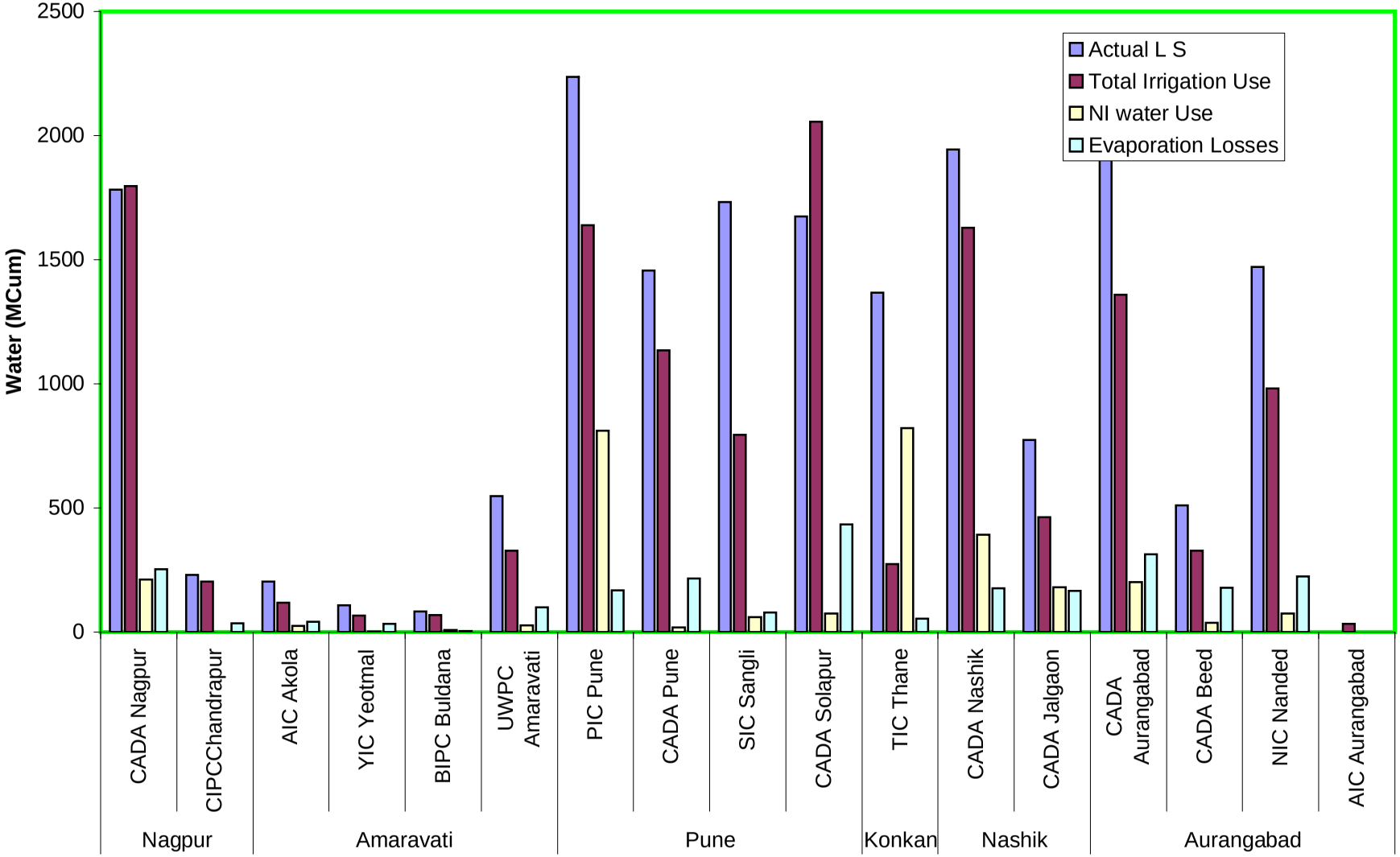
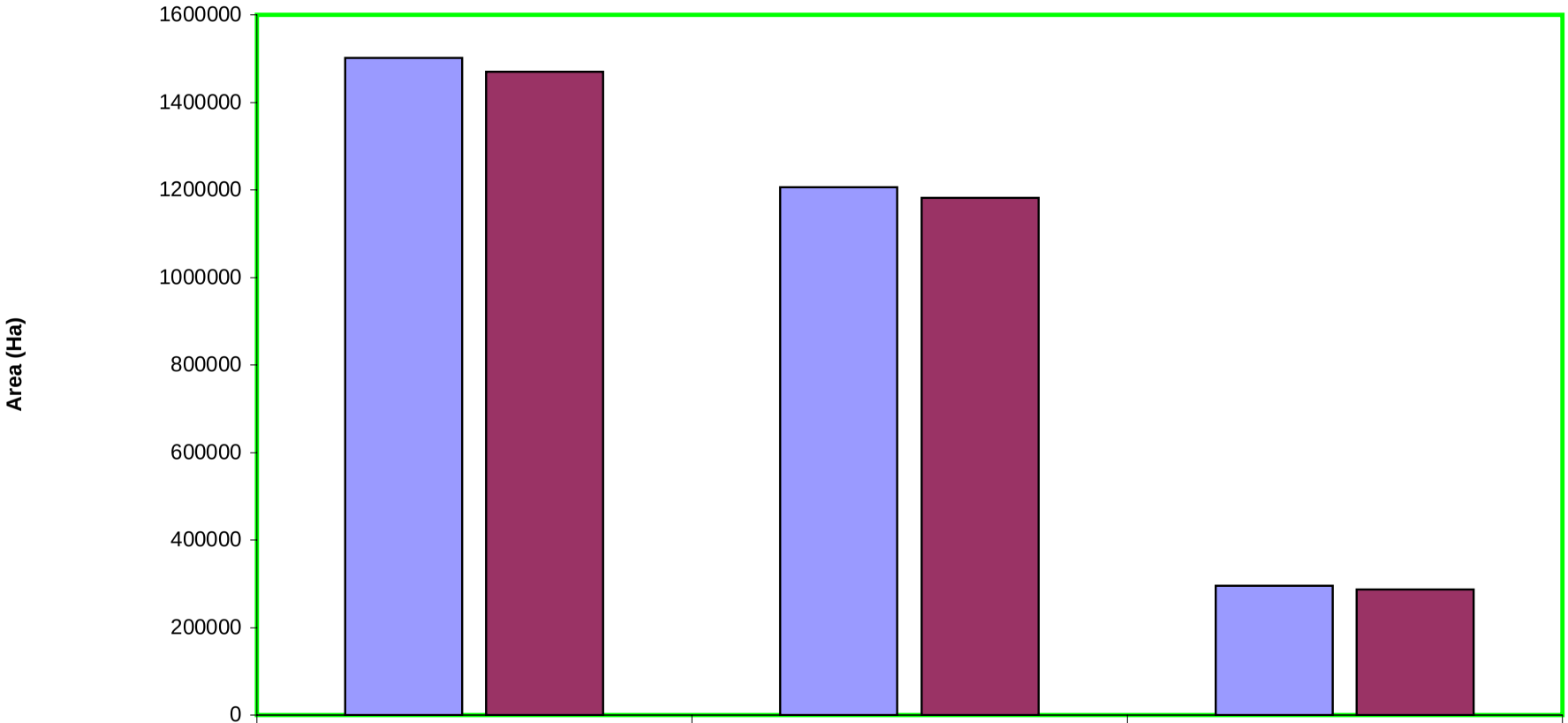
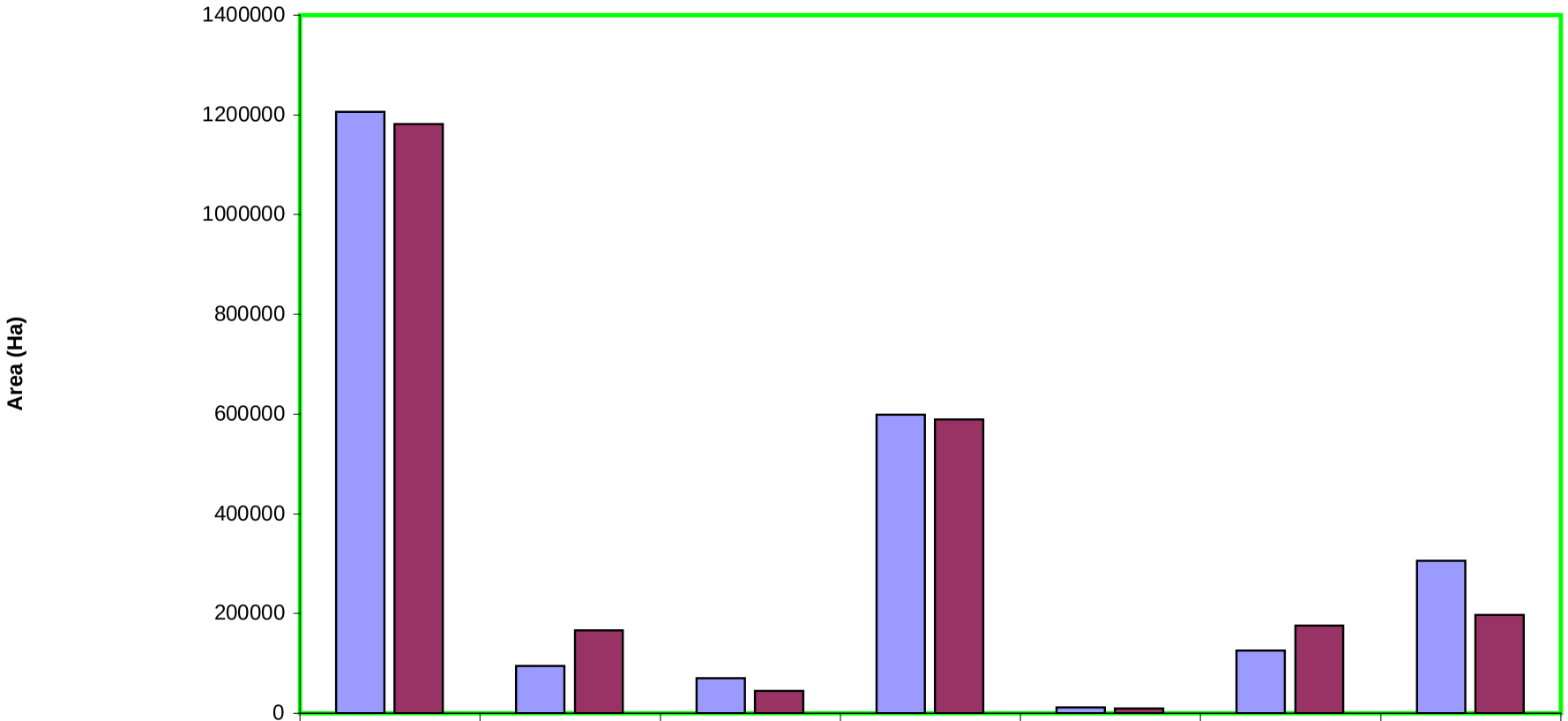


Chart IV
Details of Area Planned and Actually Irrigated (Major & Medium)



	State	Major	Medium
Irrigated Area PIP	1501005	1205775	295230
Irrigated Area Actual	1469322	1181887	287435

Chart V
Region wise Area Planned and Actual Irrigated (Major Project)



	State	Nagpur	Amaravati	Pune	Konkan	Nashik	Aurangabad
Irrigated Area (ha) PIP	1205775	94306	69810	598596	11567	125746	305750
Irrigated Area (ha) Actual	1181887	165794	44414	589468	9493	175692	197026

Chart VI

Circle wise Area Planned in PIP and Actual Area Irrigated (Major Project)

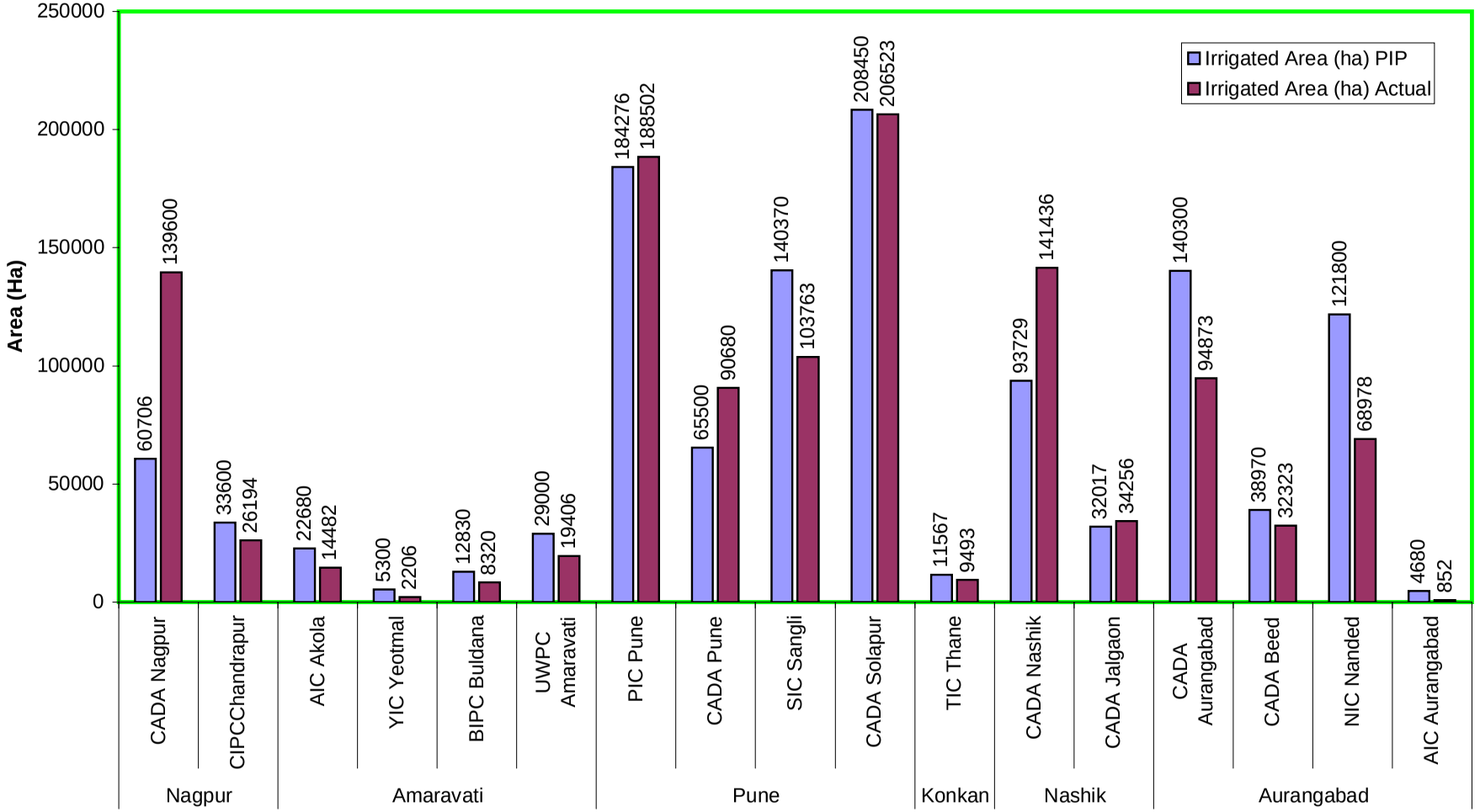


Chart VII
Region wise Annual Average Irrigation System Performance (ISP) Observed (Major Project)

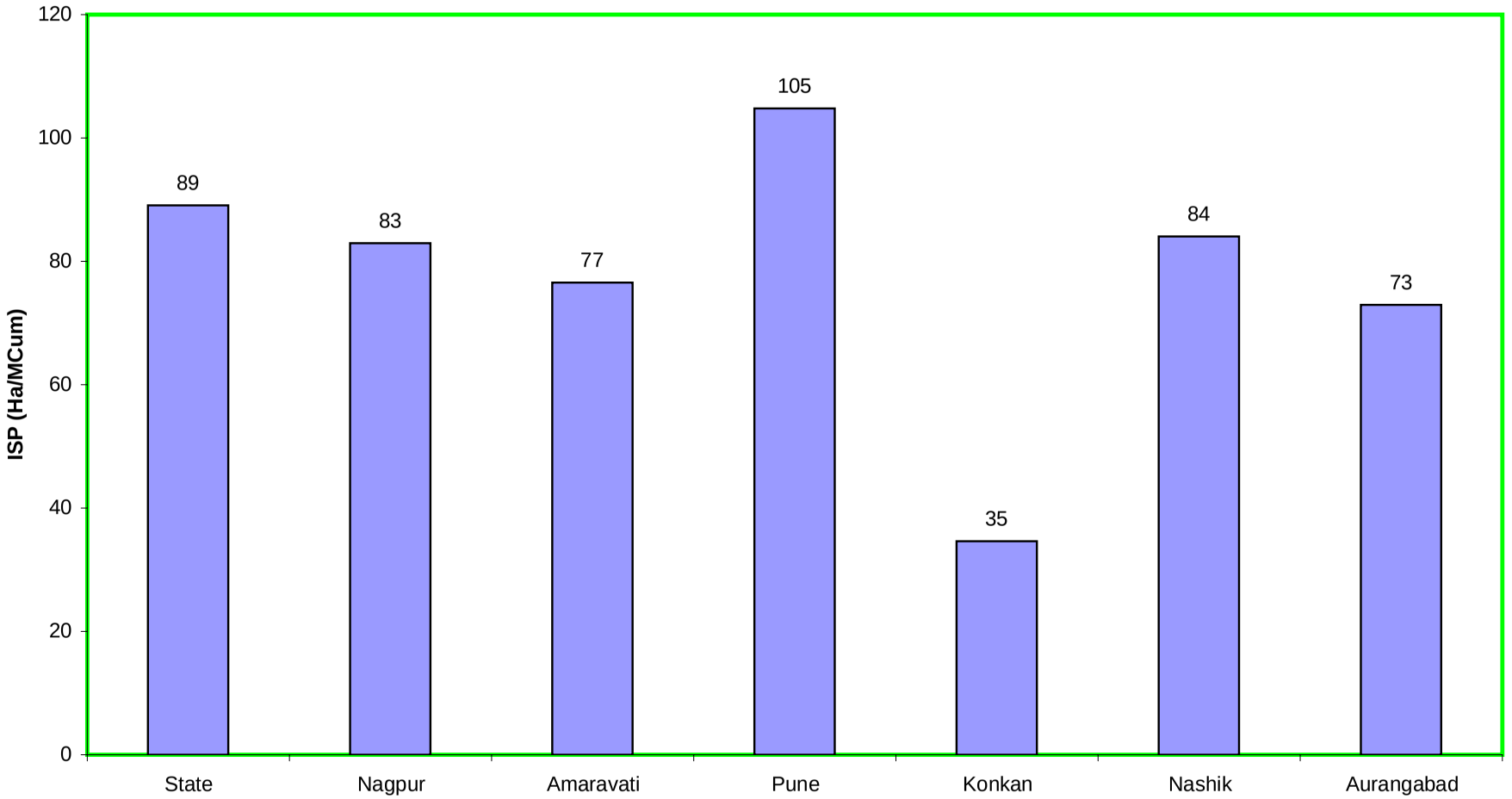


Chart VIII

Circle wise Annual Average Irrigation System performance (ISP) Observed (Major Project)

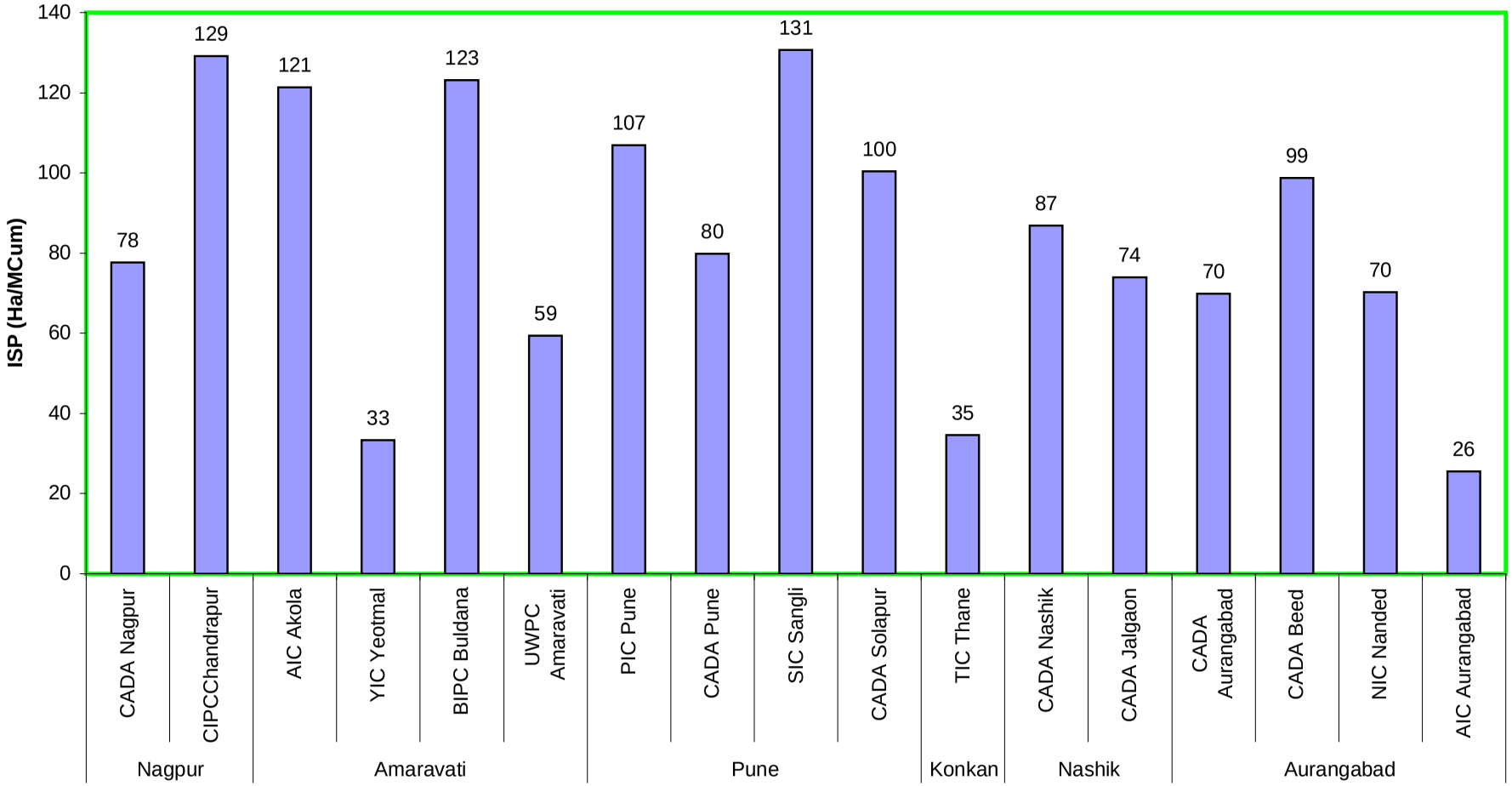


Chart IX
Water Use on Reservoir Lift (Major Project)

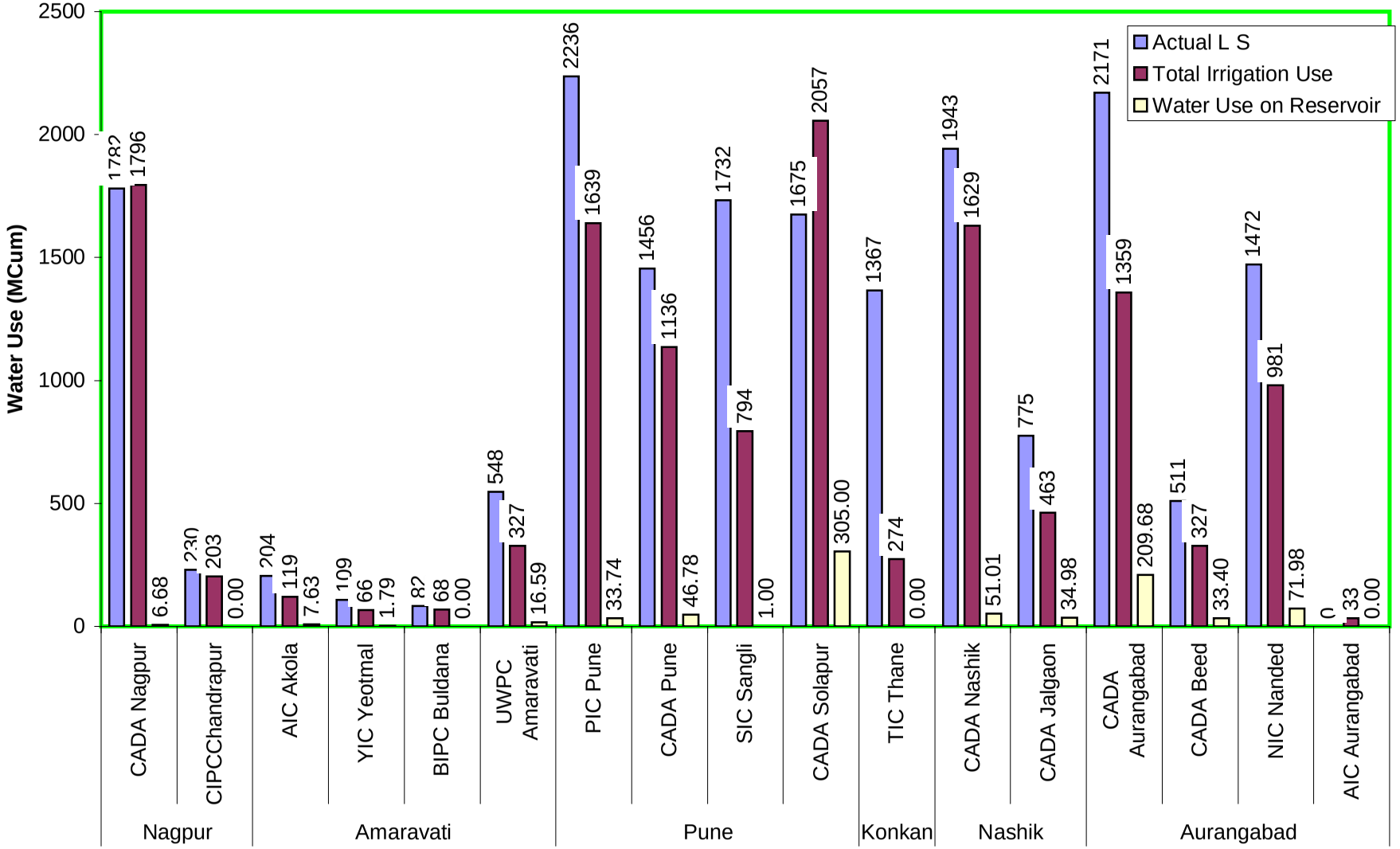


Chart X

Major Projects Having Unutilized Storage More Than 5 (%)

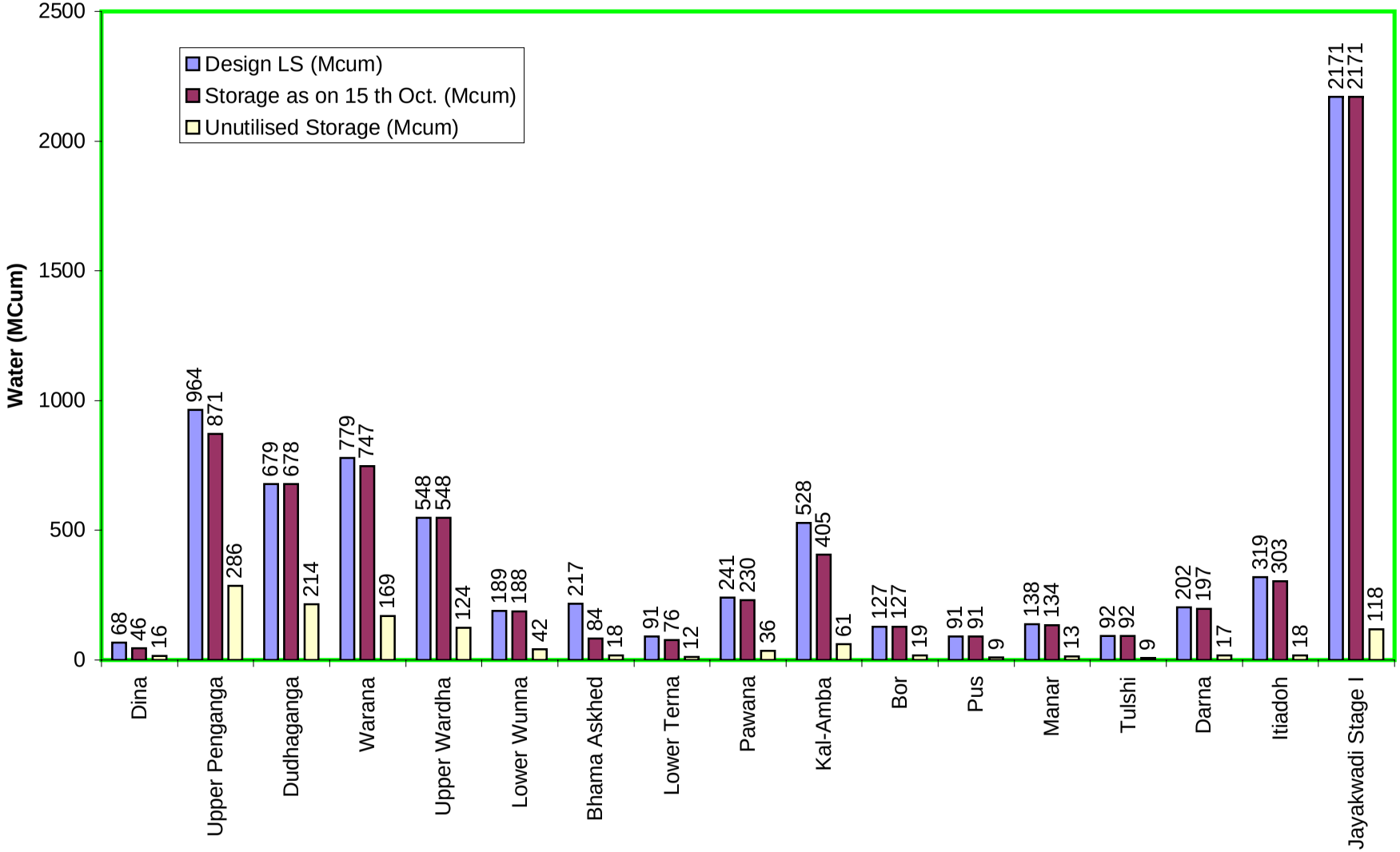
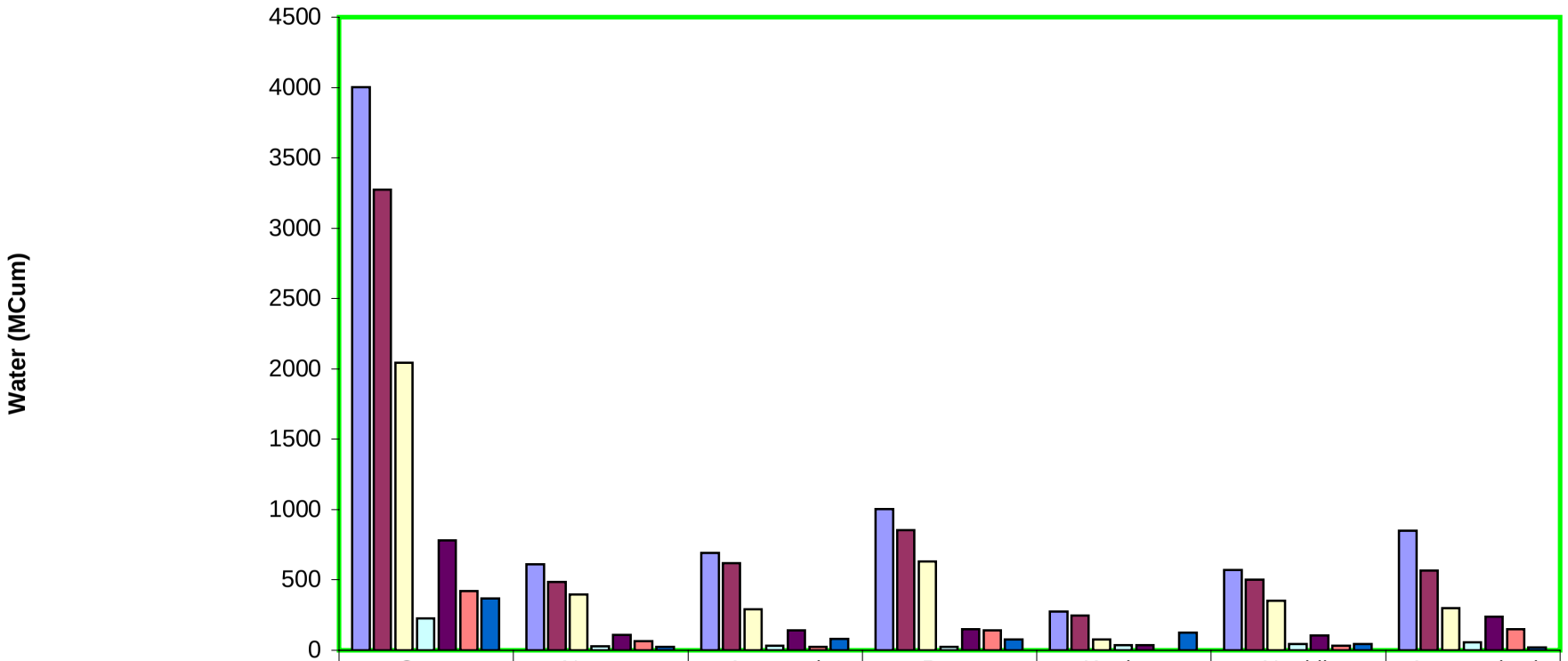


Chart XI
Region wise Water Use (Medium Projects)



	State	Nagpur	Amravati	Pune	Konkan	Nashik	Aurangabad
Design LS	4002	613	693	1003	273	570	849
Actual Live Storage	3273	486	618	854	249	500	567
Total Irrigation Use	2044	395	291	630	77	352	299
NI water Use	228	28	34	25	37	46	58
Evaporation	781	110	143	149	35	104	240
Water Use on Reservoir	419	66	26	142	0	34	151
Unutilized Storage	370	25	80	78	124	43	19

Chart XII

Circle wise Water Availability and water Use (Medium Projects)

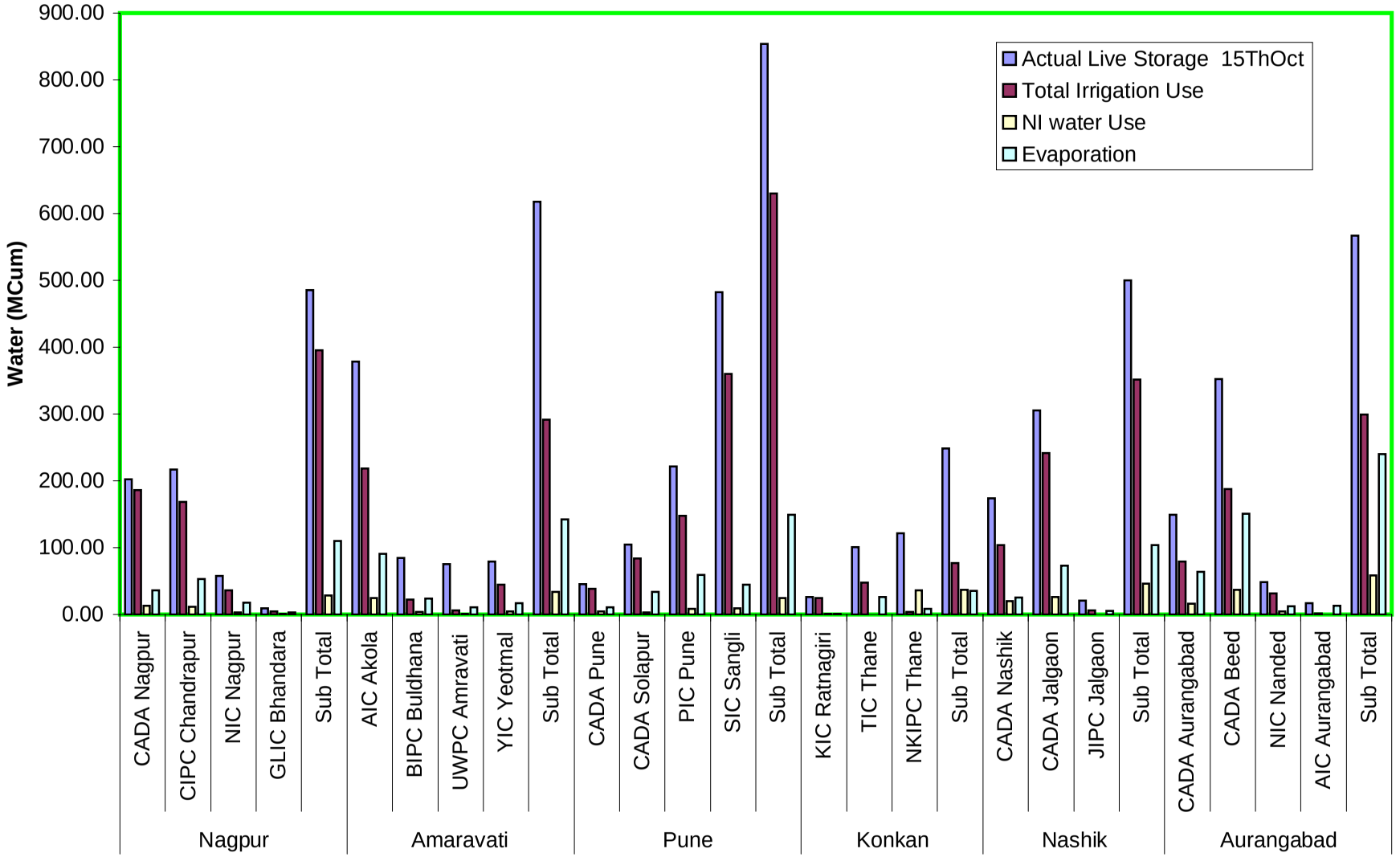


Chart XIII

Circle wise Area Planned in PIP and Actual Area Irrigated (Medium Projects)

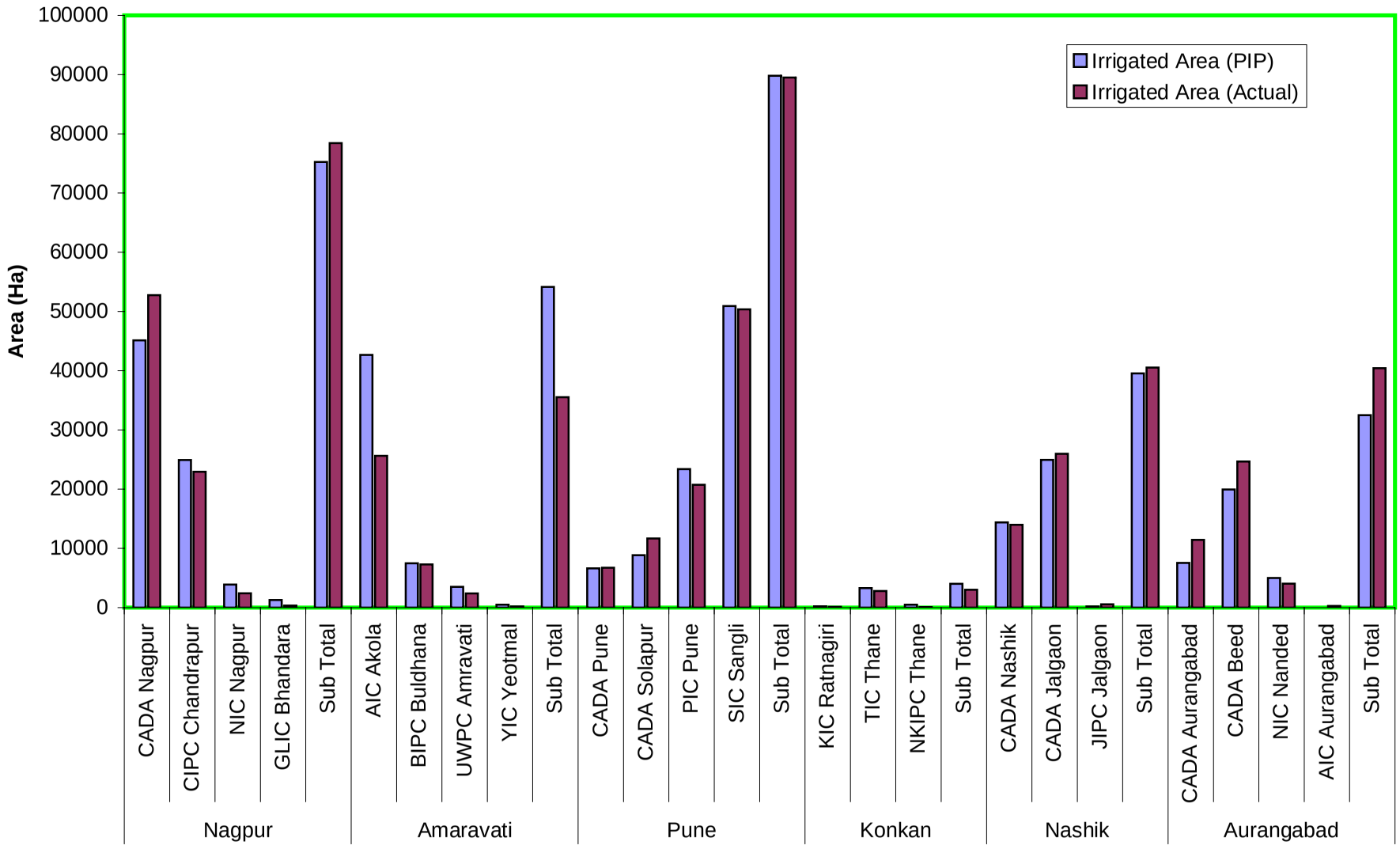


Chart XIV

Region wise Annual Irrigation System Performance (ISP) Observed (Medium Project)

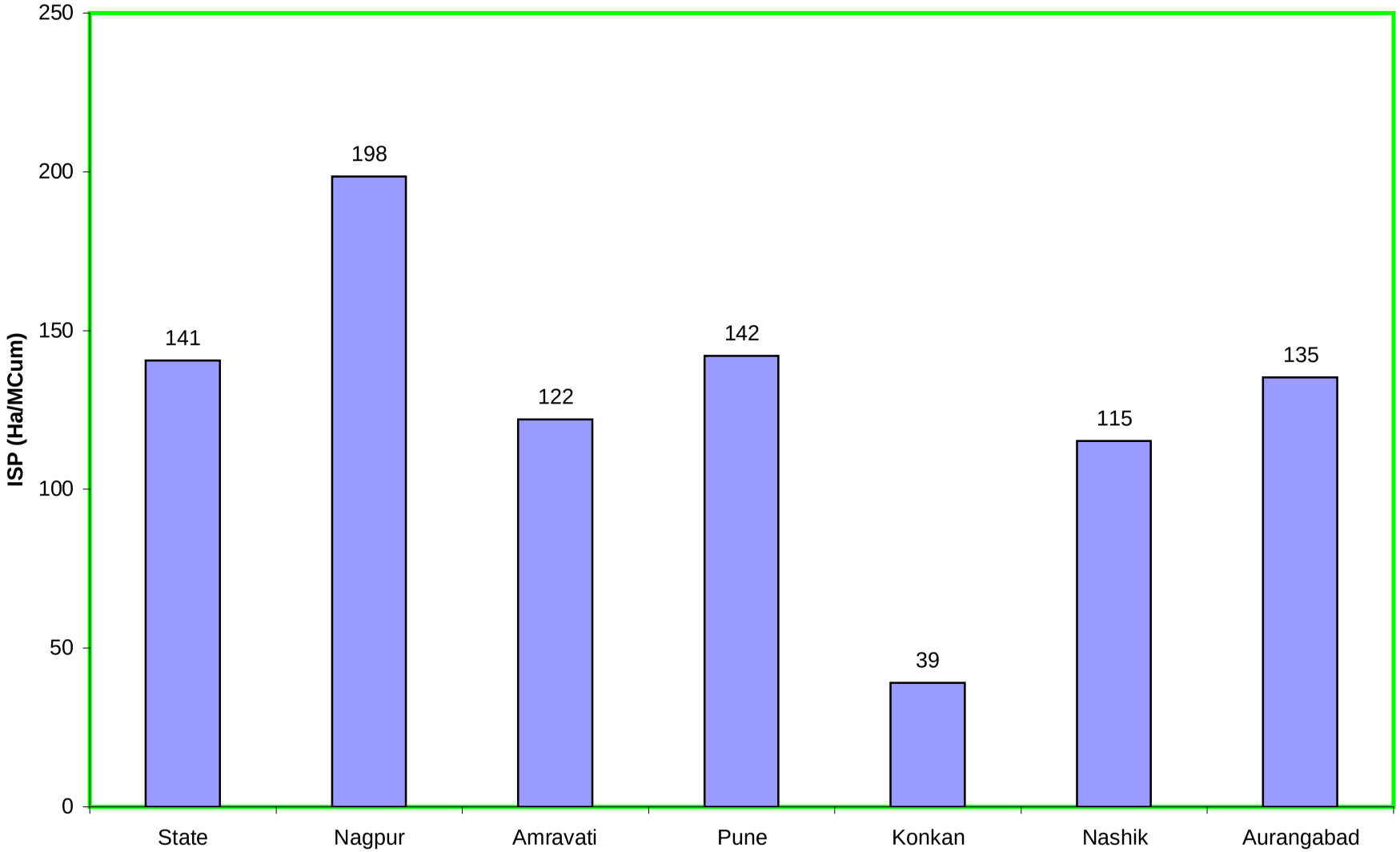


Chart XV

Circle Wise Annual Average Irrigation System Performance (ISP) Observed (Medium Projects)

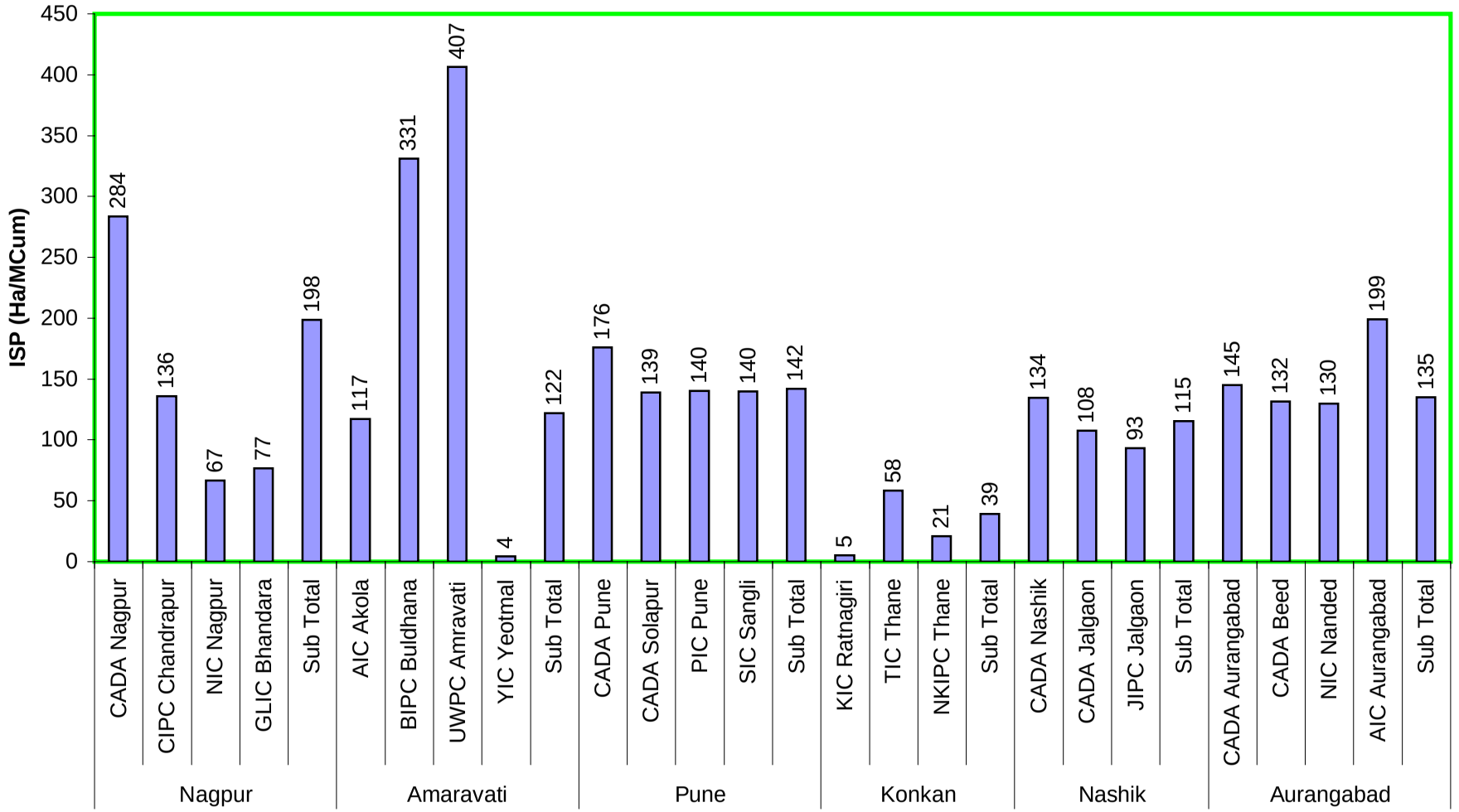
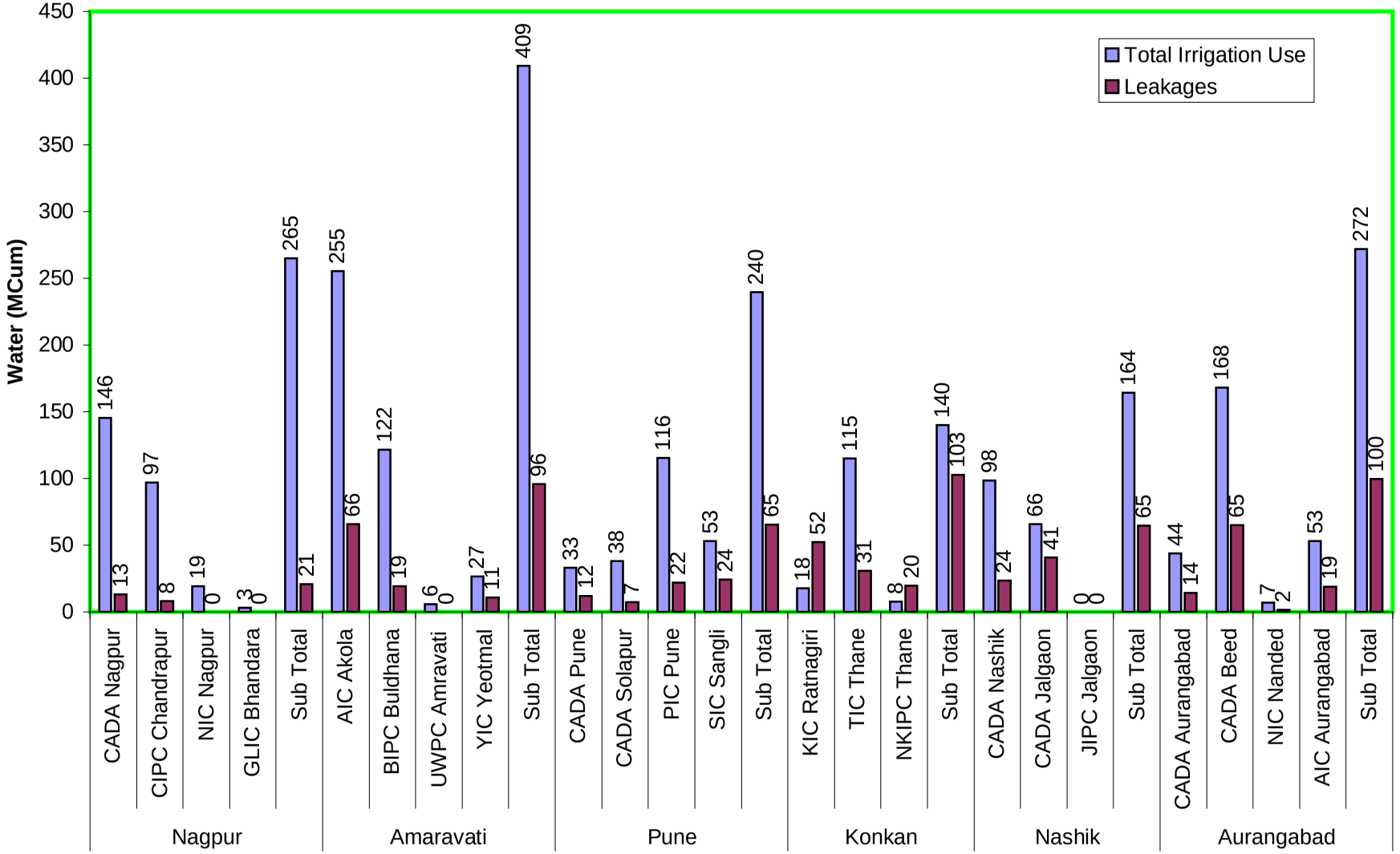
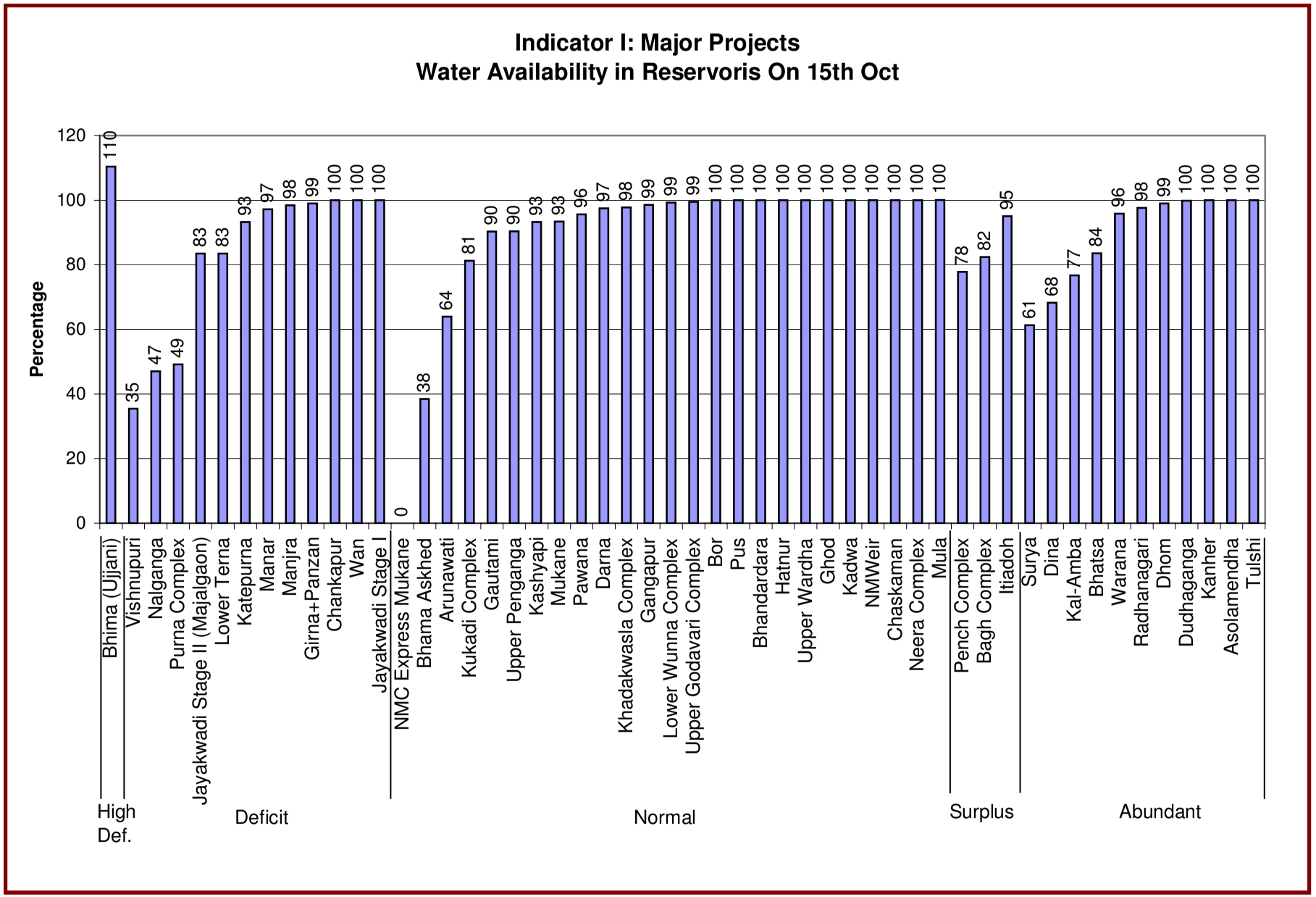


Chart XVI

Region & Circle Wise Annual Irrigation Use And Leakages (Minor Projects)



Annexure I:
Indicators of Major projects


Indicator I: Major Projects
Water Availability in Reservoris On 15th Oct
Percentage
120
100
80
60
40
20
0
Bhima (Ujjani) 110
Vishnupuri 35
Nalganga 47
Purna Complex 49
Jayakwadi Stage II (Majalgaon) 83
Lower Terna 83
Katepurna 93
Manar 97
Manjra 98
Girna+Panzan 99
Chankapur 100
Wan 100
Jayakwadi Stage I 100
NMC Express Mukane 0
Bhama Askhed 38
Arunawati 64
Kukadi Complex 81
Gautami 90
Upper Penganga 90
Kashyapi 93
Mukane 93
Pawana 96
Darna 97
Khadakwasla Complex 98
Gangapur 99
Lower Wunna Complex 99
Upper Godavari Complex 99
Bor 100
Pus 100
Bhandardara 100
Hatnur 100
Upper Wardha 100
Ghod 100
Kadwa 100
NMWeir 100
Chaskaman 100
Neera Complex 100
Mula 100
Pench Complex 78
Bagh Complex 82
Itiadoh 95
Surya 61
Dina 68
Kal-Amba 77
Bhatsa 84
Warana 96
Radhanagari 98
Dhom 99
Dudhaganga 100
Kanher 100
Asolamendha 100
Tulshi 100
High Def.
Deficit
Normal
Surplus
Abundant

Indicator I

Water Availability in Reservoirs

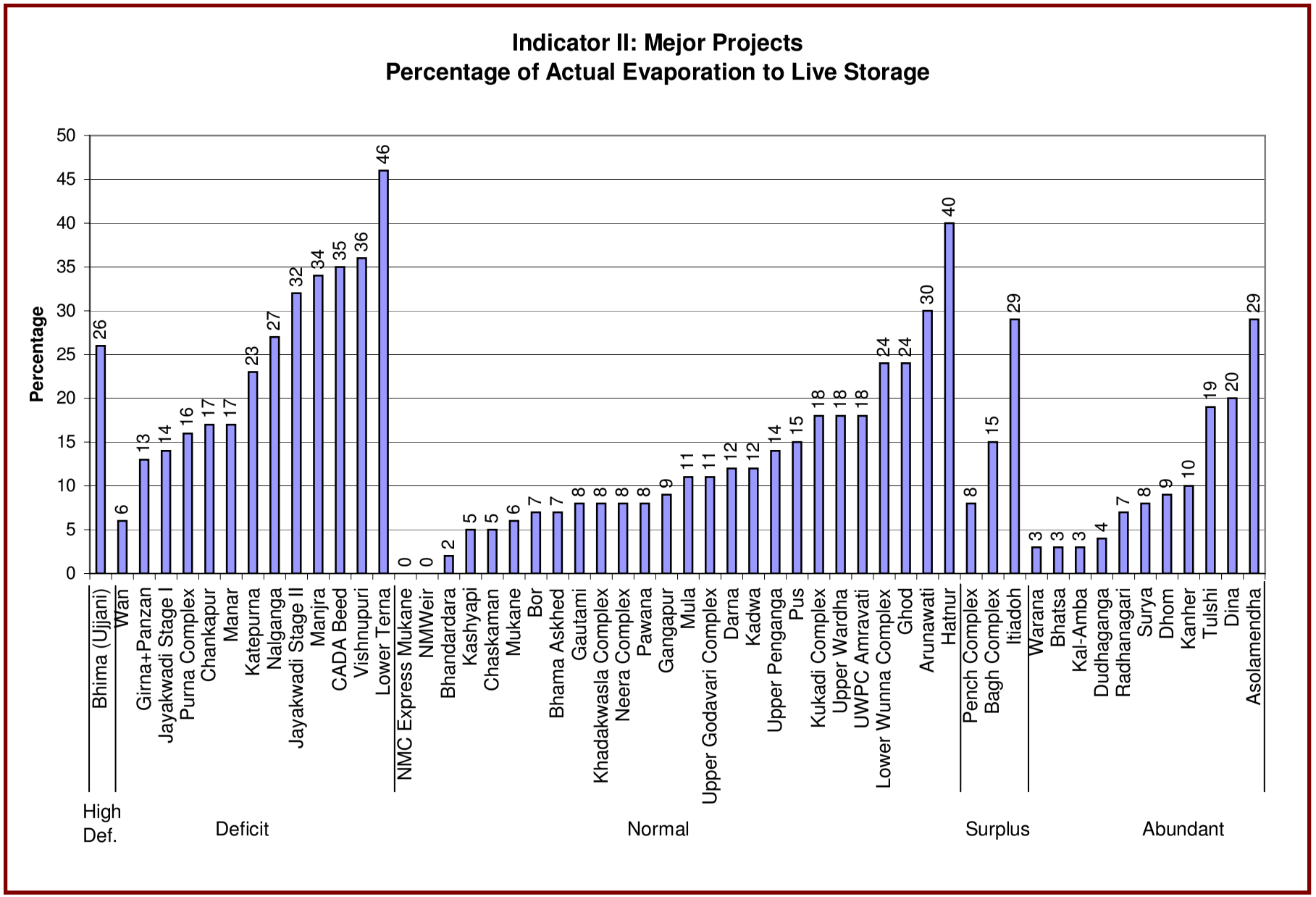
Major Projects 2007-08

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)	1,675.14	1,517.20	110
	CADA Solapur	**1675.140**	**1517.200**	**110**
Highly Deficit		**1675.140**	**1517.200**	**110**
Deficit				
Girna	Chankapur	76.85	76.85	100
	CADA Nashik	**76.850**	**76.850**	**100**
Purna (Tapi)	Wan	81.96	81.96	100
	BIPC Buldhana	**81.955**	**81.955**	**100**
Purna (Tapi)	Katepurna	80.50	86.35	93
	Nalganga	32.59	69.32	47
	AIC Akola	**113.085**	**155.670**	**73**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	260.40	312.00	83
	Lower Terna	76.15	91.22	83
	Manjra	174.16	176.96	98
	CADA Beed	**510.714**	**580.184**	**88**
Girna	Girna+Panzan	519.65	525.06	99
	CADA Jalgaon	**519.652**	**525.060**	**99**
Manjra	Manar	134.29	138.21	97
	Purna Complex	437.70	890.22	49
	Vishnupuri	28.67	80.79	35
	NIC Nanded	**600.663**	**1109.223**	**54**
Lower Godavari	Jayakwadi Stage I	2,170.94	2,170.94	100
	CADA Abad	**2170.935**	**2170.935**	**100**
Deficit		**4073.854**	**4699.877**	**87**
Normal				
Upper Godavari	NMC Express Mukane	0.00	0.00	0
	AIC Abad	**0.000**	**0.000**	**0**
Painganga	Pus	91.26	91.27	100
	AIC Akola	**91.260**	**91.265**	**100**
Painganga	Arunawati	108.69	169.92	64
	YIC Yavatmal	**108.685**	**169.920**	**64**
Wardha	Bor	127.35	127.42	100
	CIPC Chandrapur	**127.350**	**127.420**	**100**
Wardha	Lower Wunna Complex	187.82	189.18	99
	CADA Nagpur	**187.815**	**189.182**	**99**
Middle Tapi (Satpuda)	Hatnur	255.00	255.00	100
	CADA Jalgaon	**255.000**	**255.000**	**100**

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Wardha	Upper Wardha	548.14	548.14	100
	UWPC Amravati	**548.140**	**548.140**	**100**
Upper Bhima	Ghod	154.80	154.80	100
	Kukadi Complex	702.50	864.39	81
	CADA Pune	**857.300**	**1019.190**	**84**
Painganga	Upper Penganga	871.48	964.10	90
	NIC Nanded	**871.476**	**964.099**	**90**
Upper Godavari	Bhandardara	304.09	304.10	100
	Darna	197.36	202.43	97
	Gangapur	157.12	159.42	99
	Gautami	30.50	33.78	90
	Kadwa	52.91	52.91	100
	Kashyapi	48.86	52.42	93
	Mukane	125.13	134.05	93
	Mula	608.92	608.80	100
	NMWeir	7.28	7.28	100
	Upper Godavari Complex	334.32	336.18	99
	CADA Nashik	**1866.491**	**1891.370**	**99**
Upper Bhima	Bhama Askhed	83.52	217.10	38
	Chaskaman	214.50	214.50	100
	Khadakwasla Complex	775.62	793.47	98
	Neera Complex	931.93	931.93	100
	Pawana	230.49	241.11	96
	PIC Pune	**2236.057**	**2398.110**	**93**
Normal		**7149.574**	**7653.696**	**93**
Surplus				
Middle Wainganga	Bagh Complex	221.53	268.96	82
	Itiadoh	302.98	318.85	95
	Pench Complex	1,069.31	1,374.00	78
	CADA Nagpur	**1593.821**	**1961.810**	**81**
Surplus		**1593.821**	**1961.810**	**81**
Abundant				
Lower Wainganga	Asolamendha	56.38	56.38	100
	Dina	46.10	67.54	68
	CIPC Chandrapur	**102.480**	**123.915**	**83**
Upper Krishna (W)	Dhom	326.73	331.05	99
	Kanher	271.68	271.68	100
	CADA Pune	**598.410**	**602.730**	**99**
North Konkan	Bhatsa	787.26	942.10	84
	Kal-Amba	405.21	528.13	77
	Surya	175.43	286.31	61
	TIC Thane	**1367.897**	**1756.540**	**78**

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Upper Krishna (W)	Dudhaganga	678.09	679.11	100
	Radhanagari	214.67	219.97	98
	Tulshi	91.92	91.92	100
	Warana	746.52	779.35	96
	SIC Sangli	**1731.201**	**1770.348**	**98**
Abundant		**3799.988**	**4253.533**	**89**
Major		**18292.377**	**20086.116**	**91**


Indicator II: Mejor Projects
Percentage of Actual Evaporation to Live Storage
Percentage
0
5
10
15
20
25
30
35
40
45
50
Bhima (Ujjani) 26
Wan 6
Girna+Panzan 13
Jayakwadi Stage I 14
Purna Complex 16
Chankapur 17
Manar 17
Katepurna 23
Nalganga 27
Jayakwadi Stage II 32
Manjra 34
CADA Beed 35
Vishnupuri 36
Lower Terna 46
NMC Express Mukane 0
NMWeir 0
Bhandardara 2
Kashyapi 5
Chaskaman 5
Mukane 6
Bor 7
Bhama Askhed 7
Gautami 8
Khadakwasla Complex 8
Neera Complex 8
Pawana 8
Gangapur 9
Mula 11
Upper Godavari Complex 11
Darna 12
Kadwa 12
Upper Penganga 14
Pus 15
Kukadi Complex 18
Upper Wardha 18
UWPC Amravati 18
Lower Wunna Complex 24
Ghod 24
Arunawati 30
Hatnur 40
Pench Complex 8
Bagh Complex 15
Itiadoh 29
Warana 3
Bhatsa 3
Kal-Amba 3
Dudhaganga 4
Radhanagari 7
Surya 8
Dhom 9
Kanher 10
Tulshi 19
Dina 20
Asolamendha 29
High Def.
Deficit
Normal
Surplus
Abundant

Indicator II

Percentage of Actual Evaporation to Live Storage

Major 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	433.58	1675.14	26.00
	CADA Solapur	**433.58**	**1,675.14**	**26.00**
Highly Deficit		**433.58**	**1675.14**	**26.00**
Deficit				
Purna (Tapi)	Katepurna	18.81	80.50	23.00
	Nalganga	8.85	32.59	27.00
	AIC Akola	**27.66**	**113.09**	**24.00**
Purna (Tapi)	Wan	4.93	81.96	6.00
	BIPC Buldhana	**4.93**	**81.96**	**6.00**
Lower Godavari	Jayakwadi Stage I	312.80	2170.94	14.00
	CADA Abad	**312.80**	**2,170.94**	**14.00**
Lower Godavari	Jayakwadi Stage II	82.87	260.40	32.00
	(Majalgaon) Lower Terna	35.22	76.15	46.00
	Manjra	59.86	174.16	34.00
	CADA Beed	**177.95**	**510.71**	**35.00**
Girna	Girna+Panzan	65.57	519.65	13.00
	CADA Jalgaon	**65.57**	**519.65**	**13.00**
Girna	Chankapur	13.40	76.85	17.00
	CADA Nashik	**13.40**	**76.85**	**17.00**
Manjra	Manar	23.47	134.29	17.00
	Purna Complex	71.93	437.70	16.00
	Vishnupuri	10.28	28.67	36.00
	NIC Nanded	**105.68**	**600.66**	**18.00**
Deficit		**707.99**	**4073.85**	**17.00**
Normal				
Upper Godavari	NMC Express	0.00	0.00	0.00
	Mukane			
	AIC Abad	**0.00**	**0.00**	**0.00**
Painganga	Pus	13.26	91.26	15.00
	AIC Akola	**13.26**	**91.26**	**15.00**
Middle Tapi (Satpuda)	Hatnur	100.98	255.00	40.00
	CADA Jalgaon	**100.98**	**255.00**	**40.00**
Wardha				

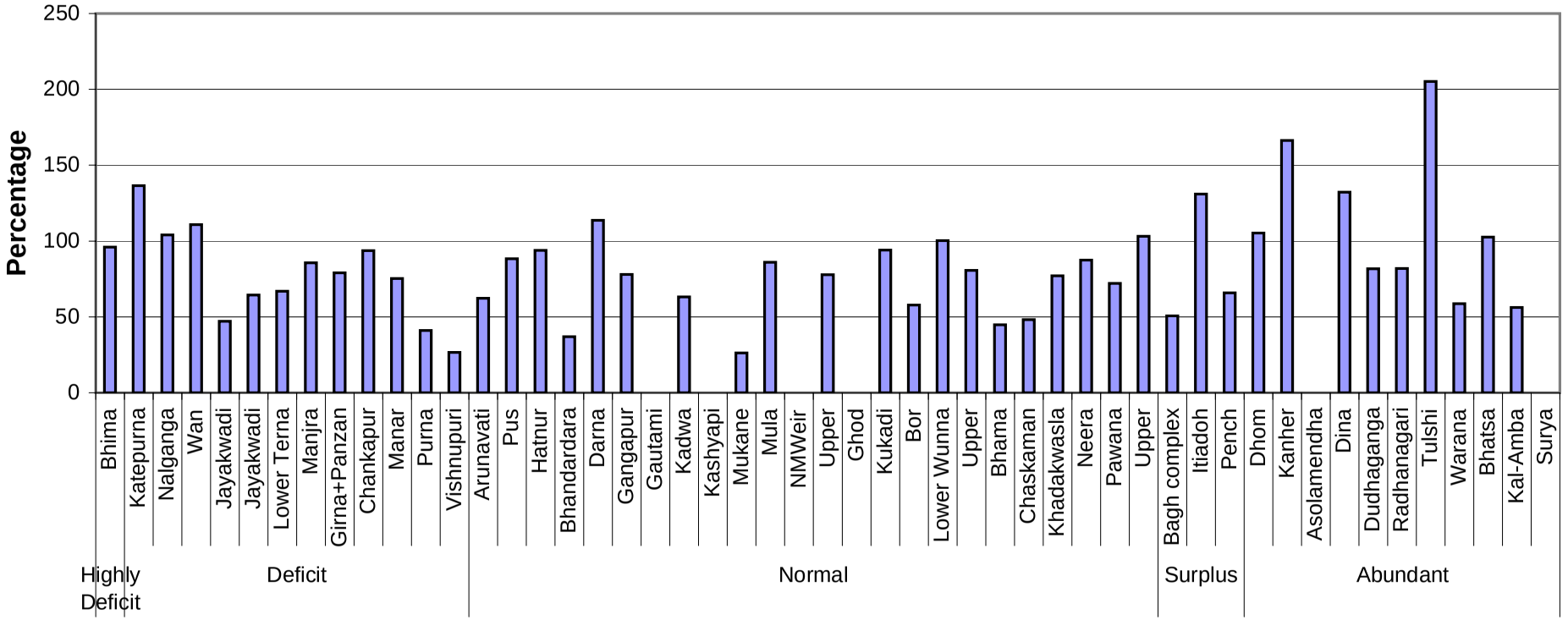
Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Lower Wunna	45.93	187.82	24.00
	Complex			
	CADA Nagpur	**45.93**	**187.82**	**24.00**
Upper Godavari	Bhandardara	4.71	304.09	2.00
	Darna	24.65	197.36	12.00
	Gangapur	13.90	157.12	9.00
	Gautami	2.32	30.50	8.00
	Kadwa	6.49	52.91	12.00
	Kashyapi	2.49	48.86	5.00
	Mukane	7.37	125.13	6.00
	Mula	65.82	608.92	11.00
	NMWeir	0.00	7.28	0.00
	Upper Godavari	35.82	334.32	11.00
	Complex			
	CADA Nashik	**163.56**	**1,866.49**	**9.00**
Upper Bhima	Ghod	37.00	154.80	24.00
	Kukadi Complex	123.40	702.50	18.00
	CADA Pune	**160.40**	**857.30**	**19.00**
Wardha	Bor	9.53	127.35	7.00
	CIPC Chandrapur	**9.53**	**127.35**	**7.00**
Painganga	Upper Penganga	118.88	871.48	14.00
	NIC Nanded	**118.88**	**871.48**	**14.00**
Upper Bhima	Bhama Askhed	5.96	83.52	7.00
	Chaskaman	11.32	214.50	5.00
	Khadakwasla	59.40	775.62	8.00
	Complex			
	Neera Complex	74.51	931.93	8.00
	Pawana	17.33	230.49	8.00
	PIC Pune	**168.51**	**2,236.06**	**8.00**
Wardha	Upper Wardha	99.66	548.14	18.00
	UWPC Amravati	**99.66**	**548.14**	**18.00**
Painganga	Arunawati	32.85	108.69	30.00
	YIC Yavatmal	**32.85**	**108.69**	**30.00**
Normal		**913.55**	**7149.57**	**13.00**
Surplus				
Middle Wainganga	Bagh Complex	34.04	221.53	15.00
	Itiadoh	88.53	302.98	29.00
	Pench Complex	84.32	1069.31	8.00
	CADA Nagpur	**206.89**	**1,593.82**	**13.00**
Surplus		**206.89**	**1593.82**	**13.00**

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Abundant				
Upper Krishna (W)	Dhom	28.86	326.73	9.00
	Kanher	26.02	271.68	10.00
	CADA Pune	**54.87**	**598.41**	**9.00**
Lower Wainganga	Asolamendha	16.32	56.38	29.00
	Dina	9.21	46.10	20.00
	CIPC Chandrapur	**25.53**	**102.48**	**25.00**
Upper Krishna (W)	Dudhaganga	26.39	678.09	4.00
	Radhanagari	14.07	214.67	7.00
	Tulshi	17.13	91.92	19.00
	Warana	20.80	746.52	3.00
	SIC Sangli	**78.40**	**1,731.20**	**5.00**
North Konkan	Bhatsa	24.64	787.26	3.00
	Kal-Amba	13.51	405.21	3.00
	Surya	14.30	175.43	8.00
	TIC Thane	**52.44**	**1,367.90**	**4.00**
Abundant		**211.24**	**3799.99**	**6.00**
Major		**2473.26**	**18292.38**	**14.00**

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



Indicator No. II (A)
Percentage of Actual Evaporation to Projected Evaporation
Major Projects

Unit: Mcum

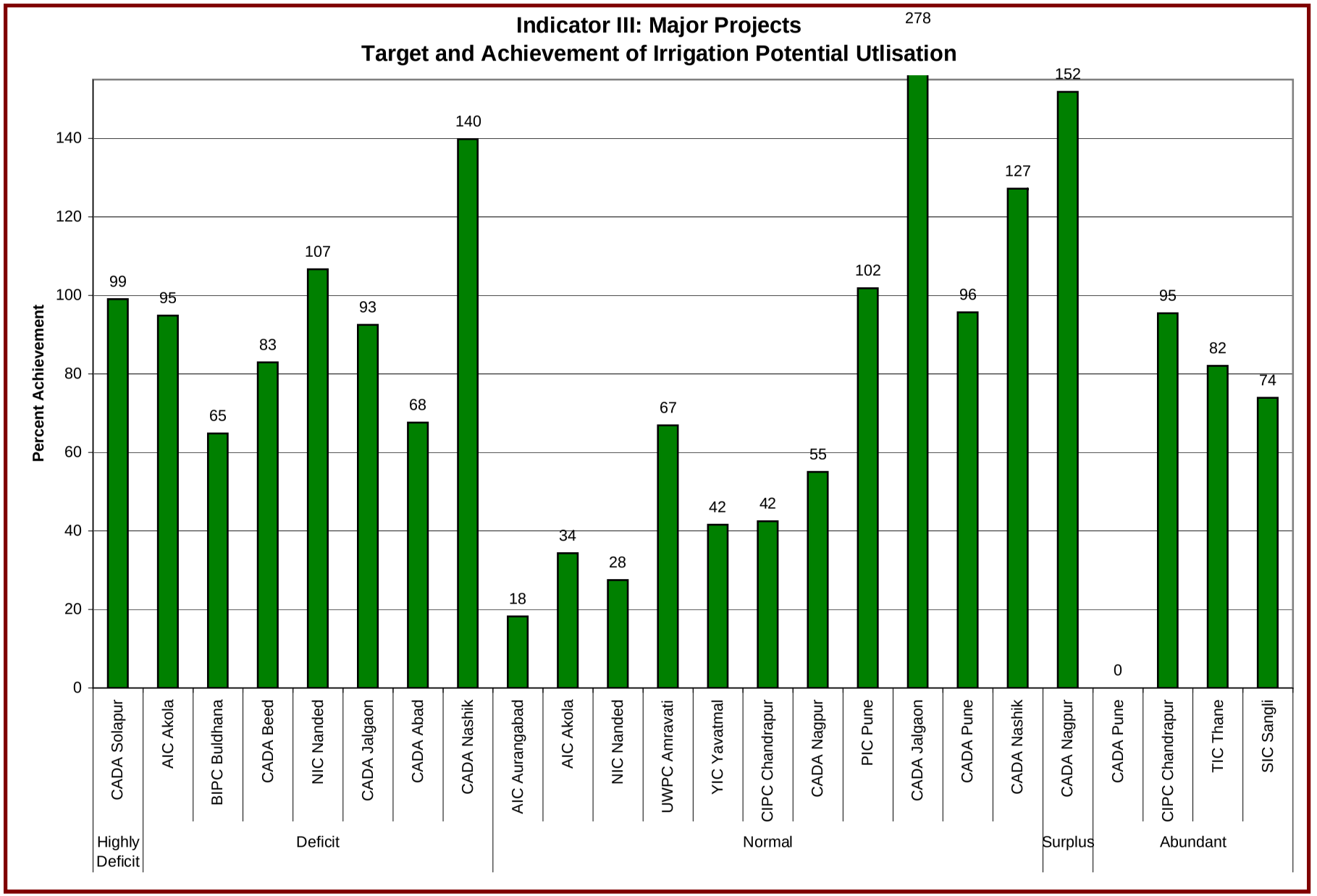
Subbasin/ Plangroup	Project/ Circle	Actual Evaporation	Projected Evaporation	Percentage of Actual/Projected Evaporation
Highly Deficit				
Remaining Bhima + Man	Bhima	433.58	453.20	96
	CADA Solapur	**433.58**	**453.20**	**96**
Highly Deficit				
Deficit				
Purna (Tapi)	Katepurna	18.81	13.78	137
Purna (Tapi)	Nalganga	8.85	8.50	104
	AIC Akola	**27.66**	**22.28**	**124**
Purna (Tapi)	Wan	4.93	4.45	111
	BIPC Buldhana	**4.93**	**4.45**	**111**
Lower Godavari	Jayakwadi Stage I	312.80	664.83	47
	CADA Abad	**312.80**	**664.83**	**47**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	82.87	128.76	**64**
Manjra	Lower Terna	35.22	52.66	**67**
	Manjra	59.86	69.94	**86**
	CADA Beed	**177.95**	**251.36**	**71**
Girna	Girna+Panzan	65.57	82.86	79
	CADA Jalgaon	**65.56**	**82.86**	**79**
Girna	Chankapur	13.40	14.30	94
	CADA Nashik	**13.40**	**14.30**	**94**
Manjra	Manar	23.47	31.14	75
Purna+Dudhna	Purna complex	71.93	174.94	41
Lower Godavari	Vishnupuri	10.28	38.54	27
	NIC Nanded	**105.68**	**244.62**	**43**
Deficit				
Normal				
Penganga	Arunavati	32.85	52.80	62
	YIC Yavatmal	**32.85**	**52.80**	**62**
	Pus	13.26	15.00	88
	AIC Akola	**13.26**	**15.00**	**88**
Middle Tapi (Satpuda	Hatnur	100.98	107.60	94
	CADA Jalgaon	**100.98**	**107.60**	**94**
Upper Godavari	Bhandardara	4.71	12.74	37
	Darna	24.65	21.67	114
	Gangapur	13.90	17.81	78
	Gautami	2.32*	N.A.	-
	Kadwa	6.49	10.27	63
	Kashyapi	2.49*	N.A.	0
	Mukane	7.37	28.06	26
	Mula	65.82	76.45	86
	NMWeir	N.A.	N.A.	-
	Upper Godavari Complex	35.82	46.01	78
	CADA Nashik	**158.75**	**213.01**	**75**

Subbasin/ Plangroup	Project/ Circle	Actual Evaporation	Projected Evaporation	Percentage of Actual/Projected Evaporation
Upper Bhima	Ghod	37.00*	N.A.	-
	Kukadi Complex	123.40	131.12	94
	CADA Pune	**123.40**	**131.12**	**94**
Wardha	Bor	9.53	16.48	58
	CIPC Chandrapur	**9.53**	**16.48**	**58**
Middle Wainganga	Lower Wunna Complex	45.93	45.84	100
	CADA Nagpur	**45.93**	**45.84**	**100**
Penganga	Upper Penganga	118.88	147.25	81
	NIC Nanded	**118.88**	**147.25**	**81**
Upper Bhima	Bhama Askhed	5.96	13.31	45
	Chaskaman	11.32	23.47	48
	Khadakwasla complex	59.40	77.02	77
Remaining Bhima (N	Neera complex	74.51	85.15	88
Upper Bhima	Pawana	17.33	24.01	72
	PIC Pune	**168.51**	**222.96**	**76**
Wardha	Upper Wardha	99.66	96.67	103
	UWPC Amravati	**99.66**	**96.67**	**103**
Normal				
Surplus				
Middle Wainganga	Bagh complex	34.04	67.07	51
	Itiadoh	88.53	67.57	131
	Pench complex	84.32	128.00	66
	CADA Nagpur	**206.89**	**262.64**	**79**
Surplus				
Abundant				
Upper Krishna (W)	Dhom	28.86	27.42	105
	Kanher	26.02	15.65	166
	CADA Pune	**54.88**	**43.07**	**127**
Lower Wainganga	Asolamendha	16.32*	N.A.	-
	Dina	9.21	6.97	132
	CIPC Chandrapur	**9.21**	**6.97**	**132**
Upper Krishna (W)	Dudhaganga	26.39	32.30	82
	Radhanagari	14.07	17.16	82
	Tulshi	17.13	8.35	205
	Warana	20.80	35.39	59
	SIC Sangli	**78.39**	**93.20**	**84**
North Konkan	Bhatsa	24.64	24.00	103
Middle Konkan	Kal-Amba	13.51	24.00	56
North Konkan	Surya	14.30*	N.A.	-
Abundant	**TIC Thane**	**38.15**	**48.00**	**79**
Major Projects				

Note :

N.A.: The projected evaporation figures are not made available by project authorities

***** : These figures are not accounted for calculating percentage as projected evaporation figures for the same circles are not made available.


Indicator III: Major Projects
Target and Achievement of Irrigation Potential Utlisation
Percent Achievement
0
20
40
60
80
100
120
140
99
95
65
83
107
93
68
140
18
34
28
67
42
42
55
102
278
96
127
152
0
95
82
74
CADA Solapur
AIC Akola
BIPC Buldhana
CADA Beed
NIC Nanded
CADA Jalgaon
CADA Abad
CADA Nashik
AIC Aurangabad
AIC Akola
NIC Nanded
UWPC Amravati
YIC Yavatmal
CIPC Chandrapur
CADA Nagpur
PIC Pune
CADA Jalgaon
CADA Pune
CADA Nashik
CADA Nagpur
CADA Pune
CIPC Chandrapur
TIC Thane
SIC Sangli
Highly Deficit
Deficit
Normal
Surplus
Abundant

Indicator III

Target and Achievement of Irrigation Potential Utilisation

Major Projects

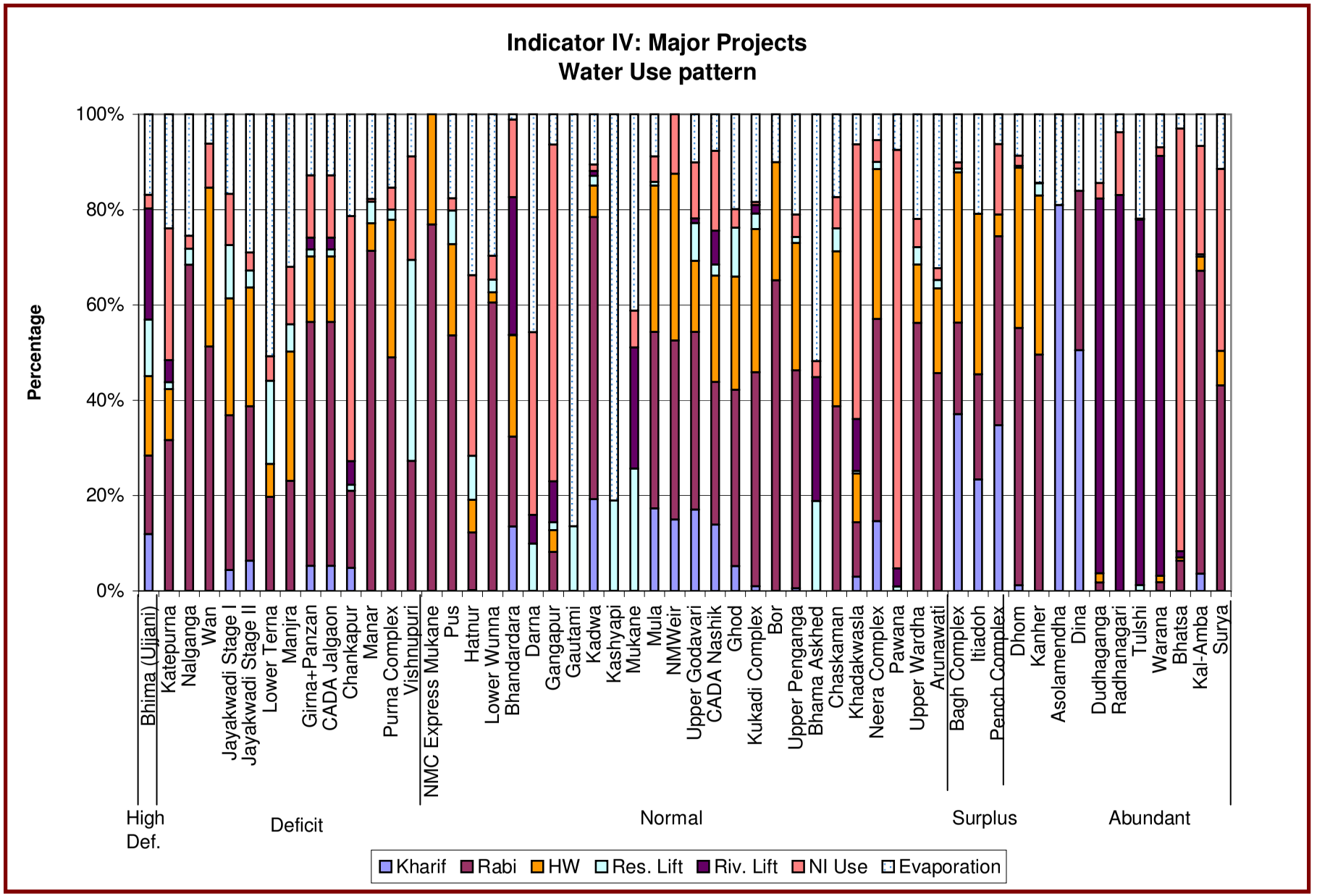
Unit: ha

Plangroup/ Subbasin	Circle/ Project	Planned Target as per PIP	Achivement	Percent Achievement
Highly Deficit				
Remaining Bhima+ M	Bhima (Ujjani)	208450	206523	99
	CADA Solapur	208450	**206523**	99
Highly Deficit		208450	**206523**	99
Deficit				
Purna (Tapi)	Katepurna	6480	7667	118
	Nalganga	4572	2820	62
	AIC Akola	**11052**	**10487**	**95**
Purna (Tapi)	Wan	12830	8320	65
	BIPC Buldhana	**12830**	**8320**	65
Lower Godavari	Jayakwadi Stage I	140300	94873	68
	CADA Abad	**140300**	**94873**	**68**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	21970	14979	68
Manjra	Lower Terna	4100	4616	113
Manjra	Manjra	12900	12728	99
	CADA Beed	**38970**	**32323**	83
Girna	Girna+Panzan	29517	27306	93
	CADA Jalgaon	**29517**	**27306**	93
Girna	Chankapur	1994	2788	140
	CADA Nashik	**1994**	**2788**	**140**
Manjra	Manar	12000	12988	108
Purna+Dudhana	Purna Complex	20800	23777	114
Lower Godavari	Vishnupuri	12000	11025	92
	NIC Nanded	**44800**	**47790**	**107**
Deficit		**279463**	**223887**	**80**
Normal				
Upper Godavari	NMC Express Mukane	4680	852	18
	AIC Aurangabad	**4680**	**852**	**18**
Painganga	Arunawati	5300	2206	42
	YIC Yavatmal	**5300**	**2206**	42
Painganga	Pus	11628	3995	34
	AIC Akola	**11628**	**3995**	34
Middle Tapi (Satpuda)	Hatnur	2500	6950	278
	CADA Jalgaon	**2500**	**6950**	278
Upper Godavari	Bhandardara	31660	28554	90
	Darna	N.A.	1814*	0
	Gangapur	2229	7715	346
	Goutami Godavari	N.A.	86*	0
	Kadwa	1500	1965	131
	Kashyapi	29	74	255
	Mukane	N.A.	1279*	0
	Mula	31000	52735	170
	NMWeir	N.A.	18785*	0
	Upper Godavari Complex	25317	25641	101
	CADA Nashik	**91735**	**116684**	**127**

Plangroup/ Subbasin	Circle/ Project	Planned Target as per PIP	Achivement	Percent Achievement
Upper Bhima	Ghod	19500	17803	91
	Kukadi Complex	46000	44865	98
	CADA Pune	**65500**	**62668**	**96**
Wardha	Bor	11100	4716	42
	CIPC Chandrapur	**11100**	**4716**	**42**
Painganga	Upper Penganga	77000	21188	28
	NIC Nanded	**77000**	**21188**	**28**
Upper Bhima	Bhama Askhed	N.A.	877*	0
	Chaskaman	12525	5599	45
	Khadakwasla Complex	26174	42569	163
Remaining Bhima (Ne	Neera Complex	144074	137645	96
Upper Bhima	Pawana	1503	1812	121
	PIC Pune	**184276**	**187625**	**102**
Wardha	Upper Wardha	29000	19406	67
	UWPC Amravati	**29000**	**19406**	**67**
Wardha	Lower Wunna Complex	10905	6000	55
	CADA Nagpur	**10905**	**6000**	**55**
Normal		**493624**	**432290**	**88**
Surplus				
Middle Wainganga	Bagh Complex	N.A.	29708*	0
	Itiadoh	N.A.	28249*	0
	Pench Complex	49801	75643	152
	CADA Nagpur	**49801**	**75643**	**152**
Surplus		**49801**	**75643**	**152**
Abundant				
Upper Krishna (W)	Dhom	N.A.	19360*	0
	Kanher	N.A.	8652*	0
	CADA Pune	**N.A.**	**28012***	**0**
Lower Wainganga	Asolamendha	11500	10684	93
	Dina	11000	10794	98
	CIPC Chandrapur	**22500**	**21478**	**95**
Upper Krishna (W)	Dudhaganga	25050	17260	69
	Radhanagari	52440	42245	81
	Tulshi	6070	3733	61
	Warana	56810	40525	71
	SIC Sangli	**140370**	**103763**	**74**
North Konkan	Bhatsa	3000	2566	86
Middle Konkan	Kal-Amba	4167	4167	100
North Konkan	Surya	4400	2760	63
	TIC Thane	**11567**	**9493**	**82**
Abundant		**174437**	**134734**	**77**
Major Projects		**997325**	**866554**	**87**

Note: N.A. : The PIP figures are not made available by project authorities.

* : These figures are not accounted for calculating percent achievement as PIP figures for the same circles are not made available.


Indicator IV: Major Projects
Water Use pattern
Percentage
100%
80%
60%
40%
20%
0%
Bhima (Ujjani)
Katepurna
Nalganga
Wan
Jayakwadi Stage I
Jayakwadi Stage II
Lower Terna
Manjra
Girna+Panzan
CADA Jalgaon
Chankapur
Manar
Purna Complex
Vishnupuri
NMC Express Mukane
Pus
Hatnur
Lower Wunna
Bhandardara
Darna
Gangapur
Gautami
Kadwa
Kashyapi
Mukane
Mula
NMWeir
Upper Godavari
CADA Nashik
Ghod
Kukadi Complex
Bor
Upper Penganga
Bhama Askhed
Chaskaman
Khadakwasla
Neera Complex
Pawana
Upper Wardha
Arunawati
Bagh Complex
Itiadoh
Pench Complex
Dhom
Kanher
Asolamendha
Dina
Dudhaganga
Radhanagari
Tulshi
Warana
Bhatsa
Kal-Amba
Surya
High Def.
Deficit
Normal
Surplus
Abundant
Kharif
Rabi
HW
Res. Lift
Riv. Lift
NI Use
Evaporation

Indicator IV

Water Use Pattern

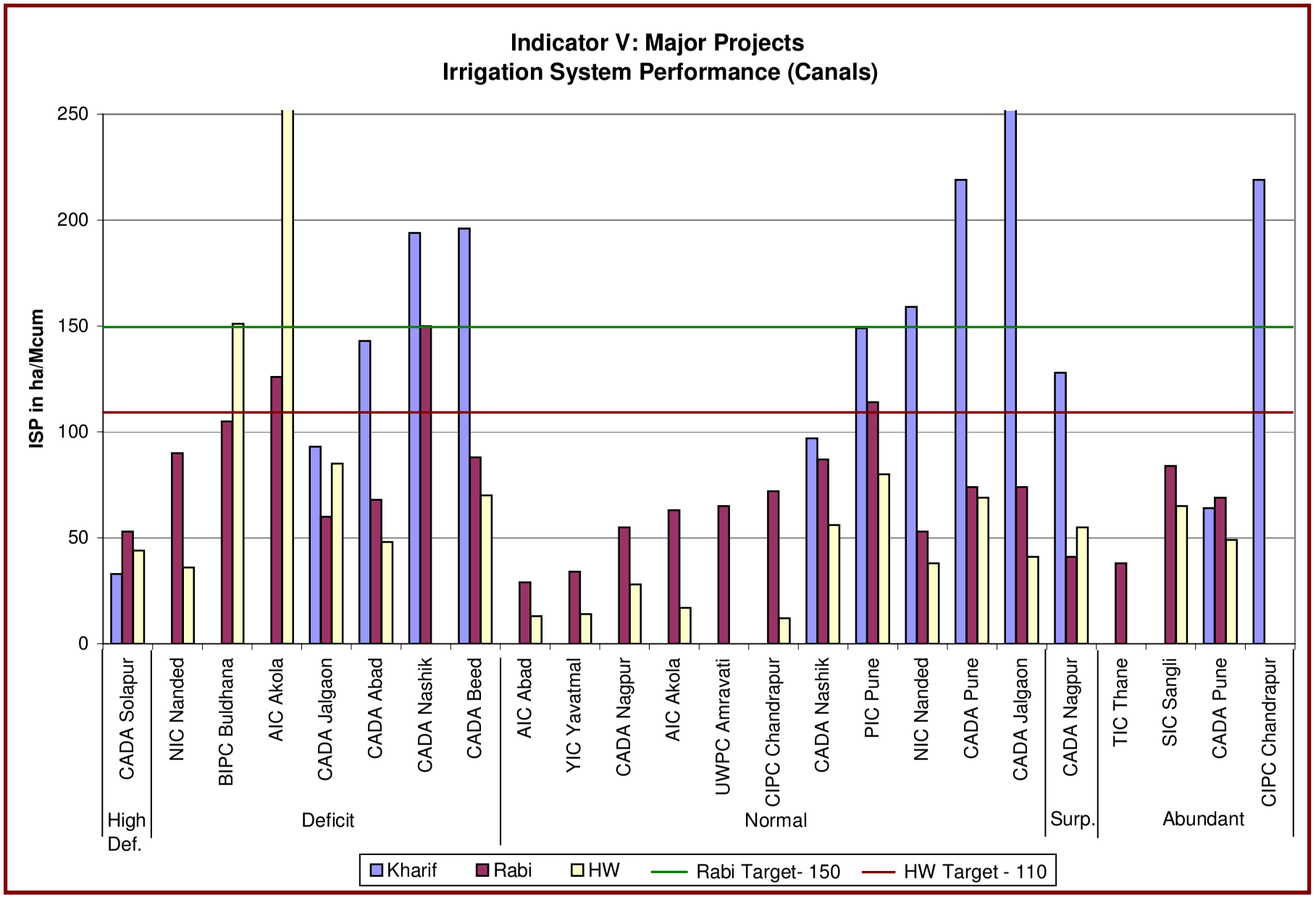
Major Projects 2007-08

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)	304.620	422.718	426.973	304.850	597.530	73.545	433.580	2563.816
	CADA Solapur	**304.620**	**422.718**	**426.973**	**304.850**	**597.530**	**73.545**	**433.580**	**2563.816**
Highly Deficit		**304.620**	**422.718**	**426.973**	**304.850**	**597.530**	**73.545**	**433.580**	**2563.816**
Deficit									
Purna (Tapi)	Katepurna	0.000	24.870	8.396	1.156	3.615	21.751	18.812	78.600
	Nalganga	0.000	23.720	0.000	1.170	0.000	0.930	8.850	34.670
	AIC Akola	**0.000**	**48.590**	**8.396**	**2.326**	**3.615**	**22.681**	**27.662**	**113.270**
Purna (Tapi)	Wan	0.000	40.940	26.631	0.000	0.000	7.390	4.930	79.891
	BIPC	**0.000**	**40.940**	**26.631**	**0.000**	**0.000**	**7.390**	**4.930**	**79.891**
	Buldhana								
Lower Godavari	Jayakwadi Stage I	81.965	607.512	459.499	209.684	0.000	201.456	312.796	1872.912
	CADA Abad	**81.965**	**607.512**	**459.499**	**209.684**	**0.000**	**201.456**	**312.796**	**1872.912**
Lower Godavari	Jayakwadi	18.088	92.643	71.227	10.139	0.000	10.835	82.869	285.801
	Stage II (Majalgaon) Lower Terna	0.000	13.680	4.776	12.097	0.000	3.562	35.224	69.339
	Manjra	0.000	43.144	50.753	10.651	0.000	22.600	59.860	187.008
	CADA Beed	**18.088**	**149.467**	**126.756**	**32.887**	**0.000**	**36.997**	**177.953**	**542.148**
Girna	Girna+Panzan	26.667	261.204	70.341	7.400	12.462	66.729	65.568	510.371
	CADA Jalgaon	**26.667**	**261.204**	**70.341**	**7.400**	**12.462**	**66.729**	**65.568**	**510.371**
Girna	Chankapur	3.020	10.130	0.000	0.800	3.110	32.200	13.400	62.660
	CADA Nashik	**3.020**	**10.130**	**0.000**	**0.800**	**3.110**	**32.200**	**13.400**	**62.660**
Manjra	Manar	0.000	94.263	7.633	5.945	0.000	0.800	23.471	132.112
	Purna Complex	0.000	228.791	134.761	9.870	0.000	21.614	71.931	466.967
	Vishnupuri	0.000	31.640	0.000	49.010	0.000	25.217	10.277	116.144
	NIC Nanded	**0.000**	**354.694**	**142.394**	**64.825**	**0.000**	**47.631**	**105.679**	**715.223**
Deficit		**129.740**	**1472.537**	**834.018**	**317.922**	**19.187**	**415.084**	**707.988**	**3896.475**
Normal									
Upper Godavari	NMC Express	0.000	25.650	7.710	0.000	0.000	0.000	0.000	33.360
	Mukane **AIC Abad**	**0.000**	**25.650**	**7.710**	**0.000**	**0.000**	**0.000**	**0.000**	**33.360**
Painganga	Pus	0.000	40.296	14.383	5.300	0.000	1.937	13.260	75.175
	AIC Akola	**0.000**	**40.296**	**14.383**	**5.300**	**0.000**	**1.937**	**13.260**	**75.175**

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Middle Tapi (Satpuda)	Hatnur	0.390	36.182	20.600	27.580	0.000	113.371	100.980	299.103
	CADA Jalgaon	**0.390**	**36.182**	**20.600**	**27.580**	**0.000**	**113.371**	**100.980**	**299.103**
Wardha	Lower Wunna Complex	0.000	93.599	3.347	4.074	0.000	7.786	45.933	154.738
	CADA Nagpur	**0.000**	**93.599**	**3.347**	**4.074**	**0.000**	**7.786**	**45.933**	**154.738**
Upper Godavari	Bhandardara	56.245	78.508	88.551	0.400	120.311	67.708	4.707	416.430
	Darna	0.000	0.000	0.000	5.349	3.235	20.688	24.648	53.920
	Gangapur	0.000	17.842	9.878	3.614	18.751	154.121	13.895	218.101
	Gautami	0.000	0.000	0.000	0.364	0.000	0.000	2.318	2.682
	Kadwa	11.840	36.400	4.044	1.274	0.618	0.830	6.494	61.500
	Kashyapi	0.000	0.000	0.000	0.582	0.000	0.000	2.489	3.071
	Mukane	0.000	0.000	0.000	4.590	4.535	1.382	7.368	17.875
	Mula	128.735	275.495	228.115	6.000	0.000	39.670	65.820	743.835
	NMWeir	39.544	99.229	92.421	0.000	0.000	32.976	0.000	264.170
	Upper Godavari	60.464	132.419	52.898	28.045	3.536	41.733	35.817	354.913
	CADA Nashik	**296.828**	**639.893**	**475.908**	**50.218**	**150.986**	**359.109**	**163.556**	**2136.498**
Upper Bhima	Ghod	9.640	68.610	44.130	18.956	0.000	7.200	37.000	185.536
	Kukadi	6.450	301.314	201.306	21.820	11.880	4.450	123.400	670.620
	CADA Pune	**16.090**	**369.924**	**245.436**	**40.776**	**11.880**	**11.650**	**160.400**	**856.156**
Wardha	Bor	0.000	61.790	23.480	0.000	0.000	0.000	9.530	94.800
	CIPC	**0.000**	**61.790**	**23.480**	**0.000**	**0.000**	**0.000**	**9.530**	**94.800**
	Chandrapur								
Painganga	Upper Penganga	2.997	258.236	150.810	7.155	0.000	26.615	118.877	564.691
	NIC Nanded	**2.997**	**258.236**	**150.810**	**7.155**	**0.000**	**26.615**	**118.877**	**564.691**
Upper Bhima	Bhama Askhed	0.000	0.000	0.000	2.170	2.990	0.390	5.960	11.510
	Chaskaman	0.000	25.218	21.204	3.113	0.000	4.293	11.320	65.147
	Khadakwasla	27.880	106.970	96.500	5.209	102.000	541.098	59.396	939.054
	Neera Complex	201.000	582.240	430.890	21.143	0.000	62.659	74.508	1372.440
	Pawana	0.000	0.000	0.000	2.100	8.791	203.213	17.325	231.430
	PIC Pune	**228.880**	**714.428**	**548.594**	**33.735**	**113.781**	**811.653**	**168.509**	**2619.581**
Wardha	Upper Wardha	0.000	254.940	55.500	16.598	0.000	26.765	99.657	453.461
	UWPC	**0.000**	**254.940**	**55.500**	**16.598**	**0.000**	**26.765**	**99.657**	**453.461**
	Amravati								
Painganga	Arunawati	0.000	46.406	18.060	1.799	0.000	2.498	32.850	101.613
	YIC Yavatmal	**0.000**	**46.406**	**18.060**	**1.799**	**0.000**	**2.498**	**32.850**	**101.613**
Normal		**545.185**	**2541.344**	**1563.828**	**187.235**	**276.647**	**1361.385**	**913.551**	**7389.176**

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Surplus									
Middle Wainganga	Bagh Complex	124.559	64.535	106.027	2.610	0.000	4.400	34.042	336.173
	Itiadoh	99.010	93.630	142.770	0.000	0.000	0.000	88.531	423.941
	Pench Complex	467.432	533.260	61.339	0.000	0.000	198.905	84.320	1345.255
	CADA Nagpur	**691.001**	**691.425**	**310.136**	**2.610**	**0.000**	**203.305**	**206.893**	**2105.370**
Surplus		**691.001**	**691.425**	**310.136**	**2.610**	**0.000**	**203.305**	**206.893**	**2105.370**
Abundant									
Upper Krishna (W)	Dhom	3.903	178.575	111.267	1.381	0.000	6.957	28.857	330.939
	Kanher	0.000	89.645	60.390	4.626	0.000	0.192	26.015	180.868
	CADA Pune	**3.903**	**268.220**	**171.657**	**6.007**	**0.000**	**7.149**	**54.872**	**511.808**
Lower Wainganga	Asolamendha	69.283	0.000	0.000	0.000	0.000	0.000	16.320	85.603
	Dina	28.942	19.156	0.000	0.000	0.000	0.000	9.213	57.311
	CIPC	**98.225**	**19.156**	**0.000**	**0.000**	**0.000**	**0.000**	**25.533**	**142.914**
	Chandrapur								
Upper Krishna (W)	Dudhaganga	0.000	3.200	3.600	0.000	143.862	5.963	26.390	183.015
	Radhanagari	0.000	0.000	0.000	0.000	307.729	48.825	14.073	370.627
	Tulshi	0.000	0.000	0.000	0.962	59.895	0.164	17.132	78.153
	Warana	0.000	5.330	4.210	0.000	264.012	5.462	20.801	299.815
	SIC Sangli	**0.000**	**8.530**	**7.810**	**0.962**	**775.498**	**60.414**	**78.396**	**931.610**
North Konkan	Bhatsa	0.000	51.962	5.438	0.000	10.581	727.240	24.638	819.859
	Kal-Amba	7.233	128.563	6.019	1.000	0.000	45.928	13.505	202.248
	Surya	0.000	53.814	9.042	0.000	0.000	47.685	14.299	124.840
	TIC Thane	**7.233**	**234.339**	**20.499**	**1.000**	**10.581**	**820.853**	**52.441**	**1146.946**
Abundant		**109.361**	**530.245**	**199.966**	**7.969**	**786.079**	**888.416**	**211.242**	**2733.278**
Major		**1779.907**	**5658.269**	**3334.920**	**820.586**	**1679.443**	**2941.735**	**2473.254**	**18688.114**


Indicator V: Major Projects
Irrigation System Performance (Canals)
ISP in ha/Mcum
250
200
150
100
50
0
CADA Solapur
NIC Nanded
BIPC Buldhana
AIC Akola
CADA Jalgaon
CADA Abad
CADA Nashik
CADA Beed
AIC Abad
YIC Yavatmal
CADA Nagpur
AIC Akola
UWPC Amravati
CIPC Chandrapur
CADA Nashik
PIC Pune
NIC Nanded
CADA Pune
CADA Jalgaon
CADA Nagpur
TIC Thane
SIC Sangli
CADA Pune
CIPC Chandrapur
High Def.
Deficit
Normal
Surp.
Abundant
Kharif
Rabi
HW
Rabi Target- 150
HW Target - 110

Indicator V

Irrigation System Performance (Canals)

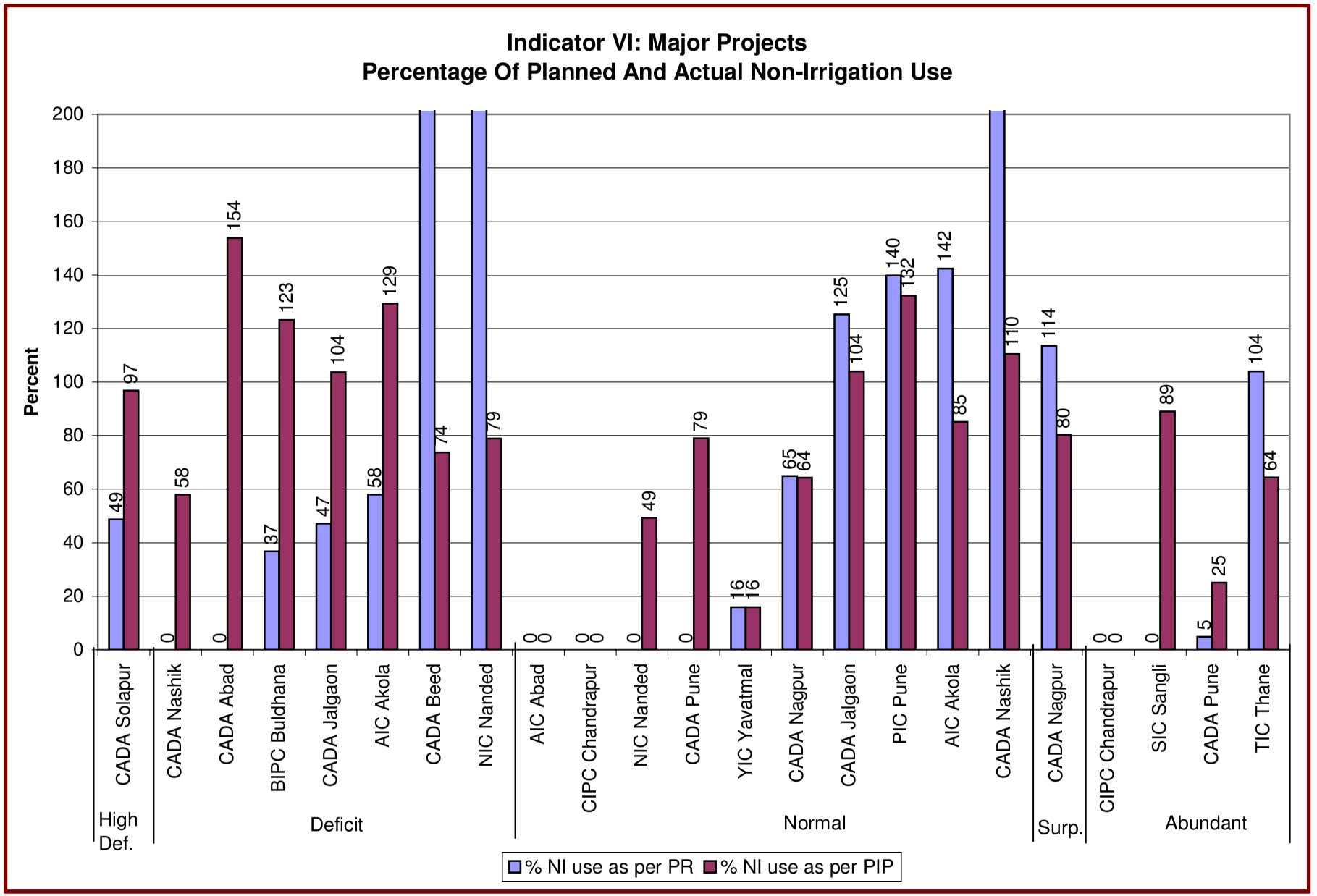
Major Projects 2007-08

Unit: ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Highly Deficit				
Remaining Bhima+ Man	Bhima (Ujjani)	33	53	44
	CADA Solapur	**33**	**53**	**44**
Highly Deficit		**33**	**53**	**44**
Deficit				
Purna (Tapi)	Katepurna	0	151	389
	Nalganga	0	100	0
	AIC Akola	**0**	**126**	**389**
Purna (Tapi)	Wan	0	105	151
	BIPC Buldhana	**0**	**105**	**151**
Lower Godavari	Jayakwadi Stage I	143	68	48
	CADA Abad	**143**	**68**	**48**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	196	63	51
	Lower Terna	0	126	86
	Manjra	0	131	96
	CADA Beed	**196**	**88**	**70**
Girna	Girna+Panzan	93	60	85
	CADA Jalgaon	**93**	**60**	**85**
Girna	Chankapur	194	150	0
	CADA Nashik	**194**	**150**	**0**
Manjra	Manar	0	111	91
	Purna Complex	0	75	32
	Vishnupuri	0	136	0
	NIC Nanded	**0**	**90**	**36**
Deficit		**141**	**77**	**59**
Normal				
Upper Godavari	NMC Express Mukane	0	29	13
	AIC Abad	**0**	**29**	**13**
Painganga	Pus	0	63	17
	AIC Akola	**0**	**63**	**17**
Middle Tapi (Satpuda)	Hatnur	672	74	41
	CADA Jalgaon	**672**	**74**	**41**
Wardha	Lower Wunna Complex	0	55	28
	CADA Nagpur	**0**	**55**	**28**
Upper Godavari	Bhandardara	99	95	42
	Darna	0	0	0

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Gangapur	0	105	76
	Gautami	0	0	0
	Kadwa	28	23	14
	Kashyapi	0	0	0
	Mukane	0	0	0
	Mula	118	89	53
	NMWeir	111	90	59
	Upper Godavari Complex	54	88	89
	CADA Nashik	**97**	**87**	**56**
Upper Bhima	Ghod	176	92	118
	Kukadi Complex	283	69	58
	CADA Pune	**219**	**74**	**69**
Wardha	Bor	0	72	12
	CIPC Chandrapur	**0**	**72**	**12**
Painganga	Upper Penganga	159	53	38
	NIC Nanded	**159**	**53**	**38**
Upper Bhima	Bhama Askhed	0	0	0
	Chaskaman	0	121	102
	Khadakwasla Complex	100	107	76
	Neera Complex	155	115	80
	Pawana	0	0	0
	PIC Pune	**149**	**114**	**80**
Wardha	Upper Wardha	0	65	0
	UWPC Amravati	**0**	**65**	**0**
Painganga	Arunawati	0	34	14
	YIC Yavatmal	**0**	**34**	**14**
Normal		**123**	**83**	**61**
Surplus				
Middle Wainganga	Bagh Complex	185	0	61
	Itiadoh	180	0	73
	Pench Complex	101	53	2
	CADA Nagpur	**128**	**41**	**55**
Surplus		**128**	**41**	**55**
Abundant				
Upper Krishna (W)	Dhom	64	72	51
	Kanher	0	64	45
	CADA Pune	**64**	**69**	**49**
Lower Wainganga	Asolamendha	154	0	0
	Dina	373	0	0
	CIPC Chandrapur	**219**	**0**	**0**
Upper Krishna (W)	Dudhaganga	0	81	72

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
North Konkan	Radhanagari	0	0	0
	Tulshi	0	0	0
	Warana	0	85	58
	SIC Sangli	**0**	**84**	**65**
	Bhatsa	0	39	0
	Kal-Amba	0	32	0
	Surya	0	51	0
	TIC Thane	**0**	**38**	**0**
Abundant		**199**	**53**	**45**
Major		**115**	**71**	**57**


Indicator VI: Major Projects
Percentage Of Planned And Actual Non-Irrigation Use
Percent
200
180
160
140
120
100
80
60
40
20
0
49
97
0
58
0
154
37
123
47
104
58
129
200
74
200
79
0
0
0
0
0
49
0
79
16
16
65
64
125
104
140
132
142
85
200
110
114
80
0
0
0
89
5
25
104
64
CADA Solapur
CADA Nashik
CADA Abad
BIPC Buldhana
CADA Jalgaon
AIC Akola
CADA Beed
NIC Nanded
AIC Abad
CIPC Chandrapur
NIC Nanded
CADA Pune
YIC Yavatmal
CADA Nagpur
CADA Jalgaon
PIC Pune
AIC Akola
CADA Nashik
CADA Nagpur
CIPC Chandrapur
SIC Sangli
CADA Pune
TIC Thane
High Def.
Deficit
Normal
Surp.
Abundant
% NI use as per PR
% NI use as per PIP

Indicator VI

Non Irrigation Use

Major Projects 2007-08

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)	73.55	150.95	76.00	49	97
	CADA Solapur	**73.550**	**150.950**	**76.000**	**49**	**97**
Highly Deficit		**73.550**	**150.950**	**76.000**	**49**	**97**
Deficit						
Purna (Tapi)	Katepurna	21.75	32.65	16.49	67	132
	Nalganga	0.93	6.51	1.05	14	89
	AIC Akola	**22.680**	**39.160**	**17.540**	**58**	**129**
Purna (Tapi)	Wan	7.39	20.08	6.00	37	123
	BIPC Buldhana	**7.390**	**20.079**	**6.000**	**37**	**123**
Lower Godavari	Jayakwadi Stage I	201.46	0.00	130.98	0	154
	CADA Abad	**201.460**	**0.000**	**130.975**	**0**	**154**
Lower Godavari	Jayakwadi Stage II (Majal	10.84	0.00	9.85	0	110
	Lower Terna	3.56	14.36	2.65	25	135
	Manjra	22.60	0.00	37.70	0	60
	CADA Beed	**37.000**	**14.361**	**50.195**	**258**	**74**
Girna	Girna+Panzan	66.73	141.42	64.39	47	104
	CADA Jalgaon	**66.730**	**141.422**	**64.390**	**47**	**104**
Girna	Chankapur	32.20	0.00	55.59	0	58
	CADA Nashik	**32.200**	**0.000**	**55.590**	**0**	**58**
Manjra	Manar	0.80	2.62	1.27	31	63
	Purna Complex	21.61	0.00	30.83	0	70
	Vishnupuri	25.22	12.15	28.28	208	89
	NIC Nanded	**47.630**	**14.770**	**60.380**	**322**	**79**
Deficit		**415.080**	**229.792**	**385.070**	**181**	**108**
Normal						
Upper Godavari	NMC Express Mukane	0.00	0.00	0.00	0	0
	AIC Abad	**0.000**	**0.000**	**0.000**	**0**	**0**
Painganga	Pus	1.94	1.36	2.28	142	85
	AIC Akola	**1.940**	**1.360**	**2.275**	**142**	**85**
Middle Tapi (Satpuda)	Hatnur	113.37	90.53	109.00	125	104
	CADA Jalgaon	**113.370**	**90.530**	**109.000**	**125**	**104**

Indicator VI

Non Irrigation Use

Major Projects 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Wardha	Lower Wunna Complex	7.79	12.00	12.12	65	64
	CADA Nagpur	**7.790**	**12.000**	**12.121**	**65**	**64**
Upper Godavari	Bhandardara	67.71	0.00	30.91	0	219
	Darna	20.69	1.53	60.23	1352	34
	Gangapur	154.12	2.73	137.90	5645	112
	Gautami	0.00	0.00	0.01	0	1
	Kadwa	0.83	0.60	0.20	138	415
	Kashyapi	0.00	0.00	1.42	0	0
	Mukane	1.38	0.00	0.00	0	0
	Mula	39.67	59.13	39.36	67	101
	NMWeir	32.98	0.00	0.00	0	0
	Upper Godavari Complex	41.73	23.46	55.15	178	76
	CADA Nashik	**359.110**	**87.448**	**325.178**	**411**	**110**
Upper Bhima	Ghod	7.20	0.00	6.39	0	113
	Kukadi Complex	4.45	0.00	8.37	0	53
	CADA Pune	**11.650**	**0.000**	**14.758**	**0**	**79**
Wardha	Bor	0.00	6.35	0.15	0	0
	CIPC Chandrapur	**0.000**	**6.350**	**0.150**	**0**	**0**
Painganga	Upper Penganga	26.62	0.00	54.00	0	49
	NIC Nanded	**26.620**	**0.000**	**54.000**	**0**	**49**
Upper Bhima	Bhama Askhed	0.39	4.53	4.52	9	9
	Chaskaman	4.29	0.00	37.79	0	11
	Khadakwasla Complex	541.10	407.62	305.57	133	177
	Neera Complex	62.66	0.00	66.72	0	94
	Pawana	203.21	168.32	199.20	121	102
	PIC Pune	**811.650**	**580.470**	**613.800**	**140**	**132**
Wardha	Upper Wardha	26.77	89.72	46.51	30	58
	UWPC Amravati	**26.770**	**89.719**	**46.510**	**30**	**58**
Painganga	Arunawati	2.50	15.65	15.65	16	16
	YIC Yavatmal	**2.500**	**15.652**	**15.652**	**16**	**16**
Normal		**1361.380**	**883.529**	**1193.444**	**154**	**114**
Surplus						

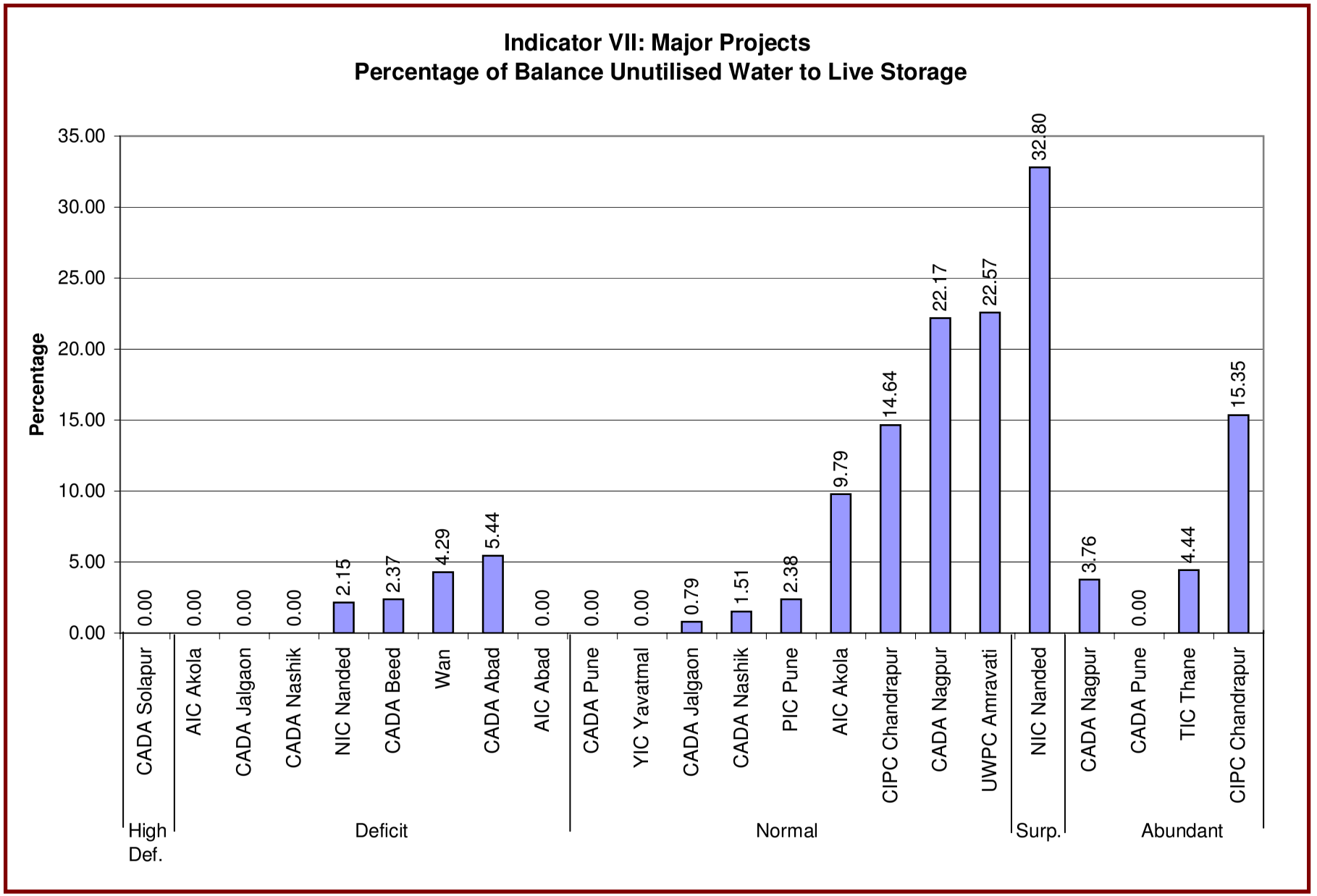
Indicator VI

Non Irrigation Use

Major Projects 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Middle Wainganga	Bagh Complex	4.40	0.00	4.40	0	100
	Itiadoh	0.00	0.00	0.00	0	0
	Pench Complex	198.91	179.00	249.00	111	80
	CADA Nagpur	**203.310**	**179.000**	**253.400**	**114**	**80**
Surplus		**203.310**	**179.000**	**253.400**	**114**	**80**
Abundant						
Upper Krishna (W)	Dhom	6.96	54.77	14.50	13	48
	Kanher	0.19	93.12	14.00	0	1
	CADA Pune	**7.150**	**147.890**	**28.500**	**5**	**25**
Lower Wainganga	Asolamendha	0.00	0.00	0.00	0	0
	Dina	0.00	0.00	0.00	0	0
	CIPC Chandrapur	**0.000**	**0.000**	**0.000**	**0**	**0**
Upper Krishna (W)	Dudhaganga	5.96	0.00	7.50	0	80
	Radhanagari	48.83	0.00	51.50	0	95
	Tulshi	0.16	0.00	1.20	0	14
	Warana	5.46	0.00	7.70	0	71
	SIC Sangli	**60.410**	**0.000**	**67.900**	**0**	**89**
North Konkan	Bhatsa	727.24	426.80	612.06	170	119
	Kal-Amba	45.93	362.85	612.06	13	8
	Surya	47.69	0.00	52.00	0	92
	TIC Thane	**820.850**	**789.650**	**1276.116**	**104**	**64**
Abundant		**888.420**	**937.540**	**1372.516**	**95**	**65**
Major		**2941.730**	**2380.811**	**3280.430**	**124**	**90**


Indicator VII: Major Projects
Percentage of Balance Unutilised Water to Live Storage
Percentage
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.00
0.00
0.00
0.00
2.15
2.37
4.29
5.44
0.00
0.00
0.00
0.79
1.51
2.38
9.79
14.64
22.17
22.57
32.80
3.76
0.00
4.44
15.35
CADA Solapur
AIC Akola
CADA Jalgaon
CADA Nashik
NIC Nanded
CADA Beed
Wan
CADA Abad
AIC Abad
CADA Pune
YIC Yavatmal
CADA Jalgaon
CADA Nashik
PIC Pune
AIC Akola
CIPC Chandrapur
CADA Nagpur
UWPC Amravati
NIC Nanded
CADA Nagpur
CADA Pune
TIC Thane
CIPC Chandrapur
High Def.
Deficit
Normal
Surp.
Abundant

Indicator VII

Percent Unutilized water to Live Storage on 15th Oct

Major Projects 2007-08

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Storage15Oct	Percent Unutilise
Highly Deficit							
Remaining Bhima+ Man	Bhima (Ujjani)	-308.85	0.00	226.81	0.00	1675.14	0.00
	CADA Solapur	**-308.85**	**0.00**	**226.81**	**0.00**	**1,675.14**	**0.00**
Highly Deficit		**-308.85**	**0.00**	**226.81**	**0.00**	**1675.14**	**0.00**
Deficit							
Purna (Tapi)	Katepurna	2.49	0.00	14.19	0.00	80.50	0.00
	Nalganga	0.25	18.40	0.36	0.00	32.59	0.00
	AIC Akola	**2.74**	**18.40**	**14.55**	**0.00**	**113.09**	**0.00**
Purna (Tapi)	Wan	4.92	0.00	1.41	3.51	81.96	4.29
	BIPC Buldhana	**4.92**	**0.00**	**1.41**	**3.51**	**81.96**	**4.29**
Lower Godavari	Jayakwadi Stage I	791.43	382.00	291.27	118.17	2170.94	5.44
	CADA Abad	**791.43**	**382.00**	**291.27**	**118.17**	**2,170.94**	**5.44**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	-0.30	0.00	2.83	0.00	260.40	0.00
	Lower Terna	12.78	0.00	0.65	12.13	76.15	15.92
	Manjra	-1.77	4.42	3.79	0.00	174.16	0.00
	CADA Beed	**10.71**	**4.42**	**7.28**	**12.13**	**510.71**	**2.37**
Girna	Girna+Panzan	34.37	155.65	140.83	0.00	519.65	0.00
	CADA Jalgaon	**34.37**	**155.65**	**140.83**	**0.00**	**519.65**	**0.00**
Girna	Chankapur	6.45	0.00	6.57	0.00	76.85	0.00
	CADA Nashik	**6.45**	**0.00**	**6.57**	**0.00**	**76.85**	**0.00**
Manjra	Manar	13.54	0.00	0.64	12.90	134.29	9.61
	Purna Complex	-42.52	243.52	103.18	0.00	437.70	0.00
	Vishnupuri	0.18	0.00	33.31	0.00	28.67	0.00
	NIC Nanded	**-28.80**	**243.52**	**137.13**	**12.90**	**600.66**	**2.15**
Deficit		**821.83**	**803.99**	**599.03**	**146.71**	**4073.85**	**3.60**
Normal							
Upper Godavari	NMC Express	1.98	0.00	9.69	0.00	0.00	0.00
	Mukane **AIC Abad**	**1.98**	**0.00**	**9.69**	**0.00**	**0.00**	**0.00**
Painganga	Pus	19.55	8.50	2.12	8.94	91.26	9.79
	AIC Akola	**19.55**	**8.50**	**2.12**	**8.94**	**91.26**	**9.79**
Middle Tapi (Satpuda)	Hatnur	58.10	0.00	56.08	2.02	255.00	0.79

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	CADA Jalgaon	**58.10**	**0.00**	**56.08**	**2.02**	**255.00**	**0.79**
Wardha	Lower Wunna	43.27	0.00	1.62	41.65	187.82	22.17
	Complex **CADA Nagpur**	**43.27**	**0.00**	**1.62**	**41.65**	**187.82**	**22.17**
Upper Godavari	Bhandardara	32.36	0.00	22.90	9.46	304.09	3.11
	Darna	24.42	0.00	7.36	17.06	197.36	8.64
	Gangapur	22.28	11.32	26.35	0.00	157.12	0.00
	Gautami	-0.32	0.00	21.73	0.00	30.50	0.00
	Kadwa	1.25	0.00	0.00	1.25	52.91	2.36
	Kashyapi	-0.28	0.00	0.00	0.00	48.86	0.00
	Mukane	0.46	0.00	0.00	0.46	125.13	0.37
	Mula	20.38	28.30	11.99	0.00	608.92	0.00
	NMWeir	7.28	0.00	164.50	0.00	7.28	0.00
	Upper Godavari	21.64	36.61	33.04	0.00	334.32	0.00
	Complex **CADA Nashik**	**129.48**	**76.23**	**287.88**	**28.22**	**1,866.49**	**1.51**
Upper Bhima	Ghod	-10.93	0.00	0.00	0.00	154.80	0.00
	Kukadi	-51.85	128.55	161.44	0.00	702.50	0.00
	Complex **CADA Pune**	**-62.78**	**128.55**	**161.44**	**0.00**	**857.30**	**0.00**
Wardha	Bor	34.45	15.80	0.00	18.65	127.35	14.64
	CIPC	**34.45**	**15.80**	**0.00**	**18.65**	**127.35**	**14.64**
	Chandrapur						
Painganga	Upper Penganga	286.76	0.00	0.96	285.81	871.48	32.80
	NIC Nanded	**286.76**	**0.00**	**0.96**	**285.81**	**871.48**	**32.80**
Upper Bhima	Bhama Askhed	76.65	0.00	59.13	17.51	83.52	20.97
	Chaskaman	11.81	18.55	1.02	0.00	214.50	0.00
	Khadakwasla	89.27	7.80	569.37	0.00	775.62	0.00
	Complex Neera Complex	189.93	42.48	544.88	0.00	931.93	0.00
	Pawana	77.20	2.27	39.15	35.78	230.49	15.52
	PIC Pune	**444.86**	**71.10**	**1,213.56**	**53.29**	**2,236.06**	**2.38**
Wardha	Upper Wardha	150.20	0.00	26.47	123.73	548.14	22.57
	UWPC	**150.20**	**0.00**	**26.47**	**123.73**	**548.14**	**22.57**
	Amravati						
Painganga	Arunawati	15.89	72.00	1.42	0.00	108.69	0.00
	YIC Yavatmal	**15.89**	**72.00**	**1.42**	**0.00**	**108.69**	**0.00**
Normal		**1121.75**	**372.18**	**1761.23**	**562.30**	**7149.57**	**7.86**
Surplus							
Middle Wainganga	Bagh Complex	9.65	16.99	127.85	0.00	221.53	0.00

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Itiadoh	73.40	0.00	54.98	18.42	302.98	6.08
	Pench Complex	330.87	0.00	289.32	41.55	1069.31	3.89
	CADA Nagpur	**413.92**	**16.99**	**472.14**	**59.98**	**1,593.82**	**3.76**
Surplus		**413.92**	**16.99**	**472.14**	**59.98**	**1593.82**	**3.76**
Abundant							
Upper Krishna (W)	Dhom	79.75	0.00	120.69	0.00	326.73	0.00
	Kanher	-14.32	0.00	0.00	0.00	271.68	0.00
	CADA Pune	**65.43**	**0.00**	**120.69**	**0.00**	**598.41**	**0.00**
Lower Wainganga	Asolamendha	21.11	13.89	14.13	0.00	56.38	0.00
	Dina	15.73	0.00	0.00	15.73	46.10	34.12
	CIPC	**36.84**	**13.89**	**14.13**	**15.73**	**102.48**	**15.35**
	Chandrapur						
Upper Krishna (W)	Dudhaganga	223.14	0.00	8.91	214.23	678.09	31.59
	Radhanagari	41.45	0.00	43.09	0.00	214.67	0.00
	Tulshi	48.67	0.00	40.08	8.59	91.92	9.35
	Warana	258.99	0.00	89.83	169.16	746.52	22.66
	SIC Sangli	**572.25**	**0.00**	**181.91**	**391.98**	**1,731.20**	**22.64**
North Konkan	Bhatsa	126.07	225.42	24.69	0.00	787.26	0.00
	Kal-Amba	154.60	0.00	93.82	60.78	405.21	15.00
	Surya	47.87	14.84	96.19	0.00	175.43	0.00
	TIC Thane	**328.54**	**240.26**	**214.70**	**60.78**	**1,367.90**	**4.44**
Abundant		**1003.06**	**254.15**	**531.43**	**468.49**	**3799.99**	**12.33**
Major		**3051.71**	**1447.31**	**3590.65**	**1237.48**	**18292.38**	**6.76**

Indicator VIII

Conveyance Efficiency of Main Canals

Major Projects 2007-08

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
Highly Deficit					
Remaining Bhima-Main	Bhima (Ujjani)	34.00	45.00	29.00	37.00
	CADA Solapur	**34.00**	**45.00**	**29.00**	**37.00**
Highly Deficit		**34.00**	**45.00**	**29.00**	**37.00**
Deficit					
Purna (Tapi)	Katepurna	NoData	NoRBC	NoData	NoRBC
	Nalganga	NoLBC	74.00	NoLBC	0.00
	AIC Akola	**0.00**	**37.00**	**0.00**	**0.00**
Purna (Tapi)	Wan	94.00	NoRBC	91.00	NoRBC
	BIPC Buldhana	**94.00**	**0.00**	**91.00**	**0.00**
Lower Godavari	Jayakwadi Stage I	81.00	65.00	77.00	68.00
	CADA Abad	**81.00**	**65.00**	**77.00**	**68.00**
Lower Godavari	Jayakwadi Stage II (Majalgaon)	NoLBC	70.00	NoLBC	70.00
	Lower Terna	65.00	64.00	60.00	62.00
	Manjra	75	75	71	67
	CADA Beed	**21.67**	**44.67**	**20.00**	**44.00**
Girna	Girna+Panzan	60	72.00	57	72.00
	CADA Jalgaon	**60**	**72.00**	**57**	**72.00**
Girna	Chankapur	70.00	76.00	78.00	0.00
	CADA Nashik	**70.00**	**76.00**	**78.00**	**0.00**
Manjra	Manar	86.00	82.00	79.00	72.00
	Purna Complex	85.00	NoRBC	77.00	NoRBC
	Vishnupuri	NoLBC	67.00	NoLBC	0.00
	NIC Nanded	**57.00**	**49.67**	**52.00**	**24.00**
Deficit		**55.08**	**47.50**	**52.75**	**28.67**
Normal					
Upper Godavari	NMC Express Mukane	NoData	NoRBC	NoData	NoRBC
	AIC Abad	**0.00**	**NoRBC**	**0.00**	**NoRBC**
Painganga	Pus	67.00	69.00	0.00	67.00
	AIC Akola	**67.00**	**69.00**	**0.00**	**67.00**
Middle Tapi (Satpuda)	Hatnur	NoLBC	60.00	NoLBC	27.00

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
	CADA Jalgaon	**NoLBC**	**60.00**	**NoLBC**	**27.00**
Wardha	Lower Wunna Complex	NoData	NoData	NoData	NoData
	CADA Nagpur	**0.00**	**0.00**	**0.00**	**0.00**
Upper Godavari	Bhandardara	45.00	53.00	37.00	41.00
	Darna	NoLBC	NoRBC	NoLBC	NoRBC
	Gangapur	60.00	NoRBC	54.00	NoRBD
	Gautami	NoLBC	NoRBC	NoLBC	NoRBC
	Kadwa	0.00	45.00	0.00	40.00
	Kashyapi	NoLBC	NoRBC	NoLBC	NoRBC
	Mukane	NoLBC	NoRBC	NoLBC	NoRBC
	Mula	65.00	73.00	43.00	62.00
	NMWeir	70.00	16.00	83.00	9.00
	Upper Godavari Complex	56	62	51	41
	CADA Nashik	**52.10**	**34.90**	**42.20**	**29.30**
Upper Bhima	Ghod	66.00	47.00	65.00	37.00
	Kukadi Complex	53	59.00	45.00	45.00
	CADA Pune	**135.50**	**53.00**	**65.00**	**41.00**
Wardha	Bor	70.00	NoRBC	18.00	NoRBC
	CIPC Chandrapur	**70.00**	**0.00**	**18.00**	**0.00**
Painganga	Upper Penganga	87.00	83.00	90.00	87.00
	NIC Nanded	**87.00**	**83.00**	**90.00**	**87.00**
Upper Bhima	Bhama Askhed	NoData	NoData	NoData	NoData
	Chaskaman	71.00	NoRBC	40.00	NoRBC
	Khadakwasla Complex	NoLBC	34.00	NoLBC	26.00
	Neera Complex	51.00	54.00	46.00	51.00
	Pawana	NoLBC	NoRBC	NoLBC	NoRBC
	PIC Pune	**24.40**	**17.60**	**17.20**	**15.40**
Wardha	Upper Wardha	NoData	NoData	NoData	NoData
	UWPC Amravati	**0.00**	**0.00**	**0.00**	**0.00**
Painganga	Arunawati	NoData	NoData	NoData	NoData
	YIC Yavatmal	**0.00**	**0.00**	**0.00**	**0.00**
Normal		**45.52**	**30.20**	**29.84**	**25.32**
Surplus					
Middle Wainganga	Bagh Complex	57	58.00	55	60.00
	Itiadoh	NoLBC	65.00	NoLBC	60
	Pench Complex	NoData	NoData	NoData	NoData

Subbasin/PlanGroup	Project/ Circle	Rabi		HW	
		LBC	RBC	LBC	RBC
	CADA Nagpur	**83.33**	**41.00**	**38.00**	**60.67**
Surplus		**83.33**	**41.00**	**38.00**	**60.67**
Abundant					
Upper Krishna (W)	Dhom	48.00	52.00	42.00	46.00
	Kanher	58.00	66.00	75.00	51.00
	CADA Pune	**53.00**	**59.00**	**58.50**	**48.50**
Lower Wainganga	Asolamendha	NoData	NoRBC	NoData	NoRBC
	Dina	NoLBC	NoData	NoLBC	NoData
	CIPC Chandrapur	**0.00**	**0.00**	**0.00**	**0.00**
Upper Krishna (W)	Dudhaganga	NoLBC	NoRBC	NoLBC	NoRBC
	Radhanagari	NoLBC	NoRBC	NoLBC	NoRBC
	Tulshi	NoLBC	NoRBC	NoLBC	NoRBC
	Warana	NoLBC	NoRBC	NoLBC	NoRBC
	SIC Sangli	**0.00**	**0.00**	**0.00**	**0.00**
North Konkan	Bhatsa	NoLBC	46.00	NoLBC	44.00
	Kal-Amba	29.00	40.00	0.00	0.00
	Surya	NoData	40.00	NoData	0.00
	TIC Thane	**9.67**	**42.00**	**0.00**	**14.67**
Abundant		**12.27**	**22.18**	**10.64**	**12.82**
Major		**2218.0**	**1737.0**	**1639.0**	**1337.0**

Indicator IX

Actual Cropping Pattern

Unit: ha

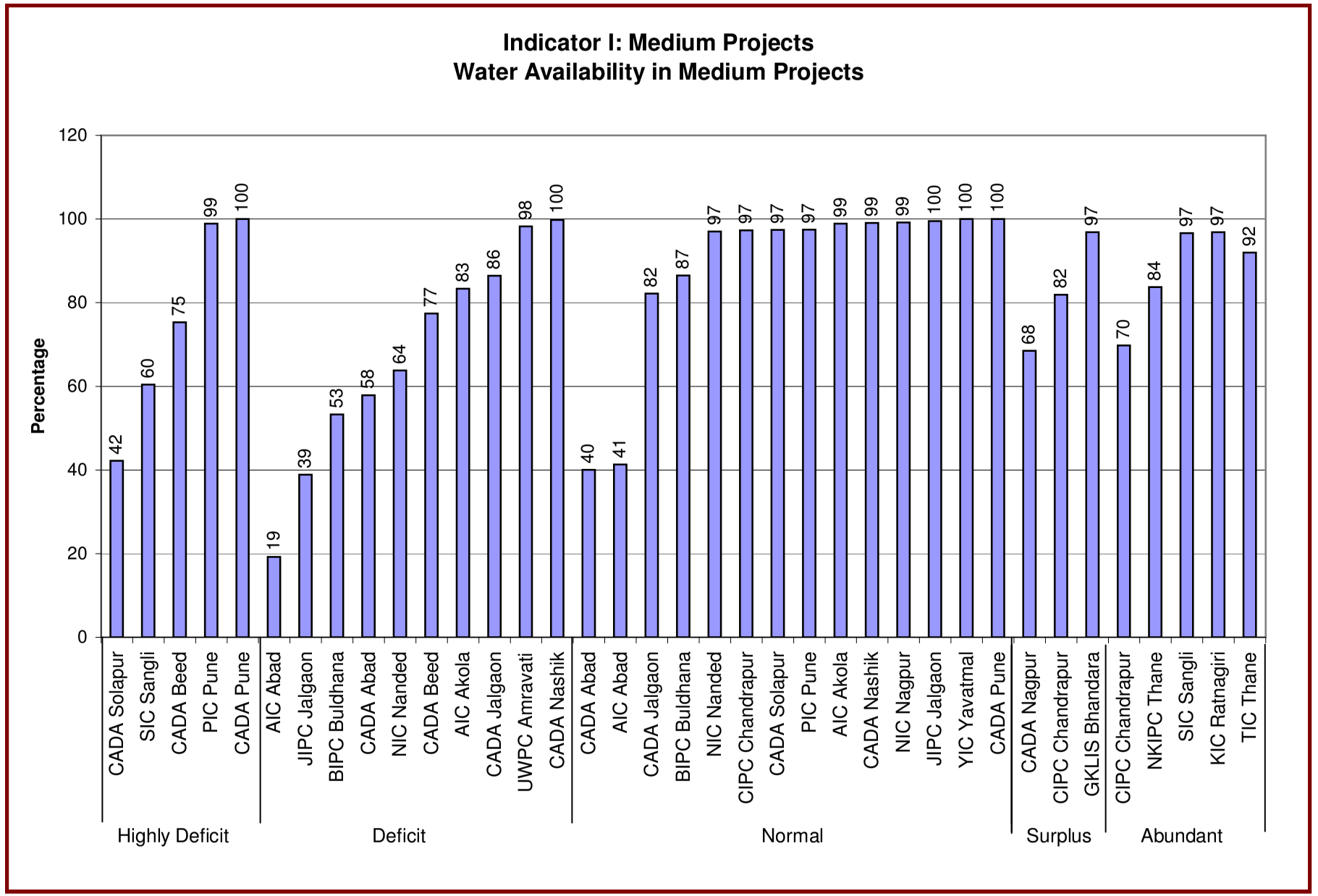
Major Projects 2007-08

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Highly Deficit						
Remaining Bhima+ Man	Bhima (Ujjani)	14.85	0.01	27.96	16.40	40.78
	CADA Solapur	14.85	0.01	27.96	16.40	40.78
Highly Deficit						
Deficit						
Purna (Tapi)	Katepurna	0.00	0.71	96.23	2.25	0.81
	Nalganga	0.00	14.88	84.64	0.00	0.48
	AIC Akola	0.00	6.38	91.59	1.35	0.68
Purna (Tapi)	Wan	0.00	2.22	92.22	4.07	1.48
	BIPC Buldhana	0.00	2.22	92.22	4.07	1.48
Lower Godavari	Jayakwadi Stage I	8.01	18.67	41.42	13.59	18.30
	CADA Abad	8.01	18.67	41.42	13.59	18.30
Lower Godavari	Jayakwadi Stage II (Majalgaon)	1.99	11.00	21.89	2.67	62.45
	Lower Terna	0.00	12.81	48.10	8.33	30.77
	Manjra	0.01	0.00	24.62	4.43	70.94
	CADA Beed	0.90	6.87	26.92	4.23	61.08
Girna	Girna+Panzan	19.18	12.66	59.06	5.57	3.53
	CADA Jalgaon	19.18	12.66	59.06	5.57	3.53
Girna	Chankapur	36.52	0.02	61.39	0.00	2.07
	CADA Nashik	36.52	0.02	61.39	0.00	2.07
Manjra	Manar	0.00	3.05	69.95	4.72	22.28
	Purna Complex	0.00	4.05	62.55	15.45	17.95
	Vishnupuri	0.00	0.28	69.89	6.33	23.50
	NIC Nanded	0.00	3.16	65.37	11.64	19.83
Deficit						
Normal						
Upper Godavari	NMC Express Mukane	0.00	1.90	85.95	8.81	3.33
	AIC Abad	0.00	1.90	85.95	8.81	3.33
Painganga	Pus	0.00	9.07	66.67	16.48	7.79
	AIC Akola	0.00	9.07	66.67	16.48	7.79
Middle Tapi (Satpuda)						

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Hatnur	11.57	11.26	45.28	12.54	19.35
	CADA Jalgaon	11.57	11.26	45.28	12.54	19.35
Wardha	Lower Wunna Complex	0.00	0.44	98.49	0.00	1.08
	CADA Nagpur	0.00	0.44	98.49	0.00	1.08
Upper Godavari	Bhandardara	25.97	0.02	50.14	0.86	23.01
	Darna	17.12	0.00	57.30	16.48	9.11
	Gangapur	10.36	0.00	59.53	0.17	29.93
	Gautami	0.00	0.00	100.00	0.00	0.00
	Kadwa	32.04	0.00	53.42	2.63	11.91
	Kashyapi	0.00	0.00	100.00	0.00	0.00
	Mukane	24.39	0.00	55.25	12.04	8.32
	Mula	30.55	0.53	43.38	11.96	13.57
	NMWeir	25.16	0.00	51.41	0.96	22.48
	Upper Godavari Complex	16.80	0.10	45.12	6.93	31.05
	CADA Nashik	24.55	0.21	47.37	6.41	21.47
Upper Bhima	Ghod	20.15	0.01	37.43	26.69	15.72
	Kukadi Complex	24.46	0.11	50.93	18.45	6.05
	CADA Pune	23.35	0.09	47.45	20.57	8.54
Wardha	Bor	0.00	0.10	91.79	5.93	2.19
	CIPC Chandrapur	0.00	0.10	91.79	5.93	2.19
Painganga	Upper Penganga	0.00	4.70	59.43	20.99	14.88
	NIC Nanded	0.00	4.70	59.43	20.99	14.88
Upper Bhima	Bhama Askhed	14.75	0.00	73.51	11.74	0.00
	Chaskaman	0.00	0.00	58.71	36.85	4.44
	Khadakwasla Complex	29.95	0.00	34.54	18.91	16.60
	Neera Complex	23.02	0.00	47.43	18.43	11.11
	Pawana	41.07	0.00	30.95	13.76	14.21
	PIC Pune	23.91	0.00	45.14	18.94	12.02
Wardha	Upper Wardha	0.00	4.24	88.88	0.06	6.82
	UWPC Amravati	0.00	4.24	88.88	0.06	6.82
Painganga	Arunawati	0.00	6.71	53.45	0.00	39.83
	YIC Yavatmal	0.00	6.71	53.45	0.00	39.83
Normal						
Surplus						
Middle Wainganga	Bagh Complex	77.80	0.00	0.00	22.20	0.00

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Itiadoh	62.40	0.00	0.00	37.60	0.00
	Pench Complex	58.14	2.21	38.61	0.32	0.71
	CADA Nagpur	63.17	1.30	22.65	12.46	0.42
Surplus						
Abundant						
Upper Krishna (W)	Dhom	11.56	0.12	57.34	19.17	11.81
	Kanher	12.36	0.00	52.80	16.29	18.55
	CADA Pune	11.78	0.09	56.07	18.37	13.69
Lower Wainganga	Asolamendha	100.00	0.00	0.00	0.00	0.00
	Dina	100.00	0.00	0.00	0.00	0.00
	CIPC Chandrapur	100.00	0.00	0.00	0.00	0.00
Upper Krishna (W)	Dudhaganga	0.00	0.00	14.63	1.86	83.51
	Radhanagari	0.00	0.00	10.97	1.27	87.75
	Tulshi	0.00	0.00	16.22	1.96	81.81
	Warana	0.00	0.00	22.69	1.53	75.78
	SIC Sangli	0.00	0.00	16.41	1.49	82.10
North Konkan	Bhatsa	0.00	0.00	91.61	0.00	8.39
	Kal-Amba	0.00	0.00	97.89	0.00	2.11
	Surya	0.00	0.00	88.19	0.00	11.81
	TIC Thane	0.00	0.00	92.77	0.00	7.23
Abundant						

Annexure II:
Indicators of Medium projects


Indicator I: Medium Projects
Water Availability in Medium Projects
Percentage
120
100
80
60
40
20
0
42
60
75
99
100
19
39
53
58
64
77
83
86
98
100
40
41
82
87
97
97
97
97
99
99
99
100
100
100
68
82
97
70
84
97
97
92
CADA Solapur
SIC Sangli
CADA Beed
PIC Pune
CADA Pune
AIC Abad
JIPC Jalgaon
BIPC Buldhana
CADA Abad
NIC Nanded
CADA Beed
AIC Akola
CADA Jalgaon
UWPC Amravati
CADA Nashik
CADA Abad
AIC Abad
CADA Jalgaon
BIPC Buldhana
NIC Nanded
CIPC Chandrapur
CADA Solapur
PIC Pune
AIC Akola
CADA Nashik
NIC Nagpur
JIPC Jalgaon
YIC Yavatmal
CADA Pune
CADA Nagpur
CIPC Chandrapur
GKLIS Bhandara
CIPC Chandrapur
NKIPC Thane
SIC Sangli
KIC Ratnagiri
TIC Thane
Highly Deficit
Deficit
Normal
Surplus
Abundant

Indicator I

Water Availability in Reservoirs

Medium Projects 2007-08

Unit: Mcum

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Highly Deficit				
Upper Krishna (E)	Basappawadi	0.00	0.00	0
	Dodda Nalla	0.42	6.06	7
	Sankh	9.81	14.87	66
	Siddhewadi	6.10	6.09	100
	SIC Sangli	**16.327**	**27.020**	**60**
Upper Krishna (E)	Yeralwadi	19.60	19.60	100
	CADA Pune	**19.600**	**19.600**	**100**
Remaining Bhima+ Man	Ashti	17.95	23.01	78
	Buddhihal	0.00	27.95	0
	Ekrukh	0.79	61.15	1
	Hingani (Pangaon)	32.00	32.00	100
	Jawalgaon	17.80	29.18	61
	Mangi	17.40	30.40	57
	CADA Solapur	**85.933**	**203.694**	**42**
Sina	Banganga	3.99	4.96	80
	Benitura	5.47	11.47	48
	Chandani	13.66	21.58	63
	Harni	2.98	11.17	27
	Jakapur	2.42	7.96	30
	Kada	8.55	8.56	100
	Kadi	5.21	5.47	95
	Kambli	1.37	3.10	44
	Khandala	3.17	5.24	60
	Khandeshwar	8.37	8.78	95
	Khasapur	13.04	13.04	100
	Kurnoor	32.28	32.28	100
	Mehkari	8.60	12.98	66
	Ramganga	4.54	5.34	85
	Ruti	6.57	6.57	100
	Sakat	6.96	13.48	52
	Talwar	3.24	3.23	100
	Turori	6.20	6.20	100
	CADA Beed	**136.627**	**181.418**	**75**

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Remaining Bhima+ Man	Andhali	7.42	7.42	100
	Khairy	13.74	13.74	100
	Mhaswad	44.33	46.12	96
	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	**160.464**	**162.250**	**99**
Highly Deficit		**418.951**	**593.982**	**71**
Deficit				
Purna+Dudhana	Wakod	2.19	11.40	19
	AIC Abad	**2.190**	**11.400**	**19**
Middle Tapi (Satpuda)	Bahula	6.35	16.33	39
	JIPC Jalgaon	**6.351**	**16.330**	**39**
Manjra	Karadkhed	7.91	11.01	72
	Kudala	2.18	4.35	50
	Kundrala	5.31	10.42	51
	Mahalingi	0.81	4.79	17
	Pethwadaj	9.04	9.04	100
	NIC Nanded	**25.257**	**39.608**	**64**
Purna (Tapi)	Mun	13.31	36.83	36
	Torna	1.26	7.90	16
	Utawali	19.79	19.79	100
	BIPC Buldhana	**34.360**	**64.520**	**53**
Girna	Haranbari	33.02	33.02	100
	Kelzar	16.09	16.22	99
	Nagya Sakya	11.24	11.24	100
	CADA Nashik	**60.350**	**60.480**	**100**
Purna (Tapi)	Chandrabhaga (Amravati)	40.30	41.25	98
	Purna (Achalpur)	34.98	35.37	99
	UWPC Amravati	**75.285**	**76.618**	**98**
Girna	Agnavati	0.00	2.76	0
	Bhokarbari	6.54	6.54	100
	Bori	25.15	25.15	100
	Burai	14.21	14.21	100
	Hiwara	3.78	9.60	39
	Jamkhedi	12.34	12.34	100
	Kanoli	0.00	8.45	0
	Manyad	40.27	40.27	100
	Rangawali	12.89	12.89	100
	Tondapur	3.10	4.64	67
	CADA Jalgaon	**118.279**	**136.849**	**86**

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Middle Tapi (South)	Ajanta Andhari	2.84	7.65	37
	Anjana Palashi	5.28	13.74	38
	Dhamna	1.60	8.51	19
	Gadadgad	3.69	4.64	79
	Galhati	10.49	13.84	76
	Girja	11.91	21.25	56
	Jivrekha	1.77	6.13	29
	Jui	4.92	6.03	82
	Kalyan Girija	0.00	8.47	0
	Karpara	14.26	24.90	57
	Khelna	3.87	11.07	35
	Lahuki	4.31	5.31	81
	Masoli	24.50	27.13	90
	Pir Kalyan	6.40	12.22	52
	Purna Nevpur	5.11	9.34	55
	Sukhana	16.28	18.50	88
	Upper Dudhana	5.32	13.02	41
	CADA Abad	**122.548**	**211.751**	**58**
Purna (Tapi)	Dnyanganga	22.36	33.93	66
	Mas	12.96	22.04	59
	Morna (Akola)	41.46	41.46	100
	Nirguna	20.03	28.85	69
	Paldhag	7.23	7.51	96
	Shahnoor	43.88	46.04	95
	Uma	11.68	11.68	100
	AIC Akola	**159.600**	**191.510**	**83**

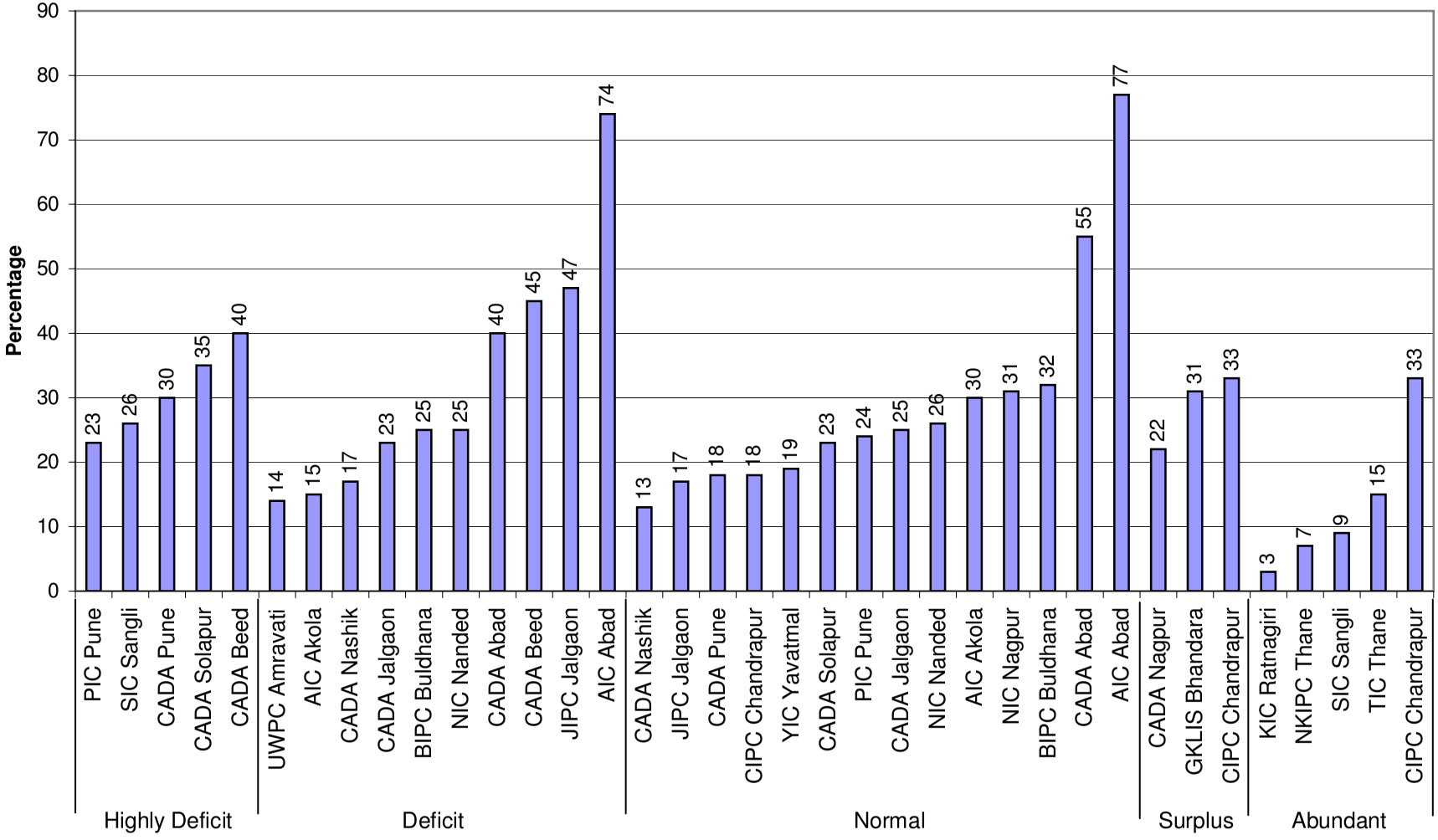
Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Manjra	Belpara	5.37	5.37	100
	Bindusara	5.70	7.11	80
	Bodhegaon	3.73	3.65	102
	Borna	8.97	8.97	100
	Devarjan	3.98	10.68	37
	Gharni	21.91	22.46	98
	Kundalika	37.69	37.69	100
	Mahasangvi	5.88	5.89	100
	Masalga	5.59	13.59	41
	Raigavan	4.21	11.26	37
	Renapur	8.13	20.55	40
	Rui	8.61	8.61	100
	Sakol	5.52	10.95	50
	Sangameshwar (Dokewadi)	15.03	15.03	100
	Saraswati	6.07	6.21	98
	Sindphana	7.36	7.36	100
	Tawarja	11.55	20.34	57
	Terna	19.39	19.66	99
	Tiru	3.18	15.29	21
	Wan (Beed)	19.34	19.34	100
	Whati	8.27	8.27	100
	CADA Beed	**215.461**	**278.272**	**77**
Deficit		**819.681**	**1087.338**	**75**
Normal				
Middle Tapi (Satpuda)	Bhokar (Mangrul)	6.41	6.41	100
	Mor	7.89	7.96	99
	JIPC Jalgaon	**14.297**	**14.367**	**100**
Upper Godavari	Shivna Takali	15.06	36.45	41
	AIC Abad	**15.059**	**36.450**	**41**
Sina	Bori	18.76	19.25	97
	CADA Solapur	**18.756**	**19.250**	**97**
Painganga	Dongargaon (Nanded)	8.47	8.81	96
	Loni	8.12	8.38	97
	Nagzari	6.45	6.57	98
	NIC Nanded	**23.038**	**23.751**	**97**
Upper Bhima	Visapur	25.62	25.61	100
	CADA Pune	**25.616**	**25.610**	**100**
Upper Godavari	Ambadi	0.00	9.43	0
	Bor Dahegaon	2.98	11.47	26
	Dheku	5.85	11.53	51
	Kolhi	1.14	3.24	35
	Narangi	9.27	11.39	81
	Tembhapuri	7.23	19.01	38
	CADA Abad	**26.469**	**66.067**	**40**

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Lower Wainganga	Dongargaon (Chandrapur)	11.96	12.44	96
	Jam	24.30	24.30	100
	Kar	21.06	21.06	100
	NIC Nagpur	**57.318**	**57.804**	**99**
Upper Bhima	Kasarsai	14.94	16.06	93
	Nazare	16.61	16.62	100
	Wadiwale	29.90	30.39	98
	PIC Pune	**61.454**	**63.070**	**97**
Wardha	Pen Takli	50.51	59.98	84
	BIPC Buldhana	**50.51**	**59.98**	**84**
	Adan	67.25	67.25	100
Painganga	Nawargaon	12.17	12.47	98
	YIC Yavatmal	**79.42**	**79.72**	**100**
Upper Godavari	Adhala	27.60	27.60	100
	Alandi	27.46	27.46	100
	Bhojapur	10.19	10.22	100
	Ghatshil Pargaon	7.48	8.50	88
	Mandohol	8.78	8.78	100
	Waldevi	32.09	32.09	100
	CADA Nashik	**113.597**	**114.646**	**99**
Wardha	Amalnalla	21.20	24.48	87
	Dham	62.51	62.51	100
	Pothra1	34.72	34.72	100
	CIPC Chandrapur	**118.430**	**121.710**	**97**
Middle Tapi (Satpuda)	Abhora	6.02	6.02	100
	Aner	59.21	59.21	100
	Karwand	20.73	21.39	97
	Malangaon	11.33	11.33	100
	Panzara	35.63	35.63	100
	Sonwad	14.36	14.36	100
	Suki	39.85	39.85	100
	Suki Pickup Wier	0.00	39.85	0
	CADA Jalgaon	**187.127**	**227.637**	**82**
Painganga	Borgaon	6.61	6.61	100
	Ekbhuji	11.97	11.97	100
	Goki	42.71	42.71	100
	Koradi	18.47	20.70	89
	Lower Pus	59.50	59.63	100
	Saikheda	27.18	27.18	100
	Sonal	16.92	16.92	100
	Waghadi	35.34	35.37	100
	AIC Akola	**218.697**	**221.092**	**99**
Normal		**1009.780**	**1131.150**	**89**
Surplus				

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Middle Wainganga	Katangi	9.10	9.40	97
	GKLIS Bhandara	**9.102**	**9.400**	**97**
Middle Wainganga	Chandai	13.66	21.58	63
	Chargaon	18.28	19.87	92
	Labhansarad	7.35	7.35	100
	Pakadigundam	8.44	11.80	72
	Panchadhara Complex	10.39	10.39	100
	CIPC Chandrapur	**58.121**	**70.984**	**82**
Middle Wainganga	Bagheda	1.22	4.54	27
	Betekar Bothli	1.78	3.67	49
	Bodalkasa	4.04	19.73	20
	Chandpur	6.86	28.88	24
	Chandrabhaga (Nagpur)	7.64	8.26	92
	Chorakhmara	2.24	22.04	10
	Chulband	18.38	21.46	86
	Kanolibara	20.49	20.49	100
	Kesarnala	3.52	3.93	89
	Khairbanda	6.93	16.48	42
	Khekara Nalla	20.86	23.81	88
	Kolar	27.26	31.32	87
	Makardhokada-Saiki	25.90	25.90	100
	Managadh	6.89	7.05	98
	Mordham	4.46	4.95	90
	Pandharbodi	11.66	13.14	89
	Rengepar	2.78	3.57	78
	Sangrampur	1.17	3.87	30
	Sorna	2.58	5.73	45
	Tekepar LIS	0.00	0.00	0
	Umri	4.51	5.14	88
	Wunna	21.30	21.64	98
	CADA Nagpur	**202.457**	**295.584**	**68**
Surplus		**269.680**	**375.968**	**72**
Abundant				
Vashishthi	Natuwadi	26.37	27.23	97
	KIC Ratnagiri	**26.372**	**27.230**	**97**
Wardha	Dongargaon (Wardha)	4.44	4.44	100
	Ghorazari	26.54	43.16	61
	Naleshwar	9.36	10.23	91
	CIPC Chandrapur	**40.340**	**57.833**	**70**
North Konkan	Hetwane	121.37	144.98	84
	NKIPC Thane	**121.370**	**144.980**	**84**
North Konkan	Rajanalla Complex(Dweir)	00	00	00
	Wandri	33.16	35.94	92
	TIC Thane	33.16	35.94	92

Subbasin/PlanGroup	Project/ Circle	Live Storage As On 15 Oct	Designed Live Storage	Percent Live Storage
Upper Krishna (W)	Chikotra	37.18	43.06	86
	Chitri	52.73	52.73	100
	Jangamhatti	26.87	33.21	81
	Kadvi	71.02	70.56	101
	Kasari	77.97	77.96	100
	Krishna Canal & Khodshi	3.53	0.00	0
	Backwater Kumbhi	68.08	76.50	89
	Morna (Sangli)	16.64	16.64	100
	Patgaon	105.19	104.77	100
	Yeoti Masoli	7.05	7.05	100
	SIC Sangli	**466.245**	**482.476**	**97**
Abundant		**924.991**	**813.657**	**114**
Medium		**3443.083**	**4002.095**	**86**

Indicator II: Medium Projects
Percentage Evaporation to Live Storage



Indicator II

Percentage Evaporation Loss to Live Storage on 15th Oct

Medium 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Highly Deficit				
Sina	Banganga	1.21	3.99	30.00
	Benitura	2.39	5.47	44.00
	Chandani	4.58	13.66	34.00
	Harni	0.55	2.98	18.00
	Jakapur	0.99	2.42	41.00
	Kada	5.46	8.55	64.00
	Kadi	3.48	5.21	67.00
	Kambli	1.53	1.37	112.00
	Khandala	1.09	3.17	35.00
	Khandeshwar	4.25	8.37	51.00
	Khasapur	4.89	13.04	38.00
	Kurnoor	6.20	32.28	19.00
	Mehkari	3.93	8.60	46.00
	Ramganga	1.54	4.54	34.00
	Ruti	4.38	6.57	67.00
	Sakat	3.86	6.96	55.00
	Talwar	2.47	3.24	76.00
	Turori	2.07	6.20	33.00
	CADA Beed	**54.87**	**136.63**	**40.00**
Upper Krishna (E)	Yeralwadi	5.82	19.60	30.00
	CADA Pune	**5.82**	**19.60**	**30.00**
Remaining Bhima+ Man	Ashti	10.81	17.95	60.00
	Buddhihal	1.66	0.00	0.00
	Ekrukh	0.12	0.79	15.00
	Hingani (Pangaon)	8.66	32.00	27.00
	Jawalgaon	4.40	17.80	25.00
	Mangi	4.35	17.40	25.00
	CADA Solapur	**30.00**	**85.93**	**35.00**
Remaining Bhima+ Man	Andhali	3.64	7.42	49.00
	Khairy	2.88	13.74	21.00
	Mhaswad	11.42	44.33	26.00
	Nher	3.59	11.79	30.00
	Ranand	1.40	6.42	22.00
	Sina	7.23	52.30	14.00
	Tisangi	7.50	24.46	31.00

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	PIC Pune	**37.65**	**160.46**	**23.00**
Upper Krishna (E)	Basappawadi	0.00	0.00	0.00
	Dodda Nalla	0.09	0.42	22.00
	Sankh	2.89	9.81	29.00
	Siddhewadi	1.21	6.10	20.00
	SIC Sangli	**4.19**	**16.33**	**26.00**
Highly Deficit		**132.54**	**418.95**	**32.00**
Deficit				
Purna+Dudhana	Wakod	1.63	2.19	74.00
	AIC Abad	**1.63**	**2.19**	**74.00**
Purna (Tapi)	Dnyanganga	4.01	22.36	18.00
	Mas	4.30	12.96	33.00
	Morna (Akola)	7.79	41.46	19.00
	Nirguna	0.00	20.03	0.00
	Paldhag	1.12	7.23	15.00
	Shahnoor	5.13	43.88	12.00
	Uma	2.28	11.68	20.00
	AIC Akola	**24.63**	**159.60**	**15.00**
Purna (Tapi)	Mun	3.56	13.31	27.00
	Torna	0.55	1.26	43.00
	Utawali	4.61	19.79	23.00
	BIPC Buldhana	**8.71**	**34.36**	**25.00**
Middle Tapi (South)	Ajanta Andhari	0.51	2.84	18.00
	Anjana Palashi	2.00	5.28	38.00
	Dhamna	1.39	1.60	87.00
	Gadadgad	2.14	3.69	58.00
	Galhati	6.11	10.49	58.00
	Girja	5.19	11.91	44.00
	Jivrekha	1.00	1.77	56.00
	Jui	1.31	4.92	27.00
	Kalyan Girija	2.40	0.00	0.00
	Karpara	7.04	14.26	49.00
	Khelna	1.43	3.87	37.00
	Lahuki	1.38	4.31	32.00
	Masoli	5.91	24.50	24.00
	Pir Kalyan	2.00	6.40	31.00
	Purna Nevpur	2.25	5.11	44.00
	Sukhana	4.10	16.28	25.00
	Upper Dudhana	3.36	5.32	63.00
	CADA Abad	**49.51**	**122.55**	**40.00**

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Manjra	Belpara	1.81	5.37	34.00
	Bindusara	1.90	5.70	33.00
	Bodhegaon	1.03	3.73	28.00
	Borna	3.70	8.97	41.00
	Devarjan	2.49	3.98	63.00
	Gharni	10.67	21.91	49.00
	Kundalika	8.92	37.69	24.00
	Mahasangvi	1.59	5.88	27.00
	Masalga	3.12	5.59	56.00
	Raigavan	3.62	4.21	86.00
	Renapur	4.47	8.13	55.00
	Rui	5.33	8.61	62.00
	Sakol	2.83	5.52	51.00
	Sangameshwar	5.89	15.03	39.00
	(Dokewadi) Saraswati	1.69	6.07	28.00
	Sindphana	3.21	7.36	44.00
	Tawarja	8.10	11.55	70.00
	Terna	8.18	19.39	42.00
	Tiru	7.14	3.18	225.00
	Wan (Beed)	7.07	19.34	37.00
	Whati	3.13	8.27	38.00
	CADA Beed	**95.90**	**215.46**	**45.00**
Girna	Agnavati	0.20	0.00	0.00
	Bhokarbari	0.93	6.54	14.00
	Bori	7.78	25.15	31.00
	Burai	2.44	14.21	17.00
	Hiwara	2.54	3.78	67.00
	Jamkhedi	2.69	12.34	22.00
	Kanoli	1.62	0.00	0.00
	Manyad	5.20	40.27	13.00
	Rangawali	2.26	12.89	18.00
	Tondapur	1.58	3.10	51.00
	CADA Jalgaon	**27.24**	**118.28**	**23.00**
Girna	Haranbari	4.97	33.02	15.00
	Kelzar	2.35	16.09	15.00
	Nagya Sakya	2.73	11.24	24.00
	CADA Nashik	**10.05**	**60.35**	**17.00**
Middle Tapi (Satpuda)	Bahula	2.96	6.35	47.00
	JIPC Jalgaon	**2.96**	**6.35**	**47.00**

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
Manjra	Karadkhed	2.13	7.91	27.00
	Kudala	0.55	2.18	25.00
	Kundrala	1.21	5.31	23.00
	Mahalingi	0.27	0.81	33.00
	Pethwadaj	2.16	9.04	24.00
	NIC Nanded	**6.32**	**25.26**	**25.00**
Purna (Tapi)	Chandrabhaga (Amravati)	3.07	40.30	8.00
	Purna (Achalpur)	7.53	34.98	22.00
	UWPC Amravati	**10.61**	**75.29**	**14.00**
Deficit		**237.56**	**819.68**	**29.00**
Normal				
Upper Godavari	Shivna Takali	11.53	15.06	77.00
	AIC Abad	**11.53**	**15.06**	**77.00**
Painganga	Borgaon	1.33	6.61	20.00
	Ekbhuji	3.12	11.97	26.00
	Goki	12.32	42.71	29.00
	Koradi	5.06	18.47	27.00
	Lower Pus	19.76	59.50	33.00
	Saikheda	11.29	27.18	42.00
	Sonal	4.74	16.92	28.00
	Waghadi	8.54	35.34	24.00
	AIC Akola	**66.16**	**218.70**	**30.00**
Wardha	Nawargaon	4.61	12.17	38.00
	Pen Takli	15.30	50.51	30.00
	BIPC Buldhana	**19.91**	**62.67**	**32.00**
Upper Godavari	Ambadi	0.00	0.00	0.00
	Bor Dahegaon	1.48	2.98	50.00
	Dheku	2.63	5.85	45.00
	Kolhi	0.10	1.14	9.00
	Narangi	5.77	9.27	62.00
	Tembhapuri	4.64	7.23	64.00
	CADA Abad	**14.62**	**26.47**	**55.00**
Middle Tapi (Satpuda)	Abhora	1.77	6.02	29.00
	Aner	14.54	59.21	25.00
	Karwand	4.62	20.73	22.00
	Malangaon	2.61	11.33	23.00
	Panzara	8.63	35.63	24.00
	Sonwad	5.48	14.36	38.00
	Suki	8.40	39.85	21.00

Unit: Mcum

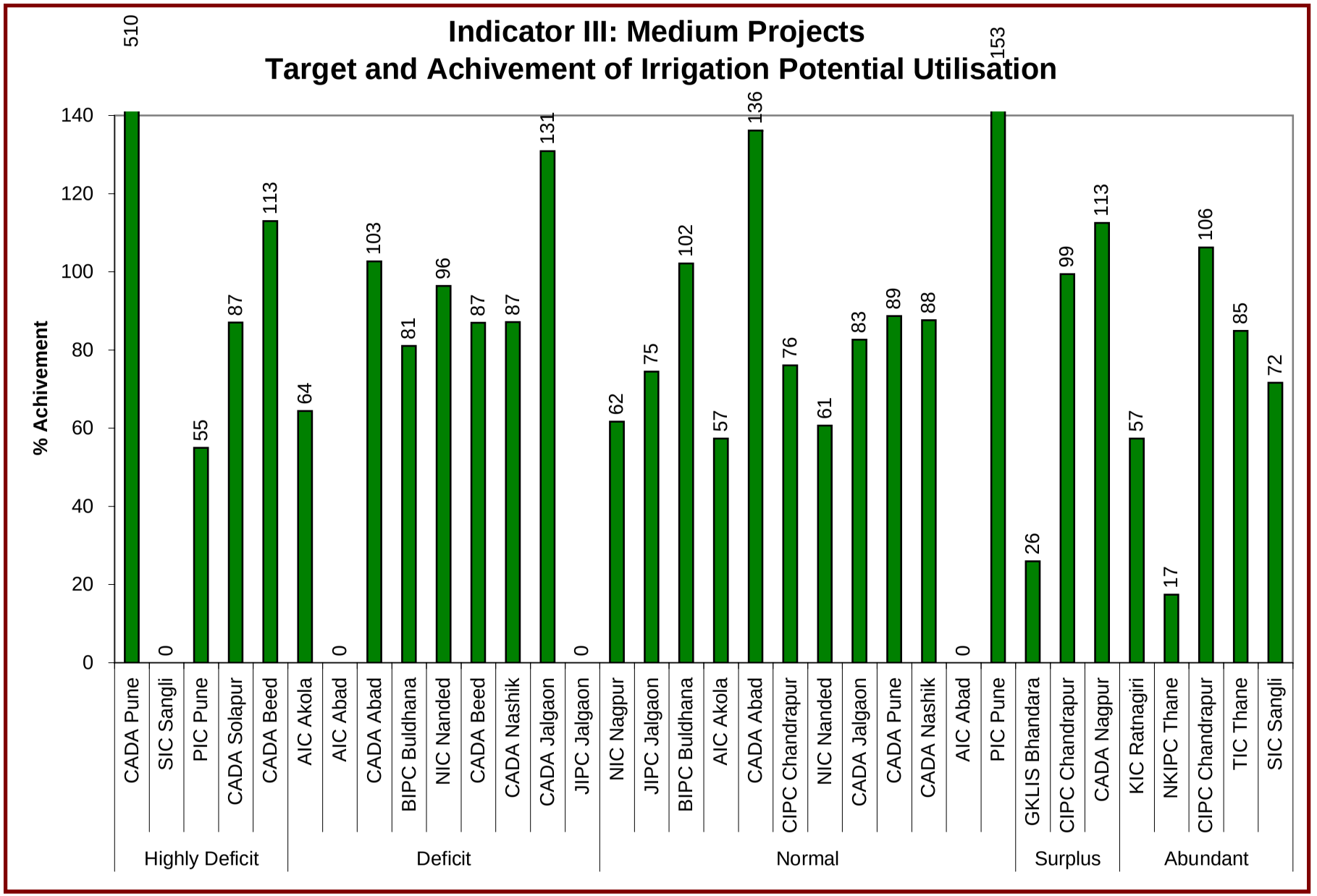
Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Suki Pickup Wier	0.00	0.00	0.00
	CADA Jalgaon	**46.05**	**187.13**	**25.00**
Upper Godavari	Adhala	2.04	27.60	7.00
	Alandi	4.25	27.46	15.00
	Bhojapur	0.72	10.19	7.00
	Ghatshil Pargaon	2.67	7.48	36.00
	Mandohol	1.54	8.78	18.00
	Waldevi	3.88	32.09	12.00
	CADA Nashik	**15.10**	**113.60**	**13.00**
Upper Bhima	Visapur	4.69	25.62	18.00
	CADA Pune	**4.69**	**25.62**	**18.00**
Sina	Bori	4.36	18.76	23.00
	CADA Solapur	**4.36**	**18.76**	**23.00**
Wardha	Amalnalla	6.41	21.20	30.00
	Dham	10.50	62.51	17.00
	Pothra1	4.51	34.72	13.00
	CIPC Chandrapur	**21.42**	**118.43**	**18.00**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	1.36	6.41	21.00
	Mor	1.05	7.89	13.00
	JIPC Jalgaon	**2.41**	**14.30**	**17.00**
Lower Wainganga	Dongargaon (Chandrapur)	3.68	11.96	31.00
	Jam	8.60	24.30	35.00
	Kar	5.48	21.06	26.00
	NIC Nagpur	**17.76**	**57.32**	**31.00**
Painganga	Dongargaon (Nanded)	2.75	8.47	32.00
	Loni	1.66	8.12	20.00
	Nagzari	1.56	6.45	24.00
	NIC Nanded	**5.97**	**23.04**	**26.00**
Upper Bhima	Kasarsai	2.89	14.94	19.00
	Nazare	6.55	16.61	39.00
	Wadiwale	5.18	29.90	17.00
	PIC Pune	**14.62**	**61.45**	**24.00**
Painganga	Adan	12.54	67.25	19.00
	YIC Yavatmal	**12.54**	**67.25**	**19.00**
Normal		**257.14**	**1009.78**	**25.00**
Surplus				
Middle Wainganga	Bagheda	0.60	1.22	49.00
	Betekar Bothli	0.47	1.78	26.00

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Bodalkasa	0.87	4.04	22.00
	Chandpur	1.61	6.86	23.00
	Chandrabhaga	1.74	7.64	23.00
	(Nagpur) Chorakhmara	2.94	2.24	131.00
	Chulband	4.01	18.38	22.00
	Kanolibara	4.06	20.49	20.00
	Kesarnala	0.25	3.52	7.00
	Khairbanda	2.55	6.93	37.00
	Khekara Nalla	1.52	20.86	7.00
	Kolar	2.17	27.26	8.00
	Makardhokada-Saiki	5.52	25.90	21.00
	Managadh	1.08	6.89	16.00
	Mordham	0.94	4.46	21.00
	Pandharbodi	5.04	11.66	43.00
	Rengepar	0.81	2.78	29.00
	Sangrampur	0.57	1.17	49.00
	Sorna	0.60	2.58	23.00
	Tekepar LIS	0.00	0.00	0.00
	Umri	0.54	4.51	12.00
	Wunna	6.39	21.30	30.00
	CADA Nagpur	**44.26**	**202.46**	**22.00**
Middle Wainganga	Chandai	4.58	13.66	34.00
	Chargaon	7.45	18.28	41.00
	Labhansarad	2.80	7.35	38.00
	Pakadigundam	3.40	8.44	40.00
	Panchadhara Complex	0.75	10.39	7.00
	CIPC Chandrapur	**18.98**	**58.12**	**33.00**
Middle Wainganga	Katangi	2.83	9.10	31.00
	GKLIS Bhandara	**2.83**	**9.10**	**31.00**
Surplus		**66.07**	**269.68**	**24.00**
Abundant				
Wardha	Dongargaon (Wardha)	0.68	4.44	15.00
	Ghorazari	10.16	26.54	38.00
	Naleshwar	2.63	9.36	28.00
	CIPC Chandrapur	**13.47**	**40.34**	**33.00**
Vashishthi	Natuwadi	0.92	26.37	3.00
	KIC Ratnagiri	**0.92**	**26.37**	**3.00**
North Konkan				

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	Evaporation	Actual Live Storage	Percentage of Evaporation
	Hetwane	8.33	121.37	7.00
	NKIPC Thane	**8.33**	**121.37**	**7.00**
Upper Krishna (W)	Chikotra	2.86	37.18	8.00
	Chitri	3.23	52.73	6.00
	Jangamhatti	3.72	26.87	14.00
	Kadvi	6.58	71.02	9.00
	Kasari	6.08	77.97	8.00
	Krishna Canal &	2.44	3.53	69.00
	Khodshi Backwater Kumbhi	5.91	68.08	9.00
	Morna (Sangli)	2.86	16.64	17.00
	Patgaon	6.04	105.19	6.00
	Yeoti Masoli	0.68	7.05	10.00
	SIC Sangli	**40.40**	**466.25**	**9.00**
North Konkan	Rajanalla Complex(DW)	0	0	0
	Wandri	5.04	33.16	15.00
	TIC Thane	**26.39**	**270.66**	**10.00**
Abundant		**89.51**	**924.99**	**10.00**
Medium		**782.82**	**3443.08**	**23.00**


Indicator III: Medium Projects
Target and Achivement of Irrigation Potential Utilisation
% Achivement
0
20
40
60
80
100
120
140
CADA Pune 510
SIC Sangli 0
PIC Pune 55
CADA Solapur 87
CADA Beed 113
AIC Akola 64
AIC Abad 0
CADA Abad 103
BIPC Buldhana 81
NIC Nanded 96
CADA Beed 87
CADA Nashik 87
CADA Jalgaon 131
JIPC Jalgaon 0
NIC Nagpur 62
JIPC Jalgaon 75
BIPC Buldhana 102
AIC Akola 57
CADA Abad 136
CIPC Chandrapur 76
NIC Nanded 61
CADA Jalgaon 83
CADA Pune 89
CADA Nashik 88
AIC Abad 0
PIC Pune 153
GKLIS Bhandara 26
CIPC Chandrapur 99
CADA Nagpur 113
KIC Ratnagiri 57
NKIPC Thane 17
CIPC Chandrapur 106
TIC Thane 85
SIC Sangli 72
Highly Deficit
Deficit
Normal
Surplus
Abundant

Indicator III

Target and Achivement of Irrigation Potential Utilisation

Medium Projects

Unit: ha

Plangroup/ Subbasin	Circle/ Project	Planned target as per PIP	Achivement	Percent Achivement
Highly Deficit				
Sina	Banganga	394	430	109
	Benitura	N.A.	261*	0
	Chandani	N.A.	1584*	0
	Harni	160	338	211
	Jakapur	N.A.	301*	0
	Kada	577	170	29
	Kadi	670	312	47
	Kambli	175	120	69
	Khandala	103	569	552
	Khandeshwar	567	1047	185
	Khasapur	1360	1576	116
	Kurnoor	1174	1820	155
	Mehkari	932	560	60
	Ramganga	470	493	105
	Ruti	527	151	29
	Sakat	301	870	289
	Talwar	281	155	55
	Turori	363	488	134
	CADA Beed	**8054**	**9099**	**113**
Upper Krishna (E)	Yeralwadi	200	1019	510
	CADA Pune	**200**	**1019**	**510**
Remaining Bhima+ Man	Ashti	N.A.	2558*	0
	Buddhihal	N.A.	635*	0
	Ekrukh	N.A.	63*	0
	Hingani (Pangaon)	3872	3105	80
	Jawalgaon	2299	2137	93
	Mangi	2181	2026	93
	CADA Solapur	**8352**	**7268**	**87**
Remaining Bhima+ Man	Andhali	829	181	22
	Khairy	1620	1326	82
	Mhaswad	6557	3517	54
	Nher	1659	803	48
	Ranand	587	334	57
	Sina	6737	3798	56
	Tisangi	3798	2015	53
	PIC Pune	**21787**	**11974**	**55**
Upper Krishna (E)	Basappawadi	N.A.	0	0
	Dodda Nalla	N.A.	25*	0
	Sankh	N.A.	419*	0
	Siddhewadi	N.A.	316*	0
	SIC Sangli	**0**	**0**	0
Highly Deficit		**38393**	**29360**	**76**

Plangroup/ Subbasin	Circle/ Project	Planned target as per PIP	Achivement	Percent Achivement
Deficit				
Purna+Dudhana	Wakod	N.A.	153*	0
	AIC Abad	**0**	**0**	**0**
Purna (Tapi)	Dnyanganga	1478	1125	76
	Mas	1358	1596	118
	Morna (Akola)	4774	3001	63
	Nirguna	2445	1690	69
	Paldhag	664	631	95
	Shahnoor	4220	1059	25
	Uma	1540	1508	98
	AIC Akola	**16479**	**10610**	**64**
Purna (Tapi)	Mun	1383	1056	76
	Torna	132	27	20
	Utawali	100	226	226
	BIPC Buldhana	**1615**	**1309**	**81**
Middle Tapi (South)	Ajanta Andhari	80	84	105
	Anjana Palashi	260	363	140
	Dhamna	N.A.	428*	0
	Gadadgad	280	249	89
	Galhati	1100	367	33
	Girja	1060	1095	103
	Jivrekha	N.A.	122*	0
	Jui	N.A.	497*	0
	Kalyan Girija	N.A.	402*	0
	Karpara	N.A.	789*	0
	Khelna	150	54	36
	Lahuki	320	339	106
	Masoli	2166	1377	64
	Pir Kalyan	N.A.	523*	0
	Purna Nevapur	590	593	101
	Sukhana	200	1852	926
	Upper Dudhana	N.A.	292*	0
	CADA Abad	**6206**	**6373**	**103**
Manjra	Belpara	206	119	58
	Bindusara	157	290	185
	Bodhegaon	317	97	31
	Borna	499	195	39
	Devarjan	325	627	193
	Gharni	1083	1440	133
	Kundalika	2269	787	35
	Mahasangvi	736	427	58
	Masalga	N.A.	73*	0

Plangroup/ Subbasin	Circle/ Project	Planned target as per PIP	Achivement	Percent Achivement
	Raigavan	N.A.	379*	0
	Renapur	N.A.	501*	0
	Rui	630	530	84
	Sakol	472	852	181
	Sangameshwar (Dokewadi)	N.A.	1363*	0
	Saraswati	412	468	114
	Sindphana	N.A.	749*	0
	Tawarja	513	1093	213
	Terna	1167	1163	100
	Tiru	1020	1195	117
	Wan (Beed)	1372	476	35
	Whati	721	592	82
	CADA Beed	**11899**	**10351**	**87**
Girna	Agnavati	N.A.	0	0
	Bhokarbari	882	415	47
	Bori	1250	2161	173
	Burai	1409	3767	267
	Hiwara	111	262	236
	Jamkhedi	N.A.	511*	0
	Kanoli	570	500	88
	Manyad	4073	3941	97
	Rangawali	1684	2052	122
	Tondapur	87	74	85
	CADA Jalgaon	**10066**	**13172**	**131**
Girna	Haranbari	2963	2773	94
Girna	Kelzar	2231	1893	85
Girna	Nagya Sakya	2040	1638	80
	CADA Nashik	**7234**	**6304**	**87**
Middle Tapi (South)	Bahula	N.A.	415*	0
	JIPC Jalgaon	**N.A.**	**415***	**0**
Manjra	Karadkhed	700	557	80
Lower Godavari	Kudala	250	529	212
Manjra	Kundrala	400	372	93
Manjra	Mahalingi	N.A.	178*	0
Manjra	Pethwadaj	1000	807	81
	NIC Nanded	**2350**	**2265**	**96**
Purna (Tapi)	Chandrabhaga (Amravati)	500	150	30
	Purna (Achalpur)	N.A.	50*	0
	UWPC Amravati	**500**	**150**	**30**
Deficit		**56349**	**50534**	**90**

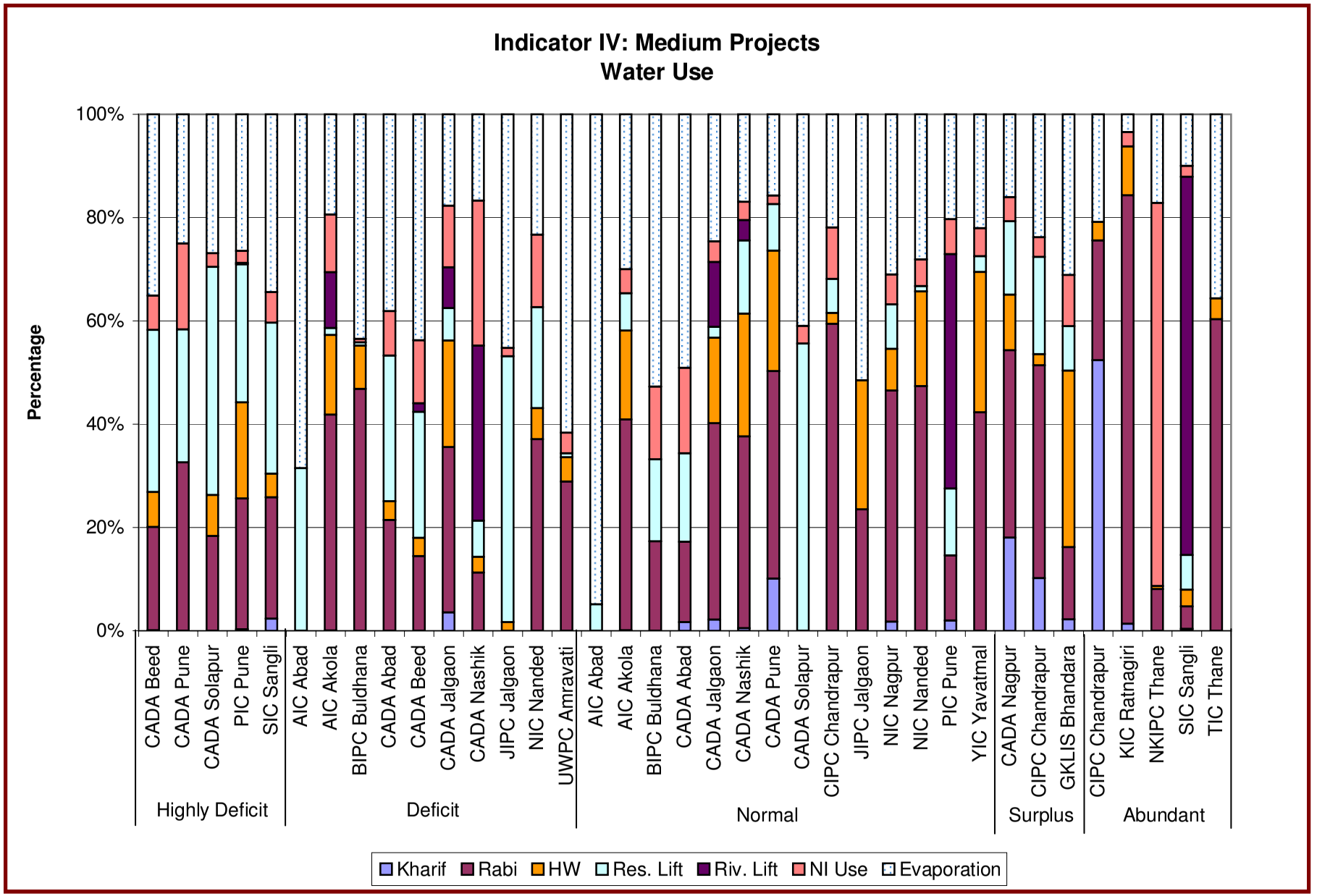
Plangroup/ Subbasin	Circle/ Project	Planned target as per PIP	Achivement	Percent Achivement
Normal				
Upper Godavari	Shivna Takali	N.A.	120*	0
	AIC Abad	**N.A.**	**120***	**0**
Wardha	Borgaon	870	711	82
Painganga	Ekbhuji	1146	726	63
Painganga	Goki	4970	3675	74
Painganga	Koradi	1800	2315	129
Painganga	Lower Pus	6758	2912	43
Painganga	Saikheda	3961	1036	26
Painganga	Sonal	1926	1955	102
Painganga	Waghadi	4750	1682	35
	AIC Akola	**26181**	**15012**	**57**
Wardha	Nawargaon	500	305	61
Painganga	Pen Takli	5363	5684	106
	BIPC Buldhana	**5863**	**5989**	**102**
Upper Godavari	Ambadi	N.A.	118*	0
	Bor Dahegaon	135	209	155
Upper Godavari	Dheku	770	566	74
Upper Godavari	Kolhi	N.A.	85*	0
	Narangi	125	504	403
	Tembhapuri	300	532	177
	CADA Abad	**1330**	**1811**	**136**
Middle Tapi (Satpuda)	Abhora	520	287	55
Middle Tapi (Satpuda)	Aner	5570	4360	78
Middle Tapi (Satpuda)	Karwand	1900	1612	85
Panzra	Malangaon	1208	1090	90
Panzra	Panzara	1333	2994	225
Panzra	Sonwad	2105	1083	51
Middle Tapi (Satpuda)	Sukhi	1125	0	0
Middle Tapi (Satpuda)	Suki	1125	874	78
	CADA Jalgaon	**14886**	**12300**	**83**
Upper Godavari	Adhala	3000	2306	77
Upper Godavari	Alandi	2325	2275	98
Upper Godavari	Bhojapur	N.A.	820*	0
Upper Godavari	Ghatshil Pargaon	940	1117	119
Upper Godavari	Mandohol	895	576	64
Upper Godavari	Waldevi	N.A.	591*	0
	CADA Nashik	**7160**	**6274**	**88**
Upper Bhima	Visapur	6435	5708	89
	CADA Pune	**6435**	**5708**	**89**
Sina	Bori	500	1154	231
	CADA Solapur	**500**	**1154**	**231**

Plangroup/ Subbasin	Circle/ Project	Planned target as per PIP	Achivement	Percent Achivement
Painganga	Amalnalla	2000	3100	155
Wardha	Dham	4870	2732	56
Wardha	Pothra	3500	2054	59
	CIPC Chandrapur	**10370**	**7886**	**76**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0	0	0
Middle Tapi (Satpuda)	Mor	200	149	75
	JIPC Jalgaon	**200**	**149**	**75**
	Dongargaon (Chandrapur)	450	397	88
Wardha	Jam	1750	994	57
Wardha	Kar	1700	1014	60
	NIC Nagpur	**3900**	**2405**	**62**
Painganga	Dongargaon (Nanded)	950	609	64
Painganga	Loni	1000	558	56
Painganga	Nagzari	700	440	63
	NIC Nanded	**2650**	**1607**	**61**
Upper Bhima	Kasarsai	N.A.	2127*	0
Remaining Bhima (Neera)	Nazare	1606	2452	153
Upper Bhima	Wadiwale	N.A.	4189*	0
	PIC Pune	**1606**	**2452**	**153**
Painganga	Adan	3500	2400	69
		3500	**2400**	**69**
Normal		**84581**	**65147**	**77**
Surplus				
Middle Wainganga	Bagheda	1261	1185	94
	Betekar Bothli	800	809	101
	Bodalkasa	4300	8690	202
	Chandpur	6600	6390	97
	Chandrabhaga (Nagpur)	786	577	73
	Chorakhmara	5066	5064	100
	Chulband	3510	6238	178
	Kanolibara	750	1675	223
	Kesarnala	N.A.	324*	0
	Khairbanda	5311	5335	100
	Khekara Nalla	2129	517	24
	Kolar	2544	2587	102
	Makardhokada-Saiki	2985	2760	92
	Managadh	1172	1251	107
	Mordham	479	325	68
	Pandharbodi	N.A.	1427*	0
	Rengepar	1007	1125	112
	Sangrampur	1094	1104	101
	Sorna	990	1044	105
	Tekepar LIS	4000	3700	93
	Umri	333	393	118
	Wunna	N.A.	240*	0
	CADA Nagpur	**45117**	**50769**	**113**

Plangroup/ Subbasin	Circle/ Project	Planned target as per PIP	Achivement	Percent Achivement
Middle Wainganga	Chandai	1470	1584	108
	Chargaon	950	1964	207
	Labhansarad	1200	1152	96
	Pakadigundam	1500	405	27
	Panchdhara Complex	940	919	98
	CIPC Chandrapur	**6060**	**6024**	**99**
Middle Wainganga	Katangi	1290	335	26
	GKLIS Bhandara	**1290**	**335**	**26**
Surplus		**52467**	**57128**	**109**
Abundant				
Wardha	Dongargaon (Wardha)	500	215	43
	Ghorazari	5500	5868	107
	Naleshwar	2500	2948	118
	CIPC Chandrapur	**8500**	**9031**	**106**
Vashishthi	Natuwadi	218	125	57
	KIC Ratnagiri	**218**	**125**	**57**
North Konkan	Hetwane	500	87	17
	NKIPC Thane	**500**	**87**	**17**
Upper Krishna (W)	Chikotra	2765	4085	148
	Chitri	6220	9136	147
	Jangamhatti	4094	4836	118
	Kadvi	10620	2961	28
	Kasari	16160	7437	46
	Krishna Canal & Khodshi Backwater	N.A.	8838*	0
	Kumbhi	N.A.	4268*	0
	Morna (Sangli)	1543	2115	137
	Patgaon	8820	5376	61
	Yeoti Masoli	700	541	77
	SIC Sangli	**50922**	**36487**	**72**
North Konkan	Rajanalla Complex	2200	2202	100
North Konkan	Wandri	1100	600	55
	TIC Thane	**3300**	**2802**	**85**
Abundant		**63440**	**48532**	**77**
Medium Projects		**295230**	**250701**	**85**

Note: N.A. : The PIP figures are not made available by project authorities.

* : These figures are not accounted for calculating percent achievement as PIP figures for the same circles are not made available.


Indicator IV: Medium Projects
Water Use
Percentage
100%
80%
60%
40%
20%
0%
CADA Beed
CADA Pune
CADA Solapur
PIC Pune
SIC Sangli
AIC Abad
AIC Akola
BIPC Buldhana
CADA Abad
CADA Beed
CADA Jalgaon
CADA Nashik
JIPC Jalgaon
NIC Nanded
UWPC Amravati
AIC Abad
AIC Akola
BIPC Buldhana
CADA Abad
CADA Jalgaon
CADA Nashik
CADA Pune
CADA Solapur
CIPC Chandrapur
JIPC Jalgaon
NIC Nagpur
NIC Nanded
PIC Pune
YIC Yavatmal
CADA Nagpur
CIPC Chandrapur
GKLIS Bhandara
CIPC Chandrapur
KIC Ratnagiri
NKIPC Thane
SIC Sangli
TIC Thane
Highly Deficit
Deficit
Normal
Surplus
Abundant
Kharif
Rabi
HW
Res. Lift
Riv. Lift
NI Use
Evaporation

Indicator IV

Water Use Pattern

Medium Projects 2007-08

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	0.600	0.000	1.831	0.000	0.624	1.205	4.260
	Benitura	0.000	0.000	0.000	2.722	0.000	0.832	2.390	5.944
	Chandani	0.000	1.160	0.000	12.790	0.000	1.270	4.580	19.800
	Harni	0.000	1.680	0.000	0.890	0.000	0.000	0.550	3.120
	Jakapur	0.000	0.000	0.000	1.590	0.000	0.000	0.990	2.580
	Kada	0.000	0.310	0.480	1.080	0.000	0.540	5.458	7.868
	Kadi	0.120	1.951	0.520	0.520	0.000	0.000	3.478	6.589
	Kambli	0.000	1.270	0.000	0.000	0.000	0.000	1.530	2.800
	Khandala	0.000	1.160	0.127	1.134	0.000	0.000	1.094	3.515
	Khandeshwar	0.000	1.070	0.310	4.910	0.000	0.000	4.250	10.540
	Khasapur	0.000	4.000	0.000	4.913	0.000	1.379	4.890	15.182
	Kurnoor	0.000	8.148	8.059	5.906	0.000	2.990	6.200	31.303
	Mehkari	0.000	5.170	0.000	1.356	0.000	0.000	3.934	10.460
	Ramganga	0.000	0.770	0.074	2.928	0.000	0.000	1.541	5.313
	Ruti	0.000	1.273	0.897	0.955	0.000	0.480	4.380	7.985
	Sakat	0.000	1.812	0.000	3.360	0.000	0.373	3.859	9.404
	Talwar	0.000	0.910	0.000	0.069	0.000	0.160	2.473	3.612
	Turori	0.000	0.000	0.143	2.053	0.000	1.760	2.070	6.026
	CADA Beed	**0.120**	**31.284**	**10.610**	**49.007**	**0.000**	**10.408**	**54.872**	**156.301**
Upper Krishna (E)	Yeralwadi	0.000	7.580	0.000	5.980	0.000	3.860	5.820	23.240
	CADA Pune	**0.000**	**7.580**	**0.000**	**5.980**	**0.000**	**3.860**	**5.820**	**23.240**
Remaining Bhima+ Man	Ashti	0.000	0.000	0.000	26.730	0.000	0.437	10.805	37.972
	Buddhihal	0.000	1.292	0.000	0.573	0.000	0.000	1.662	3.527
	Ekrukh	0.000	0.000	0.000	0.310	0.000	0.994	0.122	1.426
	Hingani	0.000	5.246	7.977	8.549	0.000	1.528	8.660	31.960
	(Pangaon) Jawalgaon	0.000	6.240	0.770	6.378	0.000	0.000	4.403	17.791
	Mangi	0.000	7.681	0.082	6.722	0.000	0.000	4.351	18.836
	CADA Solapur	**0.000**	**20.459**	**8.829**	**49.262**	**0.000**	**2.959**	**30.003**	**111.512**

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Remaining Bhima+ Man	Andhali	0.000	0.760	0.250	0.220	0.000	1.287	3.640	6.157
	Khairy	0.000	2.400	1.000	5.110	0.000	0.319	2.880	11.709
	Mhaswad	0.000	3.040	11.730	7.930	0.000	0.000	11.420	34.120
	Nher	0.000	5.000	0.000	0.260	0.360	0.064	3.590	9.274
	Ranand	0.000	0.830	0.230	0.590	0.000	0.000	1.400	3.050
	Sina	0.000	15.637	8.210	22.555	0.000	1.651	7.225	55.278
	Tisangi	0.354	8.402	5.090	1.380	0.000	0.028	7.498	22.752
	PIC Pune	**0.354**	**36.069**	**26.510**	**38.045**	**0.360**	**3.349**	**37.653**	**142.340**
Upper Krishna (E)	Basappawadi	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Dodda Nalla	0.000	0.000	0.000	0.128	0.000	0.150	0.092	0.369
	Sankh	0.283	1.931	0.559	1.869	0.000	0.000	2.891	7.533
	Siddhewadi	0.000	0.930	0.000	1.560	0.000	0.570	1.210	4.270
	SIC Sangli	**0.283**	**2.861**	**0.559**	**3.557**	**0.000**	**0.720**	**4.193**	**12.172**
Highly Deficit		**0.757**	**98.253**	**46.508**	**145.851**	**0.360**	**21.295**	**132.541**	**445.564**
Deficit									
Purna+Dudhana	Wakod	0.000	0.000	0.000	0.750	0.000	0.000	1.631	2.381
	AIC Abad	**0.000**	**0.000**	**0.000**	**0.750**	**0.000**	**0.000**	**1.631**	**2.381**
Purna (Tapi)	Dnyanganga	0.000	0.000	0.000	0.000	2.660	3.570	4.010	10.240
	Mas	0.000	4.540	2.960	0.730	0.000	1.070	4.300	13.600
	Morna (Akola)	0.000	15.240	6.975	0.000	11.073	0.399	7.790	41.478
	Nirguna	0.000	9.319	1.700	0.034	0.000	0.000	0.000	11.053
	Paldhag	0.000	4.790	0.000	0.070	0.000	1.550	1.120	7.530
	Shahnoor	0.060	10.280	7.020	0.230	0.000	7.150	5.130	29.870
	Uma	0.000	8.778	0.910	0.632	0.000	0.367	2.283	12.970
	AIC Akola	**0.060**	**52.947**	**19.565**	**1.696**	**13.733**	**14.106**	**24.633**	**126.741**
Purna (Tapi)	Mun	0.000	9.375	1.680	0.080	0.000	0.130	3.556	14.821
	Torna	0.000	0.000	0.000	0.040	0.000	0.000	0.547	0.587
	Utawali	0.000	0.000	0.000	0.010	0.000	0.000	4.610	4.620
	BIPC Buldhana	**0.000**	**9.375**	**1.680**	**0.130**	**0.000**	**0.130**	**8.713**	**20.028**

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Middle Tapi (South)	Ajanta Andhari	0.000	0.000	0.000	0.830	0.000	0.900	0.510	2.240
	Anjana Palashi	0.000	0.000	0.000	2.730	0.000	0.100	2.000	4.830
	Dhamna	0.000	0.000	0.000	2.240	0.000	0.180	1.390	3.810
	Gadadgad	0.000	0.630	0.000	0.920	0.000	0.000	2.140	3.690
	Galhati	0.000	2.556	0.000	4.649	0.000	0.000	6.105	13.310
	Girja	0.000	3.357	0.000	2.183	0.000	1.200	5.190	11.930
	Jivrekha	0.000	0.000	0.000	0.850	0.000	0.400	1.000	2.250
	Jui	0.000	1.370	0.000	1.110	0.000	0.830	1.310	4.620
	Kalyan Girija	0.000	0.930	0.000	1.160	0.000	0.000	2.400	4.490
	Karpara	0.000	5.410	0.000	3.944	0.000	0.000	7.041	16.395
	Khelna	0.000	0.000	0.000	0.360	0.000	1.600	1.430	3.390
	Lahuki	0.000	1.320	0.000	0.550	0.000	0.000	1.380	3.250
	Masoli	0.000	4.222	3.275	10.231	0.000	2.012	5.906	25.646
	Pir Kalyan	0.000	0.434	0.000	0.736	0.000	1.370	2.000	4.540
	Purna Nevpur	0.000	1.500	0.000	1.360	0.000	0.860	2.250	5.970
	Sukhana	0.000	4.000	1.470	2.400	0.000	0.750	4.100	12.720
	Upper Dudhana	0.000	2.100	0.000	0.340	0.000	1.000	3.360	6.800
	CADA Abad	**0.000**	**27.829**	**4.745**	**36.593**	**0.000**	**11.202**	**49.512**	**129.881**

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Manjra	Belpara	0.000	2.794	0.158	0.460	0.000	0.000	1.810	5.222
	Bindusara	0.000	2.340	0.000	0.000	0.000	2.860	1.900	7.100
	Bodhegaon	0.000	0.000	0.325	0.755	0.000	0.000	1.029	2.109
	Borna	0.000	0.000	0.854	1.260	0.000	0.000	3.704	5.818
	Devarjan	0.000	0.000	0.000	3.499	0.000	0.025	2.492	6.016
	Gharni	0.000	5.575	1.769	4.257	0.000	2.340	10.674	24.615
	Kundalika	0.000	3.800	2.000	1.680	0.000	1.178	8.917	17.575
	Mahasangvi	0.000	1.650	0.000	2.520	0.000	0.480	1.590	6.240
	Masalga	0.000	0.000	0.000	0.575	0.802	1.316	3.121	5.814
	Raigavan	0.000	0.000	0.000	1.330	0.000	1.224	3.620	6.174
	Renapur	0.000	0.000	0.000	3.786	0.000	1.343	4.466	9.595
	Rui	0.000	0.000	0.000	3.650	0.000	1.000	5.332	9.982
	Sakol	0.000	0.000	0.000	4.476	0.000	0.612	2.832	7.920
	Sangameshwar (Dokewadi)	0.000	0.000	0.000	4.700	2.820	0.000	5.890	13.410
	Saraswati	0.000	1.086	0.163	1.629	0.000	0.000	1.687	4.565
	Sindphana	0.000	2.443	0.659	0.101	0.000	1.250	3.212	7.665
	Tawarja	0.000	4.375	0.000	3.517	0.000	2.374	8.099	18.365
	Terna	0.000	2.394	1.111	3.373	0.000	5.196	8.183	20.257
	Tiru	0.000	2.420	0.000	5.660	0.000	2.394	7.143	17.617
	Wan (Beed)	0.000	1.550	0.750	2.390	0.000	2.651	7.070	14.411
	Whati	0.000	1.183	0.000	3.872	0.000	0.511	3.127	8.693
	CADA Beed	**0.000**	**31.610**	**7.789**	**53.491**	**3.622**	**26.755**	**95.897**	**219.164**
Girna	Agnavati	0.000	0.000	0.000	0.000	0.000	0.000	0.200	0.200
	Bhokarbari	0.000	2.936	1.568	0.366	0.000	0.279	0.925	6.075
	Bori	3.258	10.352	6.097	0.620	0.300	6.204	7.780	34.611
	Burai	0.400	8.150	5.070	0.000	9.280	1.840	2.440	27.180
	Hiwara	0.000	0.745	0.000	0.720	0.000	2.106	2.542	6.113
	Jamkhedi	0.000	0.000	0.000	0.000	2.520	4.400	2.692	9.612
	Kanoli	0.000	4.790	2.450	1.082	0.000	1.160	1.620	11.102
	Manyad	0.060	19.521	8.694	6.828	0.000	0.821	5.198	41.122
	Rangawali	1.700	2.660	7.800	0.000	0.000	0.000	2.260	14.420
	Tondapur	0.000	0.083	0.000	0.046	0.000	1.494	1.579	3.202
	CADA Jalgaon	**5.418**	**49.237**	**31.678**	**9.663**	**12.100**	**18.305**	**27.236**	**153.636**
Girna	Haranbari	0.000	1.160	0.070	1.030	14.370	14.070	4.970	35.670
	Kelzar	0.000	0.390	0.100	1.020	5.990	2.800	2.350	12.650
	Nagya Sakya	0.000	5.200	1.680	2.150	0.000	0.000	2.730	11.760

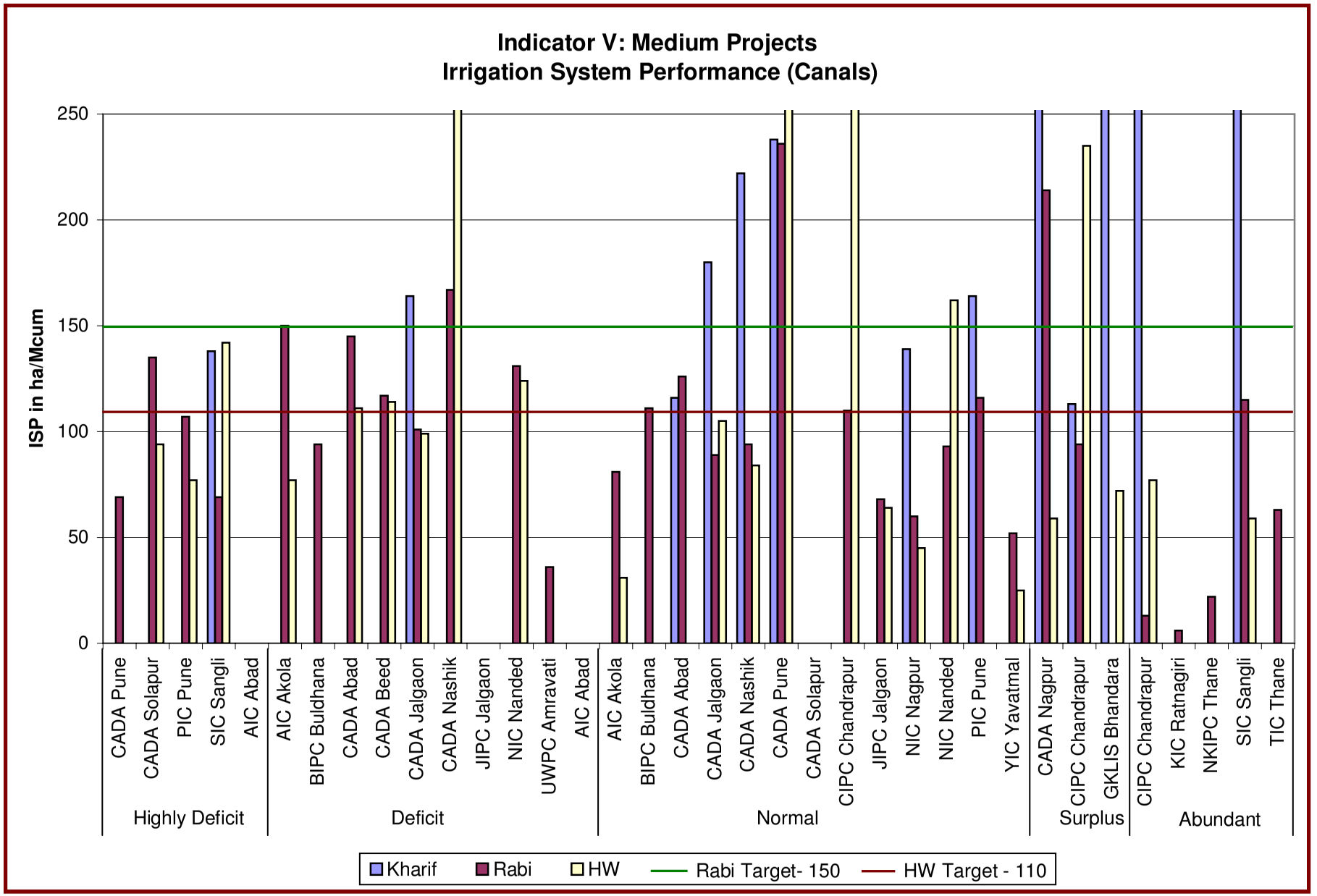
Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Middle Tapi (Satpuda)	Bahula	0.000	0.000	0.120	3.775	0.000	0.120	2.960	6.735
	JIPC Jalgaon	**0.000**	**0.000**	**0.120**	**3.775**	**0.000**	**0.120**	**2.960**	**6.735**
Manjra	Karadkhed	0.000	2.100	0.000	1.250	0.000	2.220	2.130	7.700
	Kudala	0.000	1.279	0.530	1.355	0.000	0.375	0.550	4.089
	Kundrala	0.000	0.850	0.200	1.180	0.000	0.910	1.210	4.350
	Mahalingi	0.000	0.000	0.000	1.040	0.000	0.060	0.269	1.369
	Pethwadaj	0.000	5.826	0.900	0.484	0.000	0.240	2.160	9.610
	NIC Nanded	**0.000**	**10.055**	**1.630**	**5.309**	**0.000**	**3.805**	**6.319**	**27.118**
Purna (Tapi)	Chandrabhaga	0.000	4.611	0.812	0.020	0.000	0.000	3.074	8.518
	(Amravati) Purna	0.000	0.351	0.000	0.108	0.000	0.686	7.530	8.676
	(Achalpur) **UWPC Amravati**	**0.000**	**4.963**	**0.812**	**0.128**	**0.000**	**0.686**	**10.605**	**17.194**
Deficit		**5.478**	**192.766**	**69.630**	**115.734**	**49.815**	**91.979**	**237.556**	**762.957**
Normal									
Upper Godavari	Shivna Takali	0.000	0.000	0.000	0.620	0.000	0.000	11.533	12.153
	AIC Abad	**0.000**	**0.000**	**0.000**	**0.620**	**0.000**	**0.000**	**11.533**	**12.153**
Painganga	Borgaon	0.000	5.691	0.000	0.020	0.000	0.000	1.330	7.041
	Ekbhuji	0.000	6.010	0.000	1.910	0.000	2.070	3.120	13.110
	Goki	0.000	13.967	13.499	1.300	0.000	1.681	12.321	42.768
	Koradi	0.000	9.800	0.000	3.950	0.000	2.390	5.060	21.200
	Lower Pus	0.000	25.012	12.739	2.800	0.000	2.321	19.760	62.632
	Saikheda	0.150	9.575	1.500	2.291	0.000	0.090	11.291	24.897
	Sonal	0.000	9.550	0.000	3.500	0.000	0.400	4.740	18.190
	Waghadi	0.000	10.494	10.264	0.149	0.000	1.417	8.540	30.864
	AIC Akola	**0.150**	**90.098**	**38.002**	**15.920**	**0.000**	**10.369**	**66.162**	**220.702**
Wardha	Nawargaon	0.000	3.544	0.000	0.100	0.000	1.345	4.610	9.599
	Pen Takli	0.000	2.987	0.000	5.890	0.000	3.965	15.297	28.139
	BIPC Buldhana	**0.000**	**6.531**	**0.000**	**5.990**	**0.000**	**5.310**	**19.907**	**37.738**
Upper Godavari	Ambadi	0.000	0.000	0.000	0.040	0.000	1.120	0.000	1.160
	Bor Dahegaon	0.000	0.270	0.000	1.230	0.000	0.000	1.480	2.980
	Dheku	0.000	1.000	0.000	0.620	0.000	0.030	2.630	4.280
	Kolhi	0.000	0.000	0.000	0.180	0.000	0.470	0.100	0.750
	Narangi	0.500	2.260	0.000	1.020	0.000	0.220	5.770	9.770
	Tembhapuri	0.000	1.090	0.000	2.010	0.000	3.090	4.640	10.830
	CADA Abad	**0.500**	**4.620**	**0.000**	**5.100**	**0.000**	**4.930**	**14.620**	**29.770**

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Middle Tapi (Satpuda)	Abhora	0.001	1.678	0.605	0.064	0.000	0.000	1.773	4.121
	Aner	3.894	20.550	20.510	0.810	0.000	0.000	14.540	60.304
	Karwand	0.000	3.720	3.540	2.280	0.180	1.426	4.620	15.766
	Malangaon	0.000	6.590	1.750	0.000	0.000	0.240	2.610	11.190
	Panzara	0.000	20.182	1.710	0.000	0.000	3.581	8.625	34.098
	Sonwad	0.150	10.630	0.440	0.750	0.000	0.720	5.480	18.170
	Suki	0.000	0.000	0.000	0.000	13.670	0.771	8.397	22.838
	Suki Pickup Wier	0.009	7.680	2.399	0.000	9.629	0.733	0.000	20.450
	CADA Jalgaon	**4.054**	**71.031**	**30.954**	**3.904**	**23.479**	**7.471**	**46.045**	**186.937**
Upper Godavari	Adhala	0.085	10.890	8.330	3.340	0.000	1.584	2.040	26.269
	Alandi	0.000	5.780	12.560	2.312	1.006	0.000	4.252	25.910
	Bhojapur	0.363	8.836	0.000	0.246	0.000	0.523	0.719	10.687
	Ghatshil	0.000	3.345	0.000	2.786	0.000	0.073	2.670	8.874
	Pargaon Mandohol	0.000	4.280	0.300	2.800	0.000	1.000	1.540	9.920
	Waldevi	0.000	0.000	0.000	1.155	2.505	0.000	3.880	7.540
	CADA Nashik	**0.448**	**33.131**	**21.190**	**12.639**	**3.511**	**3.180**	**15.101**	**89.200**
Upper Bhima	Visapur	3.013	11.991	6.955	2.689	0.000	0.506	4.693	29.847
	CADA Pune	**3.013**	**11.991**	**6.955**	**2.689**	**0.000**	**0.506**	**4.693**	**29.847**
Sina	Bori	0.000	0.000	0.000	5.915	0.000	0.360	4.360	10.635
	CADA Solapur	**0.000**	**0.000**	**0.000**	**5.915**	**0.000**	**0.360**	**4.360**	**10.635**
Wardha	Amalnalla	0.000	15.830	0.000	0.000	0.000	2.308	6.409	24.547
	Dham	0.000	18.830	2.100	5.520	0.000	7.310	10.500	44.260
	Pothra1	0.000	23.410	0.000	0.910	0.000	0.130	4.510	28.960
	CIPC	**0.000**	**58.070**	**2.100**	**6.430**	**0.000**	**9.748**	**21.419**	**97.767**
	Chandrapur								
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0.000	0.000	0.000	0.000	0.000	0.000	1.363	1.363
	Mor	0.000	1.100	1.170	0.000	0.000	0.000	1.051	3.321
	JIPC Jalgaon	**0.000**	**1.100**	**1.170**	**0.000**	**0.000**	**0.000**	**2.414**	**4.684**
Lower Wainganga	Dongargaon (Chandrapur)	1.002	3.617	0.000	0.000	0.000	0.000	3.680	8.299
	Jam	0.000	14.164	0.000	1.619	0.000	2.127	8.604	26.514
	Kar	0.000	7.822	4.626	3.300	0.000	1.194	5.475	22.417
	NIC Nagpur	**1.002**	**25.603**	**4.626**	**4.919**	**0.000**	**3.321**	**17.759**	**57.230**

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Painganga	Dongargaon	0.000	2.647	2.693	0.038	0.000	0.000	2.750	8.128
	(Nanded) Loni	0.000	3.136	1.193	0.080	0.000	0.013	1.660	6.082
	Nagzari	0.000	4.270	0.000	0.105	0.000	1.080	1.557	7.012
	NIC Nanded	**0.000**	**10.053**	**3.886**	**0.223**	**0.000**	**1.093**	**5.967**	**21.222**
Upper Bhima	Kasarsai	0.000	0.000	0.000	5.100	7.970	0.033	2.890	15.993
	Nazare	1.410	9.070	0.000	3.450	3.414	4.210	6.550	28.104
	Wadiwale	0.000	0.000	0.000	0.771	21.270	0.629	5.184	27.854
	PIC Pune	**1.410**	**9.070**	**0.000**	**9.321**	**32.654**	**4.872**	**14.624**	**71.951**
Painganga	Adan	0.000	24.010	15.426	1.742	0.000	3.070	12.540	56.788
	YIC Yavatmal	**0.000**	**24.010**	**15.426**	**1.742**	**0.000**	**3.070**	**12.540**	**56.788**
Normal		**10.577**	**345.307**	**124.309**	**75.412**	**59.644**	**54.230**	**257.143**	**926.622**
Surplus									
Middle Wainganga	Bagheda	2.080	1.039	0.000	0.000	0.000	0.000	0.598	3.717
	Betekar Bothli	1.856	1.210	0.233	0.000	0.000	0.000	0.470	3.769
	Bodalkasa	9.277	2.413	0.380	0.000	0.000	0.107	0.871	13.048
	Chandpur	10.679	2.904	0.000	0.694	0.000	0.000	1.610	15.887
	Chandrabhaga	0.000	5.119	0.000	1.109	0.000	0.070	1.741	8.040
	(Nagpur) Chorakhmara	11.743	0.000	0.000	0.000	0.000	0.000	2.941	14.684
	Chulband	2.661	7.794	7.131	0.135	0.000	0.000	4.007	21.728
	Kanolibara	0.000	10.264	2.545	0.240	0.000	0.000	4.063	17.112
	Kesarnala	0.000	1.835	0.390	1.174	0.000	0.000	0.250	3.649
	Khairbanda	4.975	2.646	1.467	0.000	0.000	0.000	2.552	11.640
	Khekara Nalla	0.000	8.852	5.564	0.000	0.000	0.000	1.517	15.933
	Kolar	0.030	14.220	5.566	2.080	0.000	2.490	2.165	26.551
	Makardhokada-Saiki Managadh	0.000	24.757	0.000	0.264	0.000	0.150	5.519	30.690
	Mordham	0.000	1.761	2.005	0.000	0.000	0.000	1.082	4.848
	Pandharbodi	1.365	2.360	0.000	1.006	0.000	0.063	0.940	4.369
	Rengepar	0.915	5.375	0.000	0.863	0.000	1.785	5.035	14.423
	Sangrampur	1.852	1.369	0.632	0.000	0.000	0.000	0.805	3.721
	Sorna	2.202	0.726	0.000	0.000	0.000	0.000	0.570	3.148
	Tekepar LIS	0.000	1.813	0.107	0.000	0.000	0.000	0.600	4.722
	Umri	0.000	0.000	0.000	30.370	0.000	0.000	0.000	30.370
	Wunna	0.000	1.656	2.174	1.057	0.000	0.000	0.538	5.425
	CADA Nagpur	**49.634**	**99.923**	**29.704**	**39.202**	**0.000**	**12.753**	**44.261**	**275.478**

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Middle Wainganga	Chandai	0.000	1.160	0.000	12.790	0.000	1.270	4.580	19.800
	Chargaon	8.131	9.381	0.000	1.995	0.000	0.195	7.449	27.151
	Labhansarad	0.000	11.350	0.000	0.240	0.000	0.000	2.800	14.390
	Pakadigundam	0.000	2.810	0.000	0.000	0.000	1.563	3.398	7.771
	Panchadhara	0.000	8.130	1.720	0.000	0.000	0.000	0.750	10.600
	Complex **CIPC Chandrapur**	**8.131**	**32.831**	**1.720**	**15.025**	**0.000**	**3.028**	**18.977**	**79.712**
Middle Wainganga	Katangi	0.200	1.271	3.105	0.784	0.000	0.900	2.828	9.088
	GKLIS Bhandara	**0.200**	**1.271**	**3.105**	**0.784**	**0.000**	**0.900**	**2.828**	**9.088**
Surplus		**57.965**	**134.025**	**34.529**	**55.011**	**0.000**	**16.681**	**66.066**	**364.277**
Abundant									
Wardha	Dongargaon	0.000	2.430	0.440	0.000	0.000	0.000	0.680	3.550
	(Wardha) Ghorazari	21.869	12.530	0.000	0.000	0.000	0.000	10.158	44.557
	Naleshwar	11.959	0.000	1.874	0.000	0.000	0.000	2.631	16.464
	CIPC Chandrapur	**33.828**	**14.960**	**2.314**	**0.000**	**0.000**	**0.000**	**13.469**	**64.571**
Vashishthi	Natuwadi	0.363	22.028	2.501	0.000	0.000	0.739	0.922	26.553
	KIC Ratnagiri	**0.363**	**22.028**	**2.501**	**0.000**	**0.000**	**0.739**	**0.922**	**26.553**
North Konkan	Hetwane	0.000	3.914	0.284	0.000	0.000	35.993	8.327	48.518
	NKIPC Thane	**0.000**	**3.914**	**0.284**	**0.000**	**0.000**	**35.993**	**8.327**	**48.518**
Upper Krishna (W)	Chikotra	0.000	0.000	0.000	0.000	25.451	0.444	2.864	28.759
	Chitri	0.000	0.000	0.000	0.000	42.500	2.520	3.230	48.250
	Jangamhatti	0.000	0.000	0.000	0.000	26.740	1.010	3.720	31.470
	Kadvi	0.000	0.000	0.000	0.000	22.980	0.260	6.580	29.820
	Kasari	0.000	0.000	0.000	0.000	65.101	1.164	6.080	72.345
	Krishna Canal &	1.420	15.331	13.010	22.870	0.000	0.691	2.435	55.757
	Khodshi Backwater Kumbhi	0.000	0.000	0.000	0.000	52.467	0.343	5.910	58.720
	Morna (Sangli)	0.000	0.000	0.000	4.365	5.280	0.675	2.864	13.184
	Patgaon	0.000	0.000	0.000	0.000	53.395	1.091	6.038	60.524
	Yeoti Masoli	0.000	2.240	0.000	0.000	1.498	0.169	0.680	4.587
	SIC Sangli	**1.420**	**17.571**	**13.010**	**27.235**	**295.412**	**8.367**	**40.401**	**403.416**
North Konkan	Rajanalla	0.000	21.057	0.000	0.000	0.000	0.000	00	21.057
	Complex Wandri	0.000	23.590	2.970	0.000	0.000	0.000	5.040	31.600

Subbasin/ PlanGroup	Project/ Circle	On Canals			Reservoir Lift	River Lift	NI Use	Evapo-ration	Total
		Kharif	Rabi	HW					
Abundant		**35.611**	**103.120**	**21.079**	**27.235**	**295.412**	**45.099**	**89.507**	**617.063**
Medium		**110.388**	**873.471**	**296.055**	**419.243**	**405.231**	**229.284**	**782.813**	**3116.485**


Indicator V: Medium Projects
Irrigation System Performance (Canals)
ISP in ha/Mcum
250
200
150
100
50
0
CADA Pune
CADA Solapur
PIC Pune
SIC Sangli
AIC Abad
AIC Akola
BIPC Buldhana
CADA Abad
CADA Beed
CADA Jalgaon
CADA Nashik
JIPC Jalgaon
NIC Nanded
UWPC Amravati
AIC Abad
AIC Akola
BIPC Buldhana
CADA Abad
CADA Jalgaon
CADA Nashik
CADA Pune
CADA Solapur
CIPC Chandrapur
JIPC Jalgaon
NIC Nagpur
NIC Nanded
PIC Pune
YIC Yavatmal
CADA Nagpur
CIPC Chandrapur
GKLIS Bhandara
CIPC Chandrapur
KIC Ratnagiri
NKIPC Thane
SIC Sangli
TIC Thane
Highly Deficit
Deficit
Normal
Surplus
Abundant
Kharif
Rabi
HW
Rabi Target- 150
HW Target - 110

Indicator V

Irrigation System Performance (Canals)

Medium Projects 2007-08

Unit: ha/Mcum

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Highly Deficit				
Sina	Banganga	0	217	0
	Benitura	0	0	0
	Chandani	0	151	0
	Harni	0	89	0
	Jakapur	0	0	0
	Kada	0	52	46
	Kadi	425	94	42
	Kambli	0	94	0
	Khandala	0	301	394
	Khandeshwar	0	160	113
	Khasapur	0	167	0
	Kurnoor	0	107	49
	Mehkari	0	81	0
	Ramganga	0	197	41
	Ruti	0	43	35
	Sakat	0	160	0
	Talwar	0	120	0
	Turori	0	0	203
	CADA Beed	**425**	**123**	**56**
Upper Krishna (E)	Yeralwadi	0	69	0
	CADA Pune	**0**	**69**	**0**
Remaining Bhima+ Man	Ashti	0	0	0
	Buddhihal	0	390	0
	Ekrukh	0	0	0
	Hingani (Pangaon)	0	143	93
	Jawalgaon	0	111	110
	Mangi	0	105	0
	CADA Solapur	**0**	**135**	**94**
Remaining Bhima+ Man	Andhali	0	132	148
	Khairy	0	176	66
	Mhaswad	0	158	63
	Nher	0	135	0
	Ranand	0	187	165
	Sina	0	67	44
	Tisangi	0	115	159
	PIC Pune	**0**	**107**	**77**
Upper Krishna (E)	Basappawadi	0	0	0

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Dodda Nalla	0	0	0
	Sankh	138	39	142
	Siddhewadi	0	130	0
	SIC Sangli	**138**	**69**	**142**
Highly Deficit		**119**	**114**	**76**
Deficit				
Purna+Dudhana	Wakod	0	0	0
	AIC Abad	**0**	**0**	**0**
Purna (Tapi)	Dnyanganga	0	0	0
	Mas	0	155	250
	Morna (Akola)	0	176	46
	Nirguna	0	124	0
	Paldhag	0	130	0
	Shahnoor	0	86	22
	Uma	0	158	0
	AIC Akola	**0**	**150**	**77**
Purna (Tapi)	Mun	0	94	0
	Torna	0	0	0
	Utawali	0	0	0
	BIPC Buldhana	**0**	**94**	**0**
Middle Tapi (South)	Ajanta Andhari	0	0	0
	Anjana Palashi	0	0	0
	Dhamna	0	0	0
	Gadadgad	0	178	0
	Galhati	0	79	0
	Girja	0	178	0
	Jivrekha	0	0	0
	Jui	0	289	0
	Kalyan Girija	0	159	0
	Karpara	0	77	0
	Khelna	0	0	0
	Lahuki	0	190	0
	Masoli	0	58	74
	Pir Kalyan	0	378	0
	Purna Nevpur	0	226	0
	Sukhana	0	229	195
	Upper Dudhana	0	120	0
	CADA Abad	**0**	**145**	**111**
Manjra	Belpara	0	13	57
	Bindusara	0	124	0
	Bodhegaon	0	0	80
	Borna	0	0	21

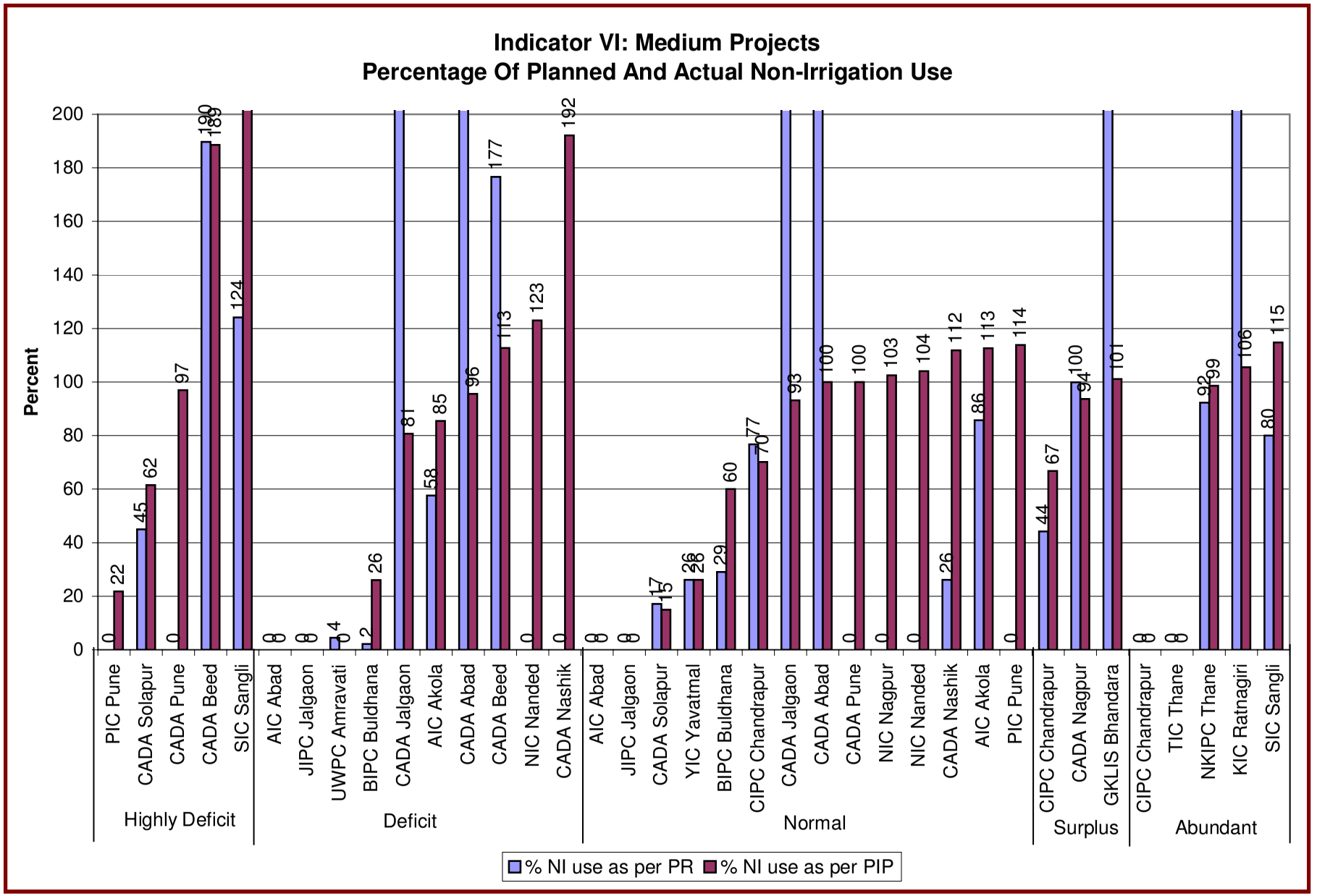
Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Devarjan	0	0	0
	Gharni	0	92	124
	Kundalika	0	106	86
	Mahasangvi	0	77	0
	Masalga	0	0	0
	Raigavan	0	0	0
	Renapur	0	0	0
	Rui	0	0	0
	Sakol	0	0	0
	Sangameshwar (Dokewadi)	0	0	0
	Saraswati	0	140	399
	Sindphana	0	231	251
	Tawarja	0	119	0
	Terna	0	152	108
	Tiru	0	205	0
	Wan (Beed)	0	87	128
	Whati	0	80	0
	CADA Beed	**0**	**117**	**114**
Girna	Agnavati	0	0	0
	Bhokarbari	0	81	75
	Bori	0	106	148
	Burai	148	151	84
	Hiwara	0	174	0
	Jamkhedi	0	0	0
	Kanoli	0	47	50
	Manyad	2508	62	114
	Rangawali	398	304	73
	Tondapur	0	615	0
	CADA Jalgaon	**164**	**101**	**99**
Girna	Haranbari	0	246	643
	Kelzar	0	179	280
	Nagya Sakya	0	148	257
	CADA Nashik	**0**	**167**	**272**
Middle Tapi (Satpuda)	Bahula	0	0	0
	JIPC Jalgaon	**0**	**0**	**0**
Manjra	Karadkhed	0	178	0
	Kudala	0	156	164
	Kundrala	0	119	175
	Mahalingi	0	0	0
	Pethwadaj	0	111	89
	NIC Nanded	**0**	**131**	**124**

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
Purna (Tapi)	Chandrabhaga (Amravati)	0	32	0
	Purna (Achalpur)	0	94	0
	UWPC Amravati	**0**	**36**	**0**
Deficit		**162**	**125**	**97**
Normal				
Upper Godavari	Shivna Takali	0	0	0
	AIC Abad	**0**	**0**	**0**
Painganga	Borgaon	0	109	0
	Ekbhuji	0	85	0
	Goki	0	69	28
	Koradi	0	146	0
	Lower Pus	0	44	34
	Saikheda	0	75	34
	Sonal	0	152	0
	Waghadi	0	49	30
	AIC Akola	**0**	**81**	**31**
Wardha	Nawargaon	0	80	0
	Pen Takli	0	148	0
	BIPC Buldhana	**0**	**111**	**0**
Upper Godavari	Ambadi	0	0	0
	Bor Dahegaon	0	107	0
	Dheku	0	227	0
	Kolhi	0	0	0
	Narangi	116	80	0
	Tembhapuri	0	133	0
	CADA Abad	**116**	**126**	**0**
Middle Tapi (Satpuda)	Abhora	1140	90	200
	Aner	180	58	56
	Karwand	0	162	142
	Malangaon	0	130	132
	Panzara	0	109	460
	Sonwad	133	68	455
	Suki	0	0	0
	Suki Pickup Wier	878	80	104
	CADA Jalgaon	**180**	**89**	**105**
Upper Godavari	Adhala	464	92	102
	Alandi	0	139	72
	Bhojapur	166	82	0
	Ghatshil Pargaon	0	112	0
	Mandohol	0	50	87
	Waldevi	0	0	0

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	CADA Nashik	**222**	**94**	**84**
Upper Bhima	Visapur	238	236	257
	CADA Pune	**238**	**236**	**257**
Sina	Bori	0	0	0
	CADA Solapur	**0**	**0**	**0**
Wardha	Amalnalla	0	196	0
	Dham	0	76	342
	Pothra1	0	78	0
	CIPC Chandrapur	**0**	**110**	**342**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0	0	0
	Mor	0	68	64
	JIPC Jalgaon	**0**	**68**	**64**
Lower Wainganga	Dongargaon (Chandrapur)	139	71	0
	Jam	0	57	0
	Kar	0	58	45
	NIC Nagpur	**139**	**60**	**45**
Painganga	Dongargaon (Nanded)	0	37	189
	Loni	0	135	101
	Nagzari	0	98	0
	NIC Nanded	**0**	**93**	**162**
Upper Bhima	Kasarsai	0	0	0
	Nazare	164	116	0
	Wadiwale	0	0	0
	PIC Pune	**164**	**116**	**0**
Painganga	Adan	0	52	25
	YIC Yavatmal	**0**	**52**	**25**
Normal		**187**	**93**	**80**
Surplus				
Middle Wainganga	Bagheda	570	0	0
	Betekar Bothli	414	34	0
	Bodalkasa	468	1801	0
	Chandpur	455	519	0
	Chandrabhaga (Nagpur)	0	79	0
	Chorakhmara	431	0	0
	Chulband	813	453	75
	Kanolibara	0	84	300
	Kesarnala	0	143	2
	Khairbanda	723	617	72
	Khekara Nalla	0	49	15
	Kolar	145	154	6
	Makardhokada-Saiki	0	109	0

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Managadh	0	628	72
	Mordham	0	101	0
	Pandharbodi	309	156	0
	Rengepar	662	355	59
	Sangrampur	428	428	0
	Sorna	452	27	0
	Tekepar LIS	0	0	0
	Umri	0	149	30
	Wunna	0	120	0
	CADA Nagpur	**500**	**214**	**59**
Middle Wainganga	Chandai	0	151	0
	Chargaon	113	98	0
	Labhansarad	0	95	0
	Pakadigundam	0	144	0
	Panchadhara Complex	0	63	235
	CIPC Chandrapur	**113**	**94**	**235**
Middle Wainganga	Katangi	355	0	72
	GKLIS Bhandara	**355**	**0**	**72**
Surplus		**445**	**183**	**69**
Abundant				
Wardha	Dongargaon (Wardha)	0	78	57
	Ghorazari	268	0	0
	Naleshwar	234	0	82
	CIPC Chandrapur	**256**	**13**	**77**
Vashishthi	Natuwadi	0	6	0
	KIC Ratnagiri	**0**	**6**	**0**
North Konkan	Hetwane	0	22	0
	NKIPC Thane	**0**	**22**	**0**
Upper Krishna (W)	Chikotra	0	0	0
	Chitri	0	0	0
	Jangamhatti	0	0	0
	Kadvi	0	0	0
	Kasari	0	0	0
	Krishna Canal & Khodshi	1380	108	59
	Backwater Kumbhi	0	0	0
	Morna (Sangli)	0	0	0
	Patgaon	0	0	0
	Yeoti Masoli	0	165	0
	SIC Sangli	**1380**	**115**	**59**
North Konkan	Rajanalla Complex	0	105	0

Subbasin/PlanGroup	Project/ Circle	Irrigation System Performance		
		Kharif	Rabi	HW
	Wandri	0	25	0
	TIC Thane	**0**	**63**	**0**
Abundant		**298**	**51**	**45**
Medium		**357**	**111**	**80**


Indicator VI: Medium Projects
Percentage Of Planned And Actual Non-Irrigation Use
Percent
200
180
160
140
120
100
80
60
40
20
0
PIC Pune
CADA Solapur
CADA Pune
CADA Beed
SIC Sangli
AIC Abad
JIPC Jalgaon
UWPC Amravati
BIPC Buldhana
CADA Jalgaon
AIC Akola
CADA Abad
CADA Beed
NIC Nanded
CADA Nashik
AIC Abad
JIPC Jalgaon
CADA Solapur
YIC Yavatmal
BIPC Buldhana
CIPC Chandrapur
CADA Jalgaon
CADA Abad
CADA Pune
NIC Nagpur
NIC Nanded
CADA Nashik
AIC Akola
PIC Pune
CIPC Chandrapur
CADA Nagpur
GKLIS Bhandara
CIPC Chandrapur
TIC Thane
NKIPC Thane
KIC Ratnagiri
SIC Sangli
Highly Deficit
Deficit
Normal
Surplus
Abundant
% NI use as per PR
% NI use as per PIP

Indicator VI

Non Irrigation Use

Medium Projects 2007-08

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	0.62	0.62	0.04	100	1560
	Benitura	0.83	0.83	0.83	100	100
	Chandani	1.27	2.55	0.00	50	0
	Harni	0.00	0.00	0.00	0	0
	Jakapur	0.00	0.00	0.00	0	0
	Kada	0.54	0.00	0.27	0	200
	Kadi	0.00	0.00	0.00	0	0
	Kambli	0.00	0.00	0.00	0	0
	Khandala	0.00	0.00	0.00	0	0
	Khandeshwar	0.00	0.00	0.00	0	0
	Khasapur	1.38	1.38	0.08	100	1724
	Kurnoor	2.99	0.10	2.52	2990	119
	Mehkari	0.00	0.00	0.00	0	0
	Ramganga	0.00	0.00	0.00	0	0
	Ruti	0.48	0.00	0.48	0	100
	Sakat	0.37	0.00	0.03	0	1492
	Talwar	0.16	0.00	0.13	0	128
	Turori	1.76	0.00	1.15	0	154
	CADA Beed	**10.410**	**5.487**	**5.518**	**190**	**189**
Upper Krishna (E)	Yeralwadi	3.86	0.00	3.98	0	97
	CADA Pune	**3.860**	**0.000**	**3.980**	**0**	**97**
Remaining Bhima+ Man	Ashti	0.44	0.00	2.93	0	15
	Buddhihal	0.00	0.00	0.00	0	0
	Ekrukh	0.99	5.13	0.00	19	0
	Hingani (Pangaon)	1.53	1.45	1.68	105	91
	Jawalgaon	0.00	0.00	0.20	0	0
	Mangi	0.00	0.00	0.00	0	0
	CADA Solapur	**2.960**	**6.580**	**4.810**	**45**	**62**

Indicator VI

Non Irrigation Use

Medium Projects 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Remaining Bhima+ Man	Andhali	1.29	0.00	1.03	0	125
	Khairy	0.32	0.00	0.67	0	48
	Mhaswad	0.00	0.00	6.65	0	0
	Nher	0.06	0.00	0.02	0	427
	Ranand	0.00	0.00	0.00	0	0
	Sina	1.65	0.00	1.94	0	85
	Tisangi	0.03	0.00	5.07	0	1
	PIC Pune	**3.350**	**0.000**	**15.375**	**0**	**22**
Upper Krishna (E)	Basappawadi	0.00	0.00	0.00	0	0
	Dodda Nalla	0.15	0.00	0.15	0	100
	Sankh	0.00	0.00	0.00	0	0
	Siddhewadi	0.57	0.58	0.00	98	0
	SIC Sangli	**0.720**	**0.580**	**0.150**	**124**	**480**
Highly Deficit		**21.300**	**12.647**	**29.833**	**168**	**71**
Deficit						
Purna+Dudhana	Wakod	0.00	1.92	0.00	0	0
	AIC Abad	**0.000**	**1.915**	**0.000**	**0**	**0**
Purna (Tapi)	Dnyanganga	3.57	8.69	5.52	41	65
	Mas	1.07	7.72	1.00	14	107
	Morna (Akola)	0.40	6.34	0.83	6	48
	Nirguna	0.00	0.00	0.33	0	0
	Paldhag	1.55	0.37	1.50	419	103
	Shahnoor	7.15	0.00	7.00	0	102
	Uma	0.37	1.35	0.33	27	111
	AIC Akola	**14.110**	**24.467**	**16.510**	**58**	**85**
Purna (Tapi)	Mun	0.13	5.13	0.50	3	26
	Torna	0.00	0.12	0.00	0	0
	Utawali	0.00	0.75	0.00	0	0
	BIPC Buldhana	**0.130**	**5.994**	**0.500**	**2**	**26**

Indicator VI

Non Irrigation Use

Medium Projects 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Middle Tapi (South)	Ajanta Andhari	0.90	0.00	0.90	0	100
	Anjana Palashi	0.10	0.00	0.10	0	100
	Dhamna	0.18	0.00	0.18	0	100
	Gadadgad	0.00	0.00	0.00	0	0
	Galhati	0.00	0.00	0.00	0	0
	Girja	1.20	3.20	1.20	38	100
	Jivrekha	0.40	0.00	0.40	0	100
	Jui	0.83	0.00	0.83	0	100
	Kalyan Girija	0.00	0.00	0.00	0	0
	Karpara	0.00	0.00	0.00	0	0
	Khelna	1.60	0.00	1.60	0	100
	Lahuki	0.00	0.00	0.00	0	0
	Masoli	2.01	0.00	3.53	0	57
	Pir Kalyan	1.37	0.00	1.37	0	100
	Purna Nevpur	0.86	0.00	0.86	0	100
	Sukhana	0.75	0.00	0.75	0	100
	Upper Dudhana	1.00	0.00	0.00	0	0
	CADA Abad	**11.200**	**3.200**	**11.720**	**350**	**96**

Indicator VI

Non Irrigation Use

Medium Projects 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Manjra	Belpara	0.00	0.00	0.00	0	0
	Bindusara	2.86	0.00	3.50	0	82
	Bodhegaon	0.00	0.00	0.00	0	0
	Borna	0.00	0.00	1.50	0	0
	Devarjan	0.03	0.00	0.04	0	63
	Gharni	2.34	0.00	2.54	0	92
	Kundalika	1.18	0.00	0.25	0	471
	Mahasangvi	0.48	0.00	0.64	0	75
	Masalga	1.32	0.00	0.98	0	134
	Raigavan	1.22	0.28	0.00	433	0
	Renapur	1.34	3.90	1.32	34	102
	Rui	1.00	0.00	1.00	0	100
	Sakol	0.61	0.00	0.54	0	113
	Sangameshwar (Dokewad	0.00	0.00	0.00	0	0
	Saraswati	0.00	0.00	0.00	0	0
	Sindphana	1.25	0.00	1.25	0	100
	Tawarja	2.37	3.89	2.11	61	113
	Terna	5.20	4.81	2.66	108	195
	Tiru	2.39	0.00	2.39	0	100
	Wan (Beed)	2.65	2.26	2.66	117	100
	Whati	0.51	0.00	0.36	0	142
	CADA Beed	**26.760**	**15.146**	**23.739**	**177**	**113**
Girna	Agnavati	0.00	0.58	0.00	0	0
	Bhokarbari	0.28	0.00	0.28	0	100
	Bori	6.20	7.08	9.58	88	65
	Burai	1.84	0.00	2.11	0	87
	Hiwara	2.11	0.00	1.00	0	211
	Jamkhedi	4.40	0.00	4.24	0	104
	Kanoli	1.16	0.00	1.16	0	100
	Manyad	0.82	0.00	2.12	0	39
	Rangawali	0.00	0.00	0.00	0	0
	Tondapur	1.49	0.85	2.18	176	69
	CADA Jalgaon	**18.300**	**8.510**	**22.672**	**215**	**81**

Indicator VI

Non Irrigation Use

Medium Projects 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Girna	Haranbari	14.07	0.00	6.66	0	211
	Kelzar	2.80	0.00	2.12	0	132
	Nagya Sakya	0.00	0.00	0.00	0	0
	CADA Nashik	**16.870**	**0.000**	**8.780**	**0**	**192**
Middle Tapi (Satpuda)	Bahula	0.12	0.00	0.00	0	0
	JIPC Jalgaon	**0.120**	**0.000**	**0.000**	**0**	**0**
Manjra	Karadkhed	2.22	0.00	1.80	0	123
	Kudala	0.38	0.00	0.15	0	250
	Kundrala	0.91	0.00	0.90	0	101
	Mahalingi	0.06	0.00	0.00	0	0
	Pethwadaj	0.24	0.00	0.24	0	100
	NIC Nanded	**3.810**	**0.000**	**3.094**	**0**	**123**
Purna (Tapi)	Chandrabhaga (Amravati)	0.00	9.62	0.00	0	0
	Purna (Achalpur)	0.69	5.73	0.00	12	0
	UWPC Amravati	**0.690**	**15.347**	**0.000**	**4**	**0**
Deficit		**91.980**	**74.579**	**87.015**	**123**	**106**
Normal						
Upper Godavari	Shivna Takali	0.00	12.05	0.00	0	0
	AIC Abad	**0.000**	**12.045**	**0.000**	**0**	**0**
Painganga	Borgaon	0.00	0.00	0.00	0	0
	Ekbhuji	2.07	0.76	2.00	272	104
	Goki	1.68	0.00	3.33	0	51
	Koradi	2.39	10.68	2.00	22	120
	Lower Pus	2.32	0.00	0.08	0	2901
	Saikheda	0.09	0.65	1.15	14	8
	Sonal	0.40	0.00	0.40	0	100
	Waghadi	1.42	0.00	0.25	0	567
	AIC Akola	**10.370**	**12.090**	**9.205**	**86**	**113**
Wardha	Nawargaon	1.35	2.71	1.27	50	106
	Pen Takli	3.97	15.58	7.57	25	52
	BIPC Buldhana	**5.310**	**18.293**	**8.840**	**29**	**60**

Indicator VI

Non Irrigation Use

Medium Projects 2007-08

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	Ambadi	1.12	0.00	1.12	0	100
	Bor Dahegaon	0.00	0.00	0.00	0	0
	Dheku	0.03	0.30	0.03	10	100
	Kolhi	0.47	0.00	0.47	0	100
	Narangi	0.22	0.00	0.22	0	100
	Tembhapuri	3.09	0.00	3.09	0	100
	CADA Abad	**4.930**	**0.300**	**4.930**	**1643**	**100**
Middle Tapi (Satpuda)	Abhora	0.00	0.00	0.00	0	0
	Aner	0.00	0.00	0.00	0	0
	Karwand	1.43	0.00	0.96	0	149
	Malangaon	0.24	0.00	0.24	0	100
	Panzara	3.58	0.89	2.75	402	130
	Sonwad	0.72	0.00	1.57	0	46
	Suki	0.77	0.00	1.25	0	62
	Suki Pickup Wier	0.73	0.00	1.25	0	59
	CADA Jalgaon	**7.470**	**0.890**	**8.016**	**839**	**93**
Upper Godavari	Adhala	1.58	0.00	1.16	0	137
	Alandi	0.00	0.00	0.00	0	0
	Bhojapur	0.52	0.00	0.52	0	100
	Ghatshil Pargaon	0.07	0.00	0.07	0	104
	Mandohol	1.00	0.00	1.09	0	92
	Waldevi	0.00	12.17	0.00	0	0
	CADA Nashik	**3.180**	**12.170**	**2.843**	**26**	**112**
Upper Bhima	Visapur	0.51	0.00	0.51	0	100
	CADA Pune	**0.510**	**0.000**	**0.506**	**0**	**100**
Sina	Bori	0.36	2.10	2.41	17	15
	CADA Solapur	**0.360**	**2.100**	**2.410**	**17**	**15**
Wardha	Amalnalla	2.31	3.93	3.93	59	59
	Dham	7.31	8.77	9.70	83	75
	Pothra1	0.13	0.00	0.27	0	48
	CIPC Chandrapur	**9.750**	**12.700**	**13.900**	**77**	**70**

Indicator VI

Non Irrigation Use

Medium Projects 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0.00	1.56	0.00	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	2.13	0.00	1.85	0	115
	Kar	1.19	0.00	1.39	0	86
	NIC Nagpur	**3.320**	**0.000**	**3.240**	**0**	**103**
Painganga	Dongargaon (Nanded)	0.00	0.00	0.00	0	0
	Loni	0.01	0.00	0.00	0	0
	Nagzari	1.08	0.00	1.05	0	103
	NIC Nanded	**1.090**	**0.000**	**1.050**	**0**	**104**
Upper Bhima	Kasarsai	0.03	0.00	0.00	0	0
	Nazare	4.21	0.00	4.28	0	98
	Wadiwale	0.63	0.00	0.00	0	0
	PIC Pune	**4.870**	**0.000**	**4.280**	**0**	**114**
Painganga	Adan	3.07	11.76	11.76	26	26
	YIC Yavatmal	**3.070**	**11.760**	**11.760**	**26**	**26**
Normal		**54.230**	**83.908**	**70.980**	**65**	**76**
Surplus						

Indicator VI

Non Irrigation Use

Medium Projects 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Middle Wainganga	Bagheda	0.00	0.00	0.00	0	0
	Betekar Bothli	0.00	0.00	0.00	0	0
	Bodalkasa	0.11	0.00	0.08	0	134
	Chandpur	0.00	0.00	0.00	0	0
	Chandrabhaga (Nagpur)	0.07	0.00	0.17	0	42
	Chorakhmara	0.00	0.00	0.00	0	0
	Chulband	0.00	0.00	0.00	0	0
	Kanolibara	0.00	0.00	0.00	0	0
	Kesarnala	0.00	0.00	0.24	0	0
	Khairbanda	0.00	0.00	0.00	0	0
	Khekara Nalla	0.00	0.00	0.00	0	0
	Kolar	2.49	1.21	1.38	206	181
	Makardhokada-Saiki	0.15	0.00	0.15	0	100
	Managadh	0.00	0.00	0.00	0	0
	Mordham	0.06	0.00	0.04	0	142
	Pandharbodi	1.79	0.00	0.00	0	0
	Rengepar	0.00	0.00	0.00	0	0
	Sangrampur	0.00	0.00	0.00	0	0
	Sorna	0.00	0.00	0.00	0	0
	Tekepar LIS	0.00	0.00	0.00	0	0
	Umri	0.00	0.00	0.00	0	0
	Wunna	8.09	11.55	11.55	70	70
	CADA Nagpur	**12.750**	**12.760**	**13.613**	**100**	**94**
Middle Wainganga	Chandai	1.27	2.55	0.04	50	3175
	Chargaon	0.20	1.27	1.27	15	15
	Labhansarad	0.00	0.00	0.20	0	0
	Pakadigundam	1.56	3.03	3.03	52	52
	Panchadhara Complex	0.00	0.00	0.00	0	0
	CIPC Chandrapur	**3.030**	**6.846**	**4.536**	**44**	**67**
Middle Wainganga	Katangi	0.90	0.30	0.89	300	101
	GKLIS Bhandara	**0.900**	**0.300**	**0.890**	**300**	**101**
Surplus		**16.680**	**19.906**	**19.039**	**84**	**88**
Abundant						

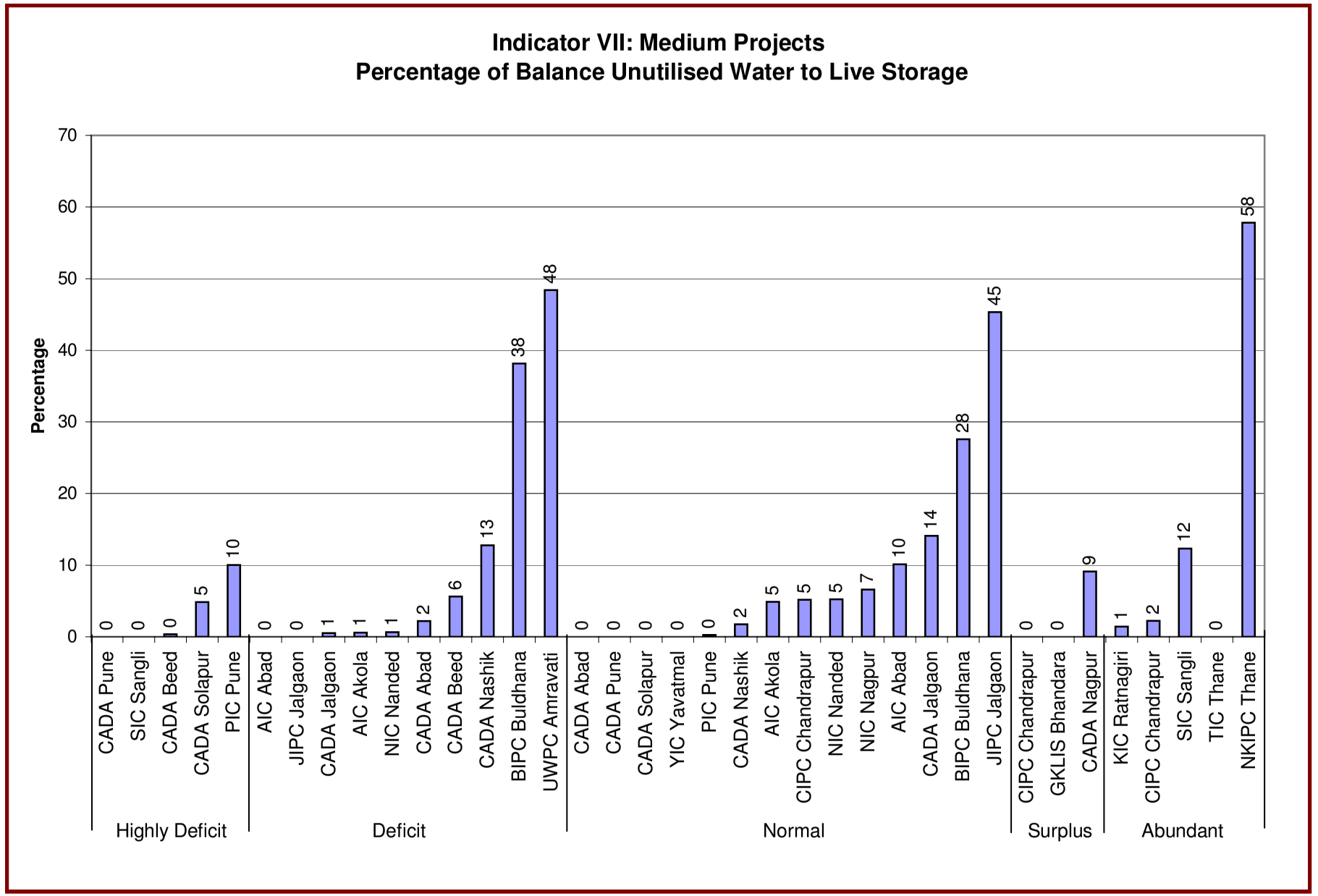
Indicator VI

Non Irrigation Use

Medium Projects 2007-08

Unit: Mcum

Subbasin/ PlanGroup	Project/ Circle	NI Use	NI Use as per PR	NI Use As per PIP	Percent wrt PR	Percent wrt PIP
Wardha	Dongargaon (Wardha)	0.00	0.00	0.00	0	0
	Ghorazari	0.00	0.00	0.00	0	0
	Naleshwar	0.00	0.00	0.00	0	0
	CIPC Chandrapur	**0.000**	**0.000**	**0.000**	**0**	**0**
Vashishthi	Natuwadi	0.74	0.04	0.70	1802	106
	KIC Ratnagiri	**0.740**	**0.041**	**0.700**	**1802**	**106**
North Konkan	Hetwane	35.99	39.00	36.50	92	99
	NKIPC Thane	**35.990**	**39.000**	**36.500**	**92**	**99**
Upper Krishna (W)	Chikotra	0.44	7.70	0.45	6	99
	Chitri	2.52	2.06	2.50	122	101
	Jangamhatti	1.01	0.00	0.78	0	129
	Kadvi	0.26	0.00	0.25	0	104
	Kasari	1.16	0.00	1.20	0	97
	Krishna Canal & Khodshi I	0.69	0.69	0.69	100	100
	Kumbhi	0.34	0.00	0.40	0	86
	Morna (Sangli)	0.68	0.00	0.00	0	0
	Patgaon	1.09	0.00	0.85	0	128
	Yeoti Masoli	0.17	0.00	0.17	0	100
	SIC Sangli	**8.370**	**10.451**	**7.290**	**80**	**115**
North Konkan	Rajanalla Complex	0.00	0.00	0.00	0	0
	Wandri	0.00	0.00	0.00	0	0
	TIC Thane	**0.000**	**0.000**	**0.000**	**0**	**0**
Abundant		**45.100**	**49.492**	**44.490**	**91**	**101**
Medium		**229.280**	**240.532**	**251.357**	**95**	**91**


Indicator VII: Medium Projects
Percentage of Balance Unutilised Water to Live Storage
Percentage
70
60
50
40
30
20
10
0
CADA Pune 0
SIC Sangli 0
CADA Beed 0
CADA Solapur 5
PIC Pune 10
AIC Abad 0
JIPC Jalgaon 0
CADA Jalgaon 1
AIC Akola 1
NIC Nanded 1
CADA Abad 2
CADA Beed 6
CADA Nashik 13
BIPC Buldhana 38
UWPC Amravati 48
CADA Abad 0
CADA Pune 0
CADA Solapur 0
YIC Yavatmal 0
PIC Pune 0
CADA Nashik 2
AIC Akola 5
CIPC Chandrapur 5
NIC Nanded 5
NIC Nagpur 7
AIC Abad 10
CADA Jalgaon 14
BIPC Buldhana 28
JIPC Jalgaon 45
CIPC Chandrapur 0
GKLIS Bhandara 0
CADA Nagpur 9
KIC Ratnagiri 1
CIPC Chandrapur 2
SIC Sangli 12
TIC Thane 0
NKIPC Thane 58
Highly Deficit
Deficit
Normal
Surplus
Abundant

Indicator VII

Percent Unutilized water to Live Storage on 15th Oct

Medium Projects 2007-08

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Highly Deficit							
Sina	Banganga	0.47	0.00	0.00	0.47	3.99	11.85
	Benitura	0.00	1.34	0.00	0.00	5.47	0.00
	Chandani	-2.20	0.00	0.55	0.00	13.66	0.00
	Harni	0.00	1.41	0.52	0.00	2.98	0.00
	Jakapur	-1.55	2.21	0.67	0.00	2.42	0.00
	Kada	0.00	0.00	0.06	0.00	8.55	0.00
	Kadi	-1.04	0.00	0.00	0.00	5.21	0.00
	Kambli	-0.64	0.00	0.06	0.00	1.37	0.00
	Khandala	0.03	1.01	0.12	0.00	3.17	0.00
	Khandeshwar	0.00	8.78	0.00	0.00	8.37	0.00
	Khasapur	0.19	13.04	0.00	0.00	13.04	0.00
	Kurnoor	1.40	2.98	0.19	0.00	32.28	0.00
	Mehkari	-2.28	0.00	0.00	0.00	8.60	0.00
	Ramganga	-0.38	0.00	0.00	0.00	4.54	0.00
	Ruti	-0.06	0.00	0.12	0.00	6.57	0.00
	Sakat	-0.16	13.48	0.00	0.00	6.96	0.00
	Talwar	-0.09	0.00	0.00	0.00	3.24	0.00
	Turori	1.00	1.46	0.00	0.00	6.20	0.00
	CADA Beed	**-5.30**	**45.72**	**2.29**	**0.47**	**136.63**	**0.35**
Upper Krishna (E)	Yeralwadi	-1.38	0.00	0.00	0.00	19.60	0.00
	CADA Pune	**-1.38**	**0.00**	**0.00**	**0.00**	**19.60**	**0.00**
Remaining Bhima+ Man	Ashti	5.05	0.00	8.55	0.00	17.95	0.00
	Buddhihal	-4.00	0.00	0.00	0.00	0.00	0.00
	Ekrukh	0.00	0.00	0.09	0.00	0.79	0.00
	Hingani	1.56	0.00	0.00	1.56	32.00	4.88
	(Pangaon) Jawalgaon	2.62	0.00	0.16	2.46	17.80	13.81
	Mangi	0.22	0.00	0.06	0.16	17.40	0.90
	CADA Solapur	**5.45**	**0.00**	**8.86**	**4.17**	**85.93**	**4.86**
Remaining Bhima+ Man	Andhali	0.00	0.00	0.12	0.00	7.42	0.00
	Khairy	1.81	24.17	0.00	0.00	13.74	0.00
	Mhaswad	10.21	0.00	0.00	10.21	44.33	23.03
	Nher	1.66	1.53	0.00	0.13	11.79	1.10

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Ranand	5.68	0.00	2.60	3.08	6.42	47.98
	Sina	2.83	0.00	0.19	2.64	52.30	5.06
	Tisangi	2.07	5.72	0.00	0.00	24.46	0.00
	PIC Pune	**24.26**	**31.42**	**2.91**	**16.06**	**160.46**	**10.01**
Upper Krishna (E)	Basappawadi	0.00	0.00	0.00	0.00	0.00	0.00
	Dodda Nalla	-0.76	0.00	0.00	0.00	0.42	0.00
	Sankh	-0.89	0.00	0.00	0.00	9.81	0.00
	Siddhewadi	0.00	0.00	0.00	0.00	6.10	0.00
	SIC Sangli	**-1.65**	**0.00**	**0.00**	**0.00**	**16.33**	**0.00**
Highly Deficit		**21.37**	**77.14**	**14.07**	**20.71**	**418.95**	**4.94**
Deficit							
Purna+Dudhana	Wakod	0.73	0.00	1.43	0.00	2.19	0.00
	AIC Abad	**0.73**	**0.00**	**1.43**	**0.00**	**2.19**	**0.00**
Purna (Tapi)	Dnyanganga	3.97	6.40	0.00	0.00	22.36	0.00
	Mas	-2.46	0.00	0.00	0.00	12.96	0.00
	Morna (Akola)	2.20	10.07	0.00	0.00	41.46	0.00
	Nirguna	0.94	0.00	0.03	0.90	20.03	4.52
	Paldhag	0.00	0.00	0.00	0.00	7.23	0.00
	Shahnoor	18.69	25.38	3.88	0.00	43.88	0.00
	Uma	0.00	2.33	0.00	0.00	11.68	0.00
	AIC Akola	**23.34**	**44.18**	**3.91**	**0.90**	**159.60**	**0.57**
Purna (Tapi)	Mun	-1.28	0.00	0.00	0.00	13.31	0.00
	Torna	0.52	0.00	0.02	0.50	1.26	39.68
	Utawali	13.03	0.00	0.42	12.61	19.79	63.72
	BIPC Buldhana	**12.27**	**0.00**	**0.44**	**13.11**	**34.36**	**38.15**
Middle Tapi (South)	Ajanta Andhari	0.14	0.00	0.00	0.14	2.84	5.00
	Anjana Palashi	-0.52	0.00	0.19	0.00	5.28	0.00
	Dhamna	-2.21	2.21	0.43	0.00	1.60	0.00
	Gadadgad	-0.45	0.75	0.06	0.00	3.69	0.00
	Galhati	-1.24	0.00	0.08	0.00	10.49	0.00
	Girja	-0.95	0.00	0.00	0.00	11.91	0.00
	Jivrekha	-0.75	0.00	0.20	0.00	1.77	0.00
	Jui	0.38	0.00	0.16	0.22	4.92	4.52
	Kalyan Girija	-1.68	0.00	0.81	0.00	0.00	0.00
	Karpara	0.00	0.00	2.11	0.00	14.26	0.00
	Khelna	-0.55	0.00	0.30	0.00	3.87	0.00
	Lahuki	-1.67	0.00	0.00	0.00	4.31	0.00
	Masoli	1.46	0.00	0.00	1.46	24.50	5.95

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Pir Kalyan	0.86	0.00	0.00	0.86	6.40	13.44
	Purna Nevpur	-2.54	0.00	0.50	0.00	5.11	0.00
	Sukhana	-2.85	0.00	1.15	0.00	16.28	0.00
	Upper Dudhana	-2.22	0.00	0.00	0.00	5.32	0.00
	CADA Abad	**-14.79**	**2.96**	**5.98**	**2.68**	**122.55**	**2.19**
Manjra	Belpara	-0.61	0.00	0.00	0.00	5.37	0.00
	Bindusara	-0.11	0.00	0.29	0.00	5.70	0.00
	Bodhegaon	1.08	0.00	0.01	1.07	3.73	28.69
	Borna	0.29	0.00	0.18	0.11	8.97	1.22
	Devarjan	-0.91	0.00	0.00	0.00	3.98	0.00
	Gharni	-1.25	0.00	0.00	0.00	21.91	0.00
	Kundalika	6.37	0.00	0.00	6.37	37.69	16.90
	Mahasangvi	-0.84	0.00	0.02	0.00	5.88	0.00
	Masalga	-0.99	0.00	0.00	0.00	5.59	0.00
	Raigavan	-1.44	0.00	0.37	0.00	4.21	0.00
	Renapur	-0.38	0.00	0.00	0.00	8.13	0.00
	Rui	0.00	1.90	0.93	0.00	8.61	0.00
	Sakol	-1.04	0.00	0.00	0.00	5.52	0.00
	Sangameshwar	0.00	15.03	0.00	0.00	15.03	0.00
	(Dokewadi) Saraswati	0.00	0.00	0.39	0.00	6.07	0.00
	Sindphana	2.59	0.00	2.59	0.00	7.36	0.00
	Tawarja	-3.64	0.00	0.00	0.00	11.55	0.00
	Terna	2.25	0.00	0.57	1.68	19.39	8.64
	Tiru	-3.00	0.00	0.37	0.00	3.18	0.00
	Wan (Beed)	3.20	0.00	0.28	2.92	19.34	15.09
	Whati	-0.28	0.00	0.00	0.00	8.27	0.00
	CADA Beed	**1.27**	**16.93**	**5.99**	**12.14**	**215.46**	**5.64**
Girna	Agnavati	-0.98	0.00	0.00	0.00	0.00	0.00
	Bhokarbari	0.60	0.00	0.00	0.60	6.54	9.22
	Bori	-8.35	0.00	0.00	0.00	25.15	0.00
	Burai	-2.82	0.00	2.57	0.00	14.21	0.00
	Hiwara	-2.10	0.00	0.00	0.00	3.78	0.00
	Jamkhedi	0.00	0.00	0.11	0.00	12.34	0.00
	Kanoli	-0.43	0.00	2.13	0.00	0.00	0.00
	Manyad	-2.60	2.15	0.00	0.00	40.27	0.00
	Rangawali	0.00	0.00	0.63	0.00	12.89	0.00
	Tondapur	-0.32	0.29	0.00	0.00	3.10	0.00

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	CADA Jalgaon	**-16.99**	**2.44**	**5.44**	**0.60**	**118.28**	**0.51**
Girna	Haranbari	4.10	0.00	0.18	3.92	33.02	11.87
	Kelzar	3.79	0.00	0.00	3.79	16.09	23.56
	Nagya Sakya	-0.84	0.00	0.06	0.00	11.24	0.00
	CADA Nashik	**7.05**	**0.00**	**0.24**	**7.71**	**60.35**	**12.78**
Middle Tapi (Satpuda)	Bahula	-1.71	0.00	0.00	0.00	6.35	0.00
	JIPC Jalgaon	**-1.71**	**0.00**	**0.00**	**0.00**	**6.35**	**0.00**
Manjra	Karadkhed	0.56	1.37	0.00	0.00	7.91	0.00
	Kudala	0.00	0.00	0.12	0.00	2.18	0.00
	Kundrala	0.38	0.00	0.22	0.16	5.31	3.01
	Mahalingi	-0.54	0.00	0.07	0.00	0.81	0.00
	Pethwadaj	-1.19	0.00	0.29	0.00	9.04	0.00
	NIC Nanded	**-0.78**	**1.37**	**0.69**	**0.16**	**25.26**	**0.63**
Purna (Tapi)	Chandrabhaga (Amravati)	23.35	0.00	0.00	23.35	40.30	57.94
	Purna (Achalpur)	13.08	0.00	0.00	13.08	34.98	37.38
	UWPC Amravati	**36.43**	**0.00**	**0.00**	**36.43**	**75.28**	**48.39**
Deficit		**46.82**	**67.88**	**24.14**	**73.74**	**819.68**	**9.00**
Normal							
Upper Godavari	Shivna Takali	3.82	2.30	0.00	1.52	15.06	10.12
	AIC Abad	**3.82**	**2.30**	**0.00**	**1.52**	**15.06**	**10.12**
Painganga	Borgaon	0.00	0.00	0.00	0.00	6.61	0.00
	Ekbhuji	0.27	1.08	0.09	0.00	11.97	0.00
	Goki	3.71	0.00	0.81	2.90	42.71	6.78
	Koradi	-0.63	0.00	0.00	0.00	18.47	0.00
	Lower Pus	4.92	8.50	2.44	0.00	59.50	0.00
	Saikheda	4.47	0.00	1.63	2.84	27.18	10.46
	Sonal	0.00	0.00	0.09	0.00	16.92	0.00
	Waghadi	6.91	0.00	1.97	4.95	35.34	13.99
	AIC Akola	**19.66**	**9.58**	**7.03**	**10.69**	**218.70**	**4.89**
Wardha	Nawargaon	2.24	0.00	0.31	1.93	12.17	15.89
	Pen Takli	31.33	0.00	15.97	15.36	50.51	30.41
	BIPC Buldhana	**33.57**	**0.00**	**16.28**	**17.29**	**62.67**	**27.59**
Upper Godavari	Ambadi	-2.34	0.00	0.35	0.00	0.00	0.00
	Bor Dahegaon	-1.93	0.00	0.12	0.00	2.98	0.00
	Dheku	0.00	0.00	0.01	0.00	5.85	0.00

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	Kolhi	-0.10	0.00	0.01	0.00	1.14	0.00
	Narangi	-1.90	0.00	0.00	0.00	9.27	0.00
	Tembhapuri	-1.96	1.19	1.34	0.00	7.23	0.00
	CADA Abad	**-8.23**	**1.19**	**1.82**	**0.00**	**26.47**	**0.00**
Middle Tapi (Satpuda)	Abhora	2.54	0.00	0.45	2.10	6.02	34.81
	Aner	3.39	0.00	6.94	0.00	59.21	0.00
	Karwand	4.30	0.00	1.71	2.59	20.73	12.48
	Malangaon	1.32	0.00	0.11	1.21	11.33	10.72
	Panzara	3.92	0.00	0.05	3.87	35.63	10.85
	Sonwad	1.14	0.00	1.15	0.00	14.36	0.00
	Suki	16.82	0.00	0.20	16.62	39.85	41.72
	Suki Pickup Wier	-10.31	0.00	5.80	0.00	0.00	0.00
	CADA Jalgaon	**23.13**	**0.00**	**16.40**	**26.39**	**187.13**	**14.10**
Upper Godavari	Adhala	0.51	0.00	0.00	0.51	27.60	1.85
	Alandi	-2.07	0.00	0.00	0.00	27.46	0.00
	Bhojapur	-3.45	0.00	0.00	0.00	10.19	0.00
	Ghatshil Pargaon	-0.01	0.00	0.00	0.00	7.48	0.00
	Mandohol	-0.45	0.00	0.00	0.00	8.78	0.00
	Waldevi	1.50	0.00	0.03	1.47	32.09	4.58
	CADA Nashik	**-3.97**	**0.00**	**0.03**	**1.98**	**113.60**	**1.74**
Upper Bhima	Visapur	0.79	0.79	1.11	0.00	25.62	0.00
	CADA Pune	**0.79**	**0.79**	**1.11**	**0.00**	**25.62**	**0.00**
Sina	Bori	-3.77	0.00	0.00	0.00	18.76	0.00
	CADA Solapur	**-3.77**	**0.00**	**0.00**	**0.00**	**18.76**	**0.00**
Wardha	Amalnalla	-1.50	0.00	2.67	0.00	21.20	0.00
	Dham	6.12	0.00	0.00	6.12	62.51	9.79
	Pothra1	-0.43	0.00	0.00	0.00	34.72	0.00
	CIPC Chandrapur	**4.19**	**0.00**	**2.67**	**6.12**	**118.43**	**5.17**
Middle Tapi (Satpuda)	Bhokar (Mangrul)	5.12	0.00	1.05	4.06	6.41	63.38
	Mor	2.42	0.00	0.00	2.42	7.89	30.70
	JIPC Jalgaon	**7.54**	**0.00**	**1.05**	**6.48**	**14.30**	**45.35**
Lower Wainganga	Dongargaon (Chandrapur)	3.89	1.74	0.08	2.07	11.96	17.35
	Jam	0.90	0.00	0.00	0.90	24.30	3.72
	Kar	1.06	0.00	0.26	0.80	21.06	3.79

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
	NIC Nagpur	**5.85**	**1.74**	**0.34**	**3.78**	**57.32**	**6.59**
Painganga	Dongargaon	0.01	0.00	0.00	0.01	8.47	0.11
	(Nanded) Loni	1.29	0.00	0.09	1.20	8.12	14.80
	Nagzari	-0.01	0.00	0.06	0.00	6.45	0.00
	NIC Nanded	**1.29**	**0.00**	**0.15**	**1.21**	**23.04**	**5.25**
Upper Bhima	Kasarsai	2.19	0.00	2.03	0.16	14.94	1.05
	Nazare	4.01	0.00	7.11	0.00	16.61	0.00
	Wadiwale	5.83	0.00	12.91	0.00	29.90	0.00
	PIC Pune	**12.03**	**0.00**	**22.05**	**0.16**	**61.45**	**0.26**
Painganga	Adan	3.18	4.36	1.01	0.00	67.25	0.00
	YIC Yavatmal	**3.18**	**4.36**	**1.01**	**0.00**	**67.25**	**0.00**
Normal		**99.07**	**19.96**	**69.94**	**75.62**	**1009.78**	**7.49**
Surplus							
Middle Wainganga	Bagheda	-0.23	0.00	0.18	0.00	1.22	0.00
	Betekar Bothli	-0.03	0.00	0.18	0.00	1.78	0.00
	Bodalkasa	0.70	0.00	0.15	0.55	4.04	13.51
	Chandpur	2.35	0.00	0.54	1.81	6.86	26.38
	Chandrabhaga	-0.60	0.62	0.00	0.00	7.64	0.00
	(Nagpur) Chorakhmara	1.23	0.00	0.20	1.03	2.24	46.01
	Chulband	3.20	0.00	1.90	1.29	18.38	7.04
	Kanolibara	3.67	1.73	0.00	1.94	20.49	9.46
	Kesarnala	0.59	0.00	0.91	0.00	3.52	0.00
	Khairbanda	1.54	0.00	0.43	1.11	6.93	16.04
	Khekara Nalla	4.97	2.32	0.15	2.49	20.86	11.94
	Kolar	1.05	4.60	0.83	0.00	27.26	0.00
	Makardhokada-	-1.85	0.00	0.00	0.00	25.90	0.00
	Saiki Managadh	1.32	0.00	0.09	1.23	6.89	17.85
	Mordham	0.07	0.49	0.00	0.00	4.46	0.00
	Pandharbodi	0.76	0.00	0.46	0.29	11.66	2.51
	Rengepar	0.44	0.00	0.19	0.25	2.78	9.06
	Sangrampur	0.12	0.00	0.00	0.12	1.17	10.44
	Sorna	0.26	0.00	0.00	0.26	2.58	9.90
	Tekepar LIS	0.00	0.00	2.33	0.00	0.00	0.00
	Umri	-0.49	0.63	0.14	0.00	4.51	0.00
	Wunna	7.04	0.00	0.96	6.09	21.30	28.57
	CADA Nagpur	**26.10**	**10.40**	**9.65**	**18.46**	**202.46**	**9.12**

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Middle Wainganga	Chandai	-2.20	0.00	0.55	0.00	13.66	0.00
	Chargaon	0.34	0.00	0.66	0.00	18.28	0.00
	Labhansarad	-0.87	0.00	0.00	0.00	7.35	0.00
	Pakadigundam	1.88	0.00	4.12	0.00	8.44	0.00
	Panchadhara	0.00	0.00	0.00	0.00	10.39	0.00
	Complex **CIPC Chandrapur**	**-0.85**	**0.00**	**5.33**	**0.00**	**58.12**	**0.00**
Middle Wainganga	Katangi	-0.12	0.00	0.00	0.00	9.10	0.00
	GKLIS Bhandara	**-0.12**	**0.00**	**0.00**	**0.00**	**9.10**	**0.00**
Surplus		**25.12**	**10.40**	**14.98**	**18.46**	**269.68**	**6.84**
Abundant							
Wardha	Dongargaon (Wardha)	0.90	0.00	0.00	0.90	4.44	20.27
	Ghorazari	1.54	0.00	2.28	0.00	26.54	0.00
	Naleshwar	10.23	0.00	10.38	0.00	9.36	0.00
	CIPC Chandrapur	**12.67**	**0.00**	**12.66**	**0.90**	**40.34**	**2.23**
Vashishthi	Natuwadi	6.42	0.00	6.05	0.37	26.37	1.41
	KIC Ratnagiri	**6.42**	**0.00**	**6.05**	**0.37**	**26.37**	**1.41**
North Konkan	Hetwane	80.40	0.00	10.23	70.17	121.37	57.82
	NKIPC Thane	**80.40**	**0.00**	**10.23**	**70.17**	**121.37**	**57.82**
Upper Krishna (W)	Chikotra	12.64	0.00	1.61	11.04	37.18	29.68
	Chitri	18.49	0.00	8.09	10.40	52.73	19.72
	Jangamhatti	11.73	0.00	7.23	4.50	26.87	16.75
	Kadvi	2.86	0.00	3.78	0.00	71.02	0.00
	Kasari	36.68	0.00	20.30	16.38	77.97	21.01
	Krishna Canal &	0.03	0.00	26.22	0.00	3.53	0.00
	Khodshi Backwater Kumbhi	3.20	0.00	3.94	0.00	68.08	0.00
	Morna (Sangli)	1.46	0.00	1.47	0.00	16.64	0.00
	Patgaon	46.70	0.00	33.67	13.03	105.19	12.39
	Yeoti Masoli	2.58	0.25	0.29	2.04	7.05	28.92
	SIC Sangli	**136.36**	**0.25**	**106.59**	**57.38**	**466.25**	**12.31**
North Konkan	Rajanalla	00	0.00	00	00	00	00
	Complex Wandri	4.86	1.27	3.92	0.00	33.16	0.00
	TIC Thane	**90.75**	**1.27**	**36.60**	**53.21**	**270.66**	**19.66**

Subbasin/PlanGroup	Project/ Circle	Live storage on 30th June	Designed Carry	Inflow in	Net Unutilise	Live Sto-age15Oct	Percent Unutilise
Abundant		**326.61**	**1.52**	**172.13**	**182.03**	**924.99**	**19.68**
Medium		**518.99**	**176.89**	**295.25**	**370.56**	**3443.08**	**10.76**

Indicator IX

Actual Cropping Pattern

Unit: ha

Medium Projects 2007-08

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Highly Deficit						
Sina	Banganga	0.00	0.00	78.72	21.28	0.00
	Benitura	0.00	4.86	49.65	24.31	21.18
	Chandani	0.00	0.00	59.25	21.86	18.89
	Harni	0.00	0.00	81.20	18.80	0.00
	Jakapur	0.00	10.57	52.86	24.57	12.00
	Kada	0.00	0.00	84.34	9.20	6.46
	Kadi	15.98	0.00	75.11	6.89	2.02
	Kambli	0.00	0.00	100.00	0.00	0.00
	Khandala	1.13	7.37	74.48	11.72	5.29
	Khandeshwar	0.96	0.00	50.92	37.13	10.99
	Khasapur	0.77	0.00	67.20	19.32	12.71
	Kurnoor	0.00	4.27	53.51	29.10	13.12
	Mehkari	0.00	0.00	87.34	0.47	12.20
	Ramganga	0.00	0.00	77.36	17.92	4.72
	Ruti	0.00	0.00	73.44	11.72	14.84
	Sakat	1.35	0.00	62.57	25.37	10.71
	Talwar	0.00	0.00	97.95	0.00	2.05
	Turori	0.00	8.00	41.08	36.36	14.56
	CADA Beed	0.84	1.86	64.21	22.05	11.05
Upper Krishna (E)	Yeralwadi	42.82	0.00	53.29	2.47	1.42
	CADA Pune	42.82	0.00	53.29	2.47	1.42
Remaining Bhima+ Man	Ashti	13.03	0.00	22.90	12.34	51.72
	Buddhihal	22.35	0.00	72.82	4.83	0.00
	Ekrukh	0.00	0.42	44.35	24.42	30.81
	Hingani (Pangaon)	11.15	1.27	44.11	28.79	14.69
	Jawalgaon	12.53	0.00	59.32	9.37	18.78
	Mangi	3.18	0.00	63.83	8.72	24.27
	CADA Solapur	10.68	0.45	51.12	16.72	21.03

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Remaining Bhima+ Man	Andhali	0.00	0.00	60.07	32.86	7.07
	Khairy	13.87	0.00	68.82	17.32	0.00
	Mhaswad	0.00	0.00	28.26	65.56	6.18
	Nher	0.00	0.00	94.26	4.71	1.04
	Ranand	0.00	0.00	79.37	15.67	4.96
	Sina	11.93	0.00	55.40	31.51	1.16
	Tisangi	0.00	0.00	51.04	33.21	15.75
	PIC Pune	5.00	0.00	52.89	36.82	5.29
Upper Krishna (E)	Basappawadi	0.00	0.00	0.00	0.00	0.00
	Dodda Nalla	0.00	0.00	100.00	0.00	0.00
	Sankh	25.49	0.00	29.07	45.45	0.00
	Siddhewadi	9.33	0.00	73.87	16.80	0.00
	SIC Sangli	16.58	0.00	53.78	29.64	0.00
Highly Deficit						
Deficit						
Purna+Dudhana	Wakod	0.00	0.00	100.00	0.00	0.00
	AIC Abad	0.00	0.00	100.00	0.00	0.00
Purna (Tapi)	Dnyanganga	0.00	0.00	85.02	11.94	3.04
	Mas	0.00	0.07	92.76	7.02	0.14
	Morna (Akola)	0.00	1.41	82.57	4.81	11.20
	Nirguna	0.00	0.74	93.71	0.00	5.54
	Paldhag	0.00	9.77	87.27	0.00	2.97
	Shahnoor	0.00	1.37	89.31	0.04	9.28
	Uma	0.00	0.15	97.04	2.08	0.73
	AIC Akola	0.00	1.31	89.34	3.29	6.07
Purna (Tapi)	Mun	0.00	0.00	99.06	0.00	0.94
	Torna	0.00	7.50	83.75	0.00	8.75
	Utawali	0.00	0.00	97.59	0.00	2.41
	BIPC Buldhana	0.00	0.40	97.99	0.00	1.61
Middle Tapi (South)	Ajanta Andhari	33.50	0.00	66.50	0.00	0.00
	Anjana Palashi	0.00	6.12	89.86	0.00	4.02
	Dhamna	0.00	29.87	68.62	0.00	1.51
	Gadadgad	2.86	22.67	41.52	0.76	32.19
	Galhati	0.00	34.46	45.74	1.88	17.92
	Girja	0.03	21.18	73.07	0.00	5.71

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Manjra	Jivrekha	0.00	0.00	96.47	0.00	3.53
	Jui	0.00	6.66	93.18	0.00	0.17
	Kalyan Girija	0.00	11.42	84.21	0.00	4.37
	Karpara	0.00	0.00	97.32	2.68	0.00
	Khelna	0.00	14.65	80.97	0.00	4.38
	Lahuki	0.00	1.46	97.57	0.00	0.97
	Masoli	0.00	2.26	18.08	22.74	56.92
	Pir Kalyan	0.00	3.46	88.12	0.00	8.42
	Purna Nevpur	0.00	7.12	92.81	0.00	0.07
	Sukhana	0.00	3.79	95.16	0.00	1.06
	Upper Dudhana	0.00	5.79	94.21	0.00	0.00
	CADA Abad	0.37	9.23	82.38	1.43	6.60
	Belpara	0.00	0.00	47.71	2.08	50.21
	Bindusara	0.00	0.00	100.00	0.00	0.00
	Bodhegaon	0.00	9.09	6.06	48.48	36.36
	Borna	0.00	1.81	48.96	5.70	43.52
	Devarjan	6.25	4.38	27.71	2.50	59.17
	Gharni	2.34	0.43	57.29	8.41	31.52
	Kundalika	0.00	3.32	20.52	8.02	68.13
	Mahasangvi	0.00	0.00	100.00	0.00	0.00
	Masalga	0.00	0.73	33.44	0.00	65.83
	Raigavan	0.00	0.00	11.01	30.55	58.44
	Renapur	6.99	0.40	43.31	0.00	49.30
	Rui	1.41	0.00	44.47	34.82	19.29
	Sakol	2.81	7.29	42.08	4.63	43.20
	Sangameshwar (Dokewadi)	0.00	0.00	54.30	32.34	13.35
	Saraswati	0.00	3.68	36.10	9.39	50.83
	Sindphana	0.00	0.00	76.16	0.61	23.23
	Tawarja	0.00	0.00	49.42	0.47	50.12
	Terna	0.00	0.00	46.07	16.61	37.32
	Tiru	0.00	9.55	56.40	1.52	32.52
	Wan (Beed)	0.00	0.00	20.04	0.58	79.38
	Whati	0.00	1.93	40.93	3.85	53.29
	CADA Beed	0.91	2.07	47.07	9.83	40.12

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
Girna	Agnavati	41.86	27.44	20.93	2.79	6.98
	Bhokarbari	29.12	18.26	44.06	8.05	0.51
	Bori	0.00	0.00	58.79	41.21	0.00
	Burai	23.01	6.46	64.32	5.87	0.34
	Hiwara	29.86	40.60	26.74	2.73	0.07
	Jamkhedi	0.00	0.00	97.98	0.00	2.02
	Kanoli	41.26	0.00	58.59	0.15	0.00
	Manyad	1.69	19.90	50.56	14.50	13.35
	Rangawali	56.71	0.00	22.56	10.54	10.19
	Tondapur	25.43	30.71	34.48	1.99	7.40
	CADA Jalgaon	22.22	11.38	47.65	13.02	5.74
Girna	Haranbari	7.28	0.00	76.20	7.25	9.27
	Kelzar	11.93	0.00	73.50	7.64	6.93
	Nagya Sakya	8.22	0.00	57.94	33.83	0.00
	CADA Nashik	8.79	0.00	70.73	14.25	6.23
Middle Tapi (Satpuda)	Bahula	0.00	37.35	14.46	12.05	36.14
	JIPC Jalgaon	0.00	37.35	14.46	12.05	36.14
Manjra	Karadkhed	0.00	11.34	65.81	2.24	20.61
	Kudala	0.00	0.00	53.06	17.90	29.04
	Kundrala	0.00	23.29	14.73	15.75	46.23
	Mahalingi	0.00	3.37	92.13	0.00	4.49
	Pethwadaj	0.00	0.37	74.60	9.33	15.71
	NIC Nanded	0.00	6.25	62.05	9.20	22.50
Purna (Tapi)	Chandrabhaga (Amravati)	0.00	0.00	15.55	0.00	84.45
	Purna (Achalpur)	0.00	0.00	5.22	44.54	50.25
	UWPC Amravati	0.00	0.00	11.14	19.01	69.85
Deficit						
Normal						
Upper Godavari	Shivna Takali	0.00	0.00	100.00	0.00	0.00
	AIC Abad	0.00	0.00	100.00	0.00	0.00
Painganga	Borgaon	0.00	3.76	96.14	0.00	0.10
	Ekbhuji	0.00	0.32	97.92	1.68	0.08
	Goki	0.00	8.83	71.20	13.36	6.61
	Koradi	0.00	0.33	95.02	0.85	3.80
	Lower Pus	0.00	3.81	54.68	23.07	18.43

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Saikheda	0.00	48.90	40.90	10.02	0.17
	Sonal	0.00	6.51	88.65	2.14	2.70
	Waghadi	0.00	7.73	56.20	35.83	0.24
	AIC Akola	0.00	8.63	72.19	12.78	6.40
Wardha	Nawargaon	0.00	0.00	100.00	0.00	0.00
	Pen Takli	0.00	0.00	99.88	0.12	0.00
	BIPC Buldhana	0.00	0.00	99.89	0.11	0.00
Upper Godavari	Ambadi	0.00	11.07	79.58	0.00	9.34
	Bor Dahegaon	0.00	9.26	87.50	0.00	3.24
	Dheku	0.00	21.03	78.97	0.00	0.00
	Kolhi	0.00	3.92	96.08	0.00	0.00
	Narangi	0.00	1.71	85.45	0.00	12.84
	Tembhapuri	0.00	14.06	81.81	0.00	4.13
	CADA Abad	0.00	12.64	83.04	0.00	4.32
Middle Tapi (Satpuda)	Abhora	4.53	9.82	24.95	24.62	36.08
	Aner	32.33	10.20	46.42	7.12	3.94
	Karwand	19.60	0.00	57.86	22.55	0.00
	Malangaon	33.80	0.00	65.40	0.32	0.48
	Panzara	40.94	0.00	58.21	0.04	0.81
	Sonwad	38.33	0.51	52.70	8.46	0.00
	Suki	0.00	0.00	0.00	0.00	0.00
	Suki Pickup Wier	7.35	9.30	36.32	1.40	45.63
	CADA Jalgaon	29.11	4.10	50.61	5.66	10.52
Upper Godavari	Adhala	43.95	0.00	42.05	9.89	4.10
	Alandi	11.98	0.00	32.37	1.69	53.96
	Bhojapur	40.97	0.00	56.87	0.00	2.16
	Ghatshil Pargaon	19.19	0.00	66.04	9.67	5.10
	Mandohol	13.20	0.00	71.64	15.15	0.00
	Waldevi	5.69	0.00	55.00	31.72	7.59
	CADA Nashik	26.96	0.00	45.99	6.01	21.04
Upper Bhima	Visapur	12.33	0.28	20.16	9.23	57.99
	CADA Pune	12.33	0.28	20.16	9.23	57.99
Sina	Bori	0.00	0.00	65.22	6.13	28.65
	CADA Solapur	0.00	0.00	65.22	6.13	28.65
Wardha	Amalnalla	0.00	26.74	73.26	0.00	0.00

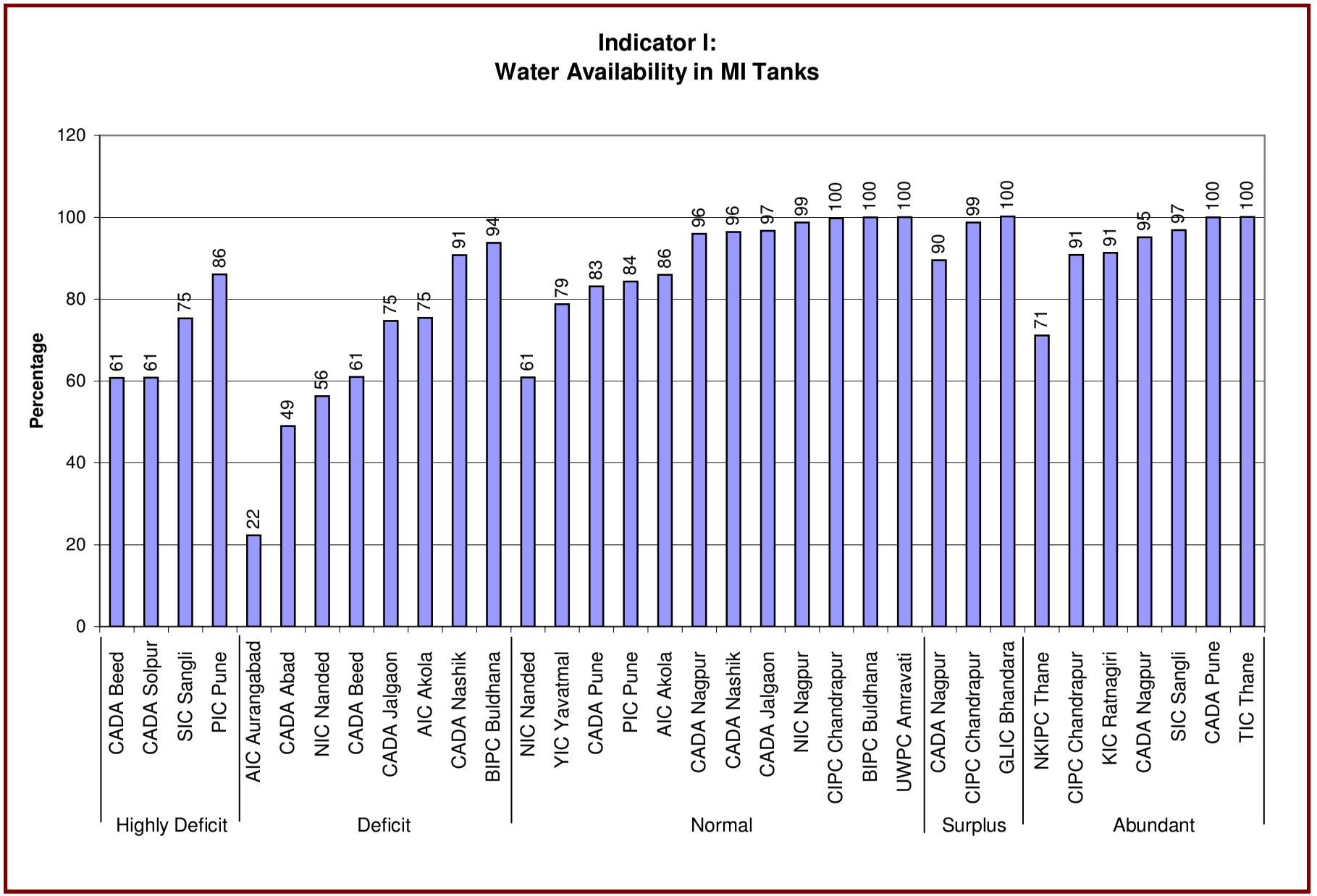
Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Dham	0.00	2.56	82.05	0.33	15.06
	Pothra1	0.00	0.00	100.00	0.00	0.00
	CIPC Chandrapur	0.00	12.13	82.83	0.11	4.94
Middle Tapi (Satpuda)	Bhokar (Mangrul)	0.00	0.00	0.00	0.00	0.00
	Mor	0.00	0.00	0.00	100.00	0.00
	JIPC Jalgaon	0.00	0.00	0.00	100.00	0.00
Lower Wainganga	Dongargaon (Chandrapur)	31.54	0.00	68.46	0.00	0.00
	Jam	0.00	0.00	98.01	0.64	1.36
	Kar	0.00	0.00	73.31	26.69	0.00
	NIC Nagpur	4.28	0.00	82.25	12.95	0.53
Painganga	Dongargaon (Nanded)	0.00	7.08	9.88	82.70	0.33
	Loni	0.00	17.03	68.89	10.24	3.84
	Nagzari	0.00	47.30	50.07	0.88	1.75
	NIC Nanded	0.00	24.12	45.39	28.36	2.12
Upper Bhima	Kasarsai	25.74	0.00	26.79	25.42	22.05
	Nazare	40.17	0.00	59.65	0.00	0.17
	Wadiwale	4.89	0.00	70.39	0.62	24.10
	PIC Pune	25.30	0.00	57.88	4.51	12.31
Painganga	Adan	0.00	0.17	38.20	0.18	61.45
	YIC Yavatmal	0.00	0.17	38.20	0.18	61.45
Normal						
Surplus						
Middle Wainganga	Bagheda	100.00	0.00	0.00	0.00	0.00
	Betekar Bothli	94.97	0.00	5.03	0.00	0.00
	Bodalkasa	100.00	0.00	0.00	0.00	0.00
	Chandpur	99.49	0.00	0.26	0.26	0.00
	Chandrabhaga (Nagpur)	0.38	0.43	82.16	0.31	16.72
	Chorakhmara	100.00	0.00	0.00	0.00	0.00
	Chulband	80.11	0.00	0.00	19.70	0.19
	Kanolibara	0.00	0.00	98.42	1.58	0.00
	Kesarnala	0.00	2.84	87.81	2.63	6.72
	Khairbanda	96.69	0.00	0.00	3.31	0.00
	Khekara Nalla	0.00	3.99	86.76	5.72	3.53
	Kolar	0.33	23.56	69.60	1.96	4.55
	Makardhokada-Saiki	0.00	0.00	100.00	0.00	0.00

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
	Managadh	0.00	0.00	0.00	100.00	0.00
	Mordham	0.37	0.00	90.99	1.14	7.50
	Pandharbodi	24.87	0.00	75.13	0.00	0.00
	Rengepar	94.23	0.00	0.00	5.77	0.00
	Sangrampur	100.00	0.00	0.00	0.00	0.00
	Sorna	95.39	0.00	4.61	0.00	0.00
	Tekepar LIS	91.30	0.00	8.70	0.00	0.00
	Umri	1.02	4.64	66.09	21.11	7.14
	Wunna	0.00	0.00	100.00	0.00	0.00
	CADA Nagpur	66.77	1.92	27.74	2.54	1.02
Middle Wainganga	Chandai	0.00	0.00	59.25	21.86	18.89
	Chargaon	45.60	0.00	54.40	0.00	0.00
	Labhansarad	0.00	0.00	100.00	0.00	0.00
	Pakadigundam	0.00	11.66	88.34	0.00	0.00
	Panchadhara Complex	0.00	0.74	99.01	0.00	0.25
	CIPC Chandrapur	16.40	1.19	73.18	4.94	4.30
Middle Wainganga	Katangi	21.19	0.00	0.00	78.81	0.00
	GKLIS Bhandara	21.19	0.00	0.00	78.81	0.00
Surplus						
Abundant						
Wardha	Dongargaon (Wardha)	0.00	4.66	88.92	0.00	6.41
	Ghorazari	100.00	0.00	0.00	0.00	0.00
	Naleshwar	100.00	0.00	0.00	0.00	0.00
	CIPC Chandrapur	96.19	0.18	3.39	0.00	0.24
Vashishthi	Natuwadi	0.00	0.00	100.00	0.00	0.00
	KIC Ratnagiri	0.00	0.00	100.00	0.00	0.00
North Konkan	Hetwane	0.00	0.00	100.00	0.00	0.00
	NKIPC Thane	0.00	0.00	100.00	0.00	0.00
Upper Krishna (W)	Chikotra	0.00	0.00	34.23	0.00	65.77
	Chitri	0.00	0.00	10.42	1.40	88.17
	Jangamhatti	0.00	0.00	15.27	0.00	84.73
	Kadvi	0.00	0.00	29.88	0.00	70.12
	Kasari	0.00	0.00	19.30	0.00	80.70
	Krishna Canal & Khodshi	40.23	0.00	25.56	1.46	32.75
	Backwater Kumbhi	0.00	0.00	6.74	0.00	93.26

Subbasin/PlanGroup	Project/ Circle	Kharif seasonals	Two seasonals	Rabi seasonals	HW seasonals	Perennials
North Konkan	Morna (Sangli)	0.00	0.00	68.81	0.00	31.19
	Patgaon	0.00	0.00	24.09	3.56	72.35
	Yeoti Masoli	0.00	0.00	80.55	0.00	19.45
	SIC Sangli	8.34	0.00	23.81	0.92	66.93
	Rajanalla Complex	0.00	0.00	99.68	0.00	0.32
	Wandri	0.00	0.00	100.00	0.00	0.00
	TIC Thane	0.00	0.00	99.75	0.00	0.25

Abundant

Annexure III:
Indicators of Minor projects

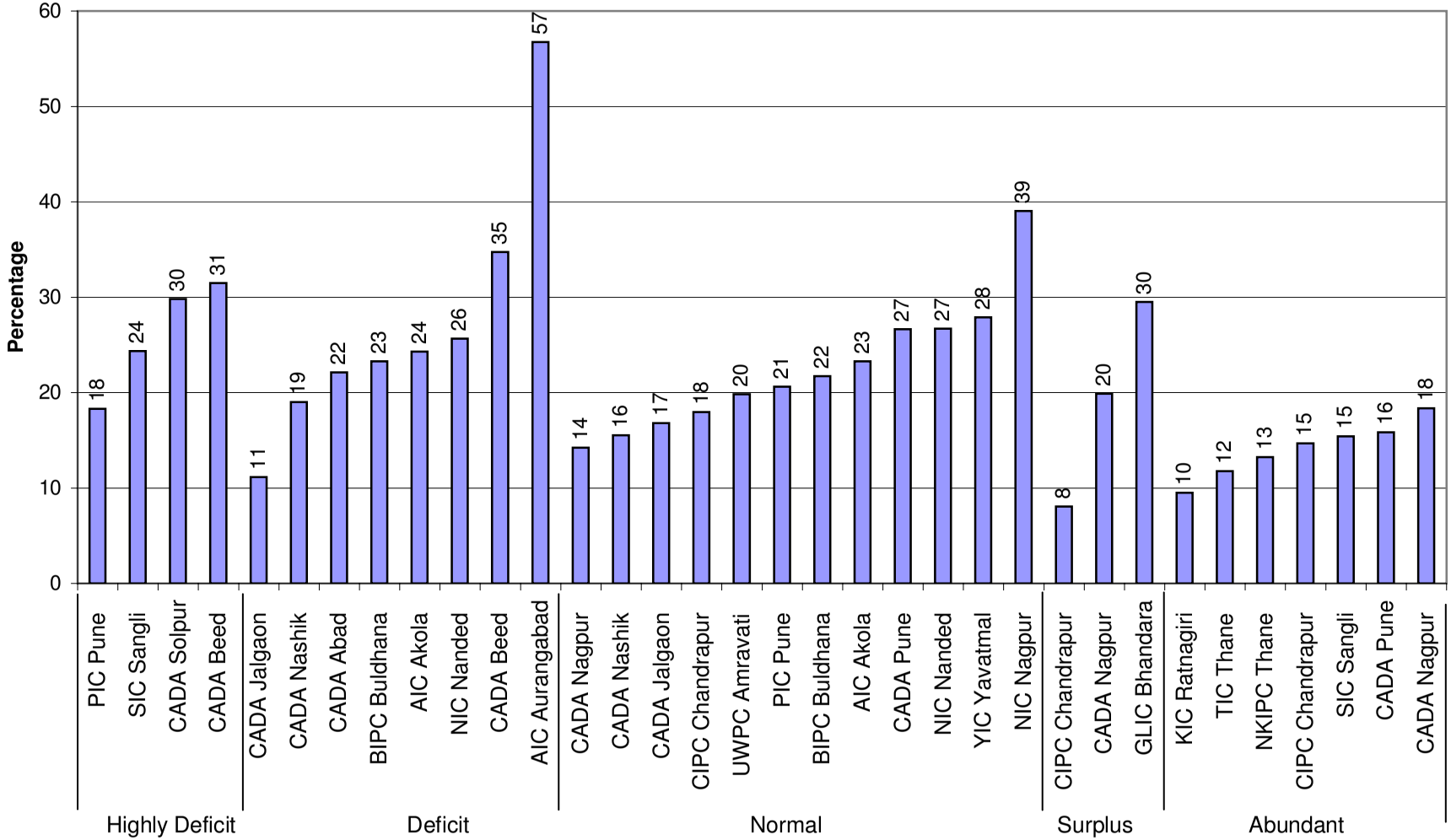

Indicator I:
Water Availability in MI Tanks
Percentage
120
100
80
60
40
20
0
61
61
75
86
22
49
56
61
75
75
91
94
61
79
83
84
86
96
96
97
99
100
100
100
90
99
100
71
91
91
95
97
100
100
CADA Beed
CADA Solpur
SIC Sangli
PIC Pune
AIC Aurangabad
CADA Abad
NIC Nanded
CADA Beed
CADA Jalgaon
AIC Akola
CADA Nashik
BIPC Buldhana
NIC Nanded
YIC Yavatmal
CADA Pune
PIC Pune
AIC Akola
CADA Nagpur
CADA Nashik
CADA Jalgaon
NIC Nagpur
CIPC Chandrapur
BIPC Buldhana
UWPC Amravati
CADA Nagpur
CIPC Chandrapur
GLIC Bhandara
NKIPC Thane
CIPC Chandrapur
KIC Ratnagiri
CADA Nagpur
SIC Sangli
CADA Pune
TIC Thane
Highly Deficit
Deficit
Normal
Surplus
Abundant

Indicator I : Availability in MI Tanks

Unit : Mcum

Circle	Max. Live StorageObserved	Designed Live Storage	Precentage
CADA Solpur	65.76	108.09	60.83
SIC Sangli	111.78	148.48	75.28
CADA Beed	132.65	218.38	60.74
PIC Pune	51.51	59.86	86.04
Highly Deficit	**361.69**	**534.81**	**67.63**
CADA Beed	259.28	425.15	60.99
CADA Abad	75.11	153.29	49.00
CADA Nashik	55.73	61.40	90.77
AIC Akola	139.98	185.62	75.41
CADA Jalgaon	4.40	5.89	74.69
BIPC Buldhana	158.01	168.51	93.77
NIC Nanded	42.29	75.08	56.32
AIC Aurangabad	23.55	105.69	22.29
Deficit	**758.34**	**1,180.63**	**64.23**
CADA Nagpur	35.25	36.73	95.97
CADA Pune	41.91	50.43	83.11
PIC Pune	123.05	145.95	84.31
CADA Jalgaon	124.97	129.21	96.72
CIPC Chandrapur	29.66	29.73	99.76
AIC Akola	295.70	344.02	85.95
BIPC Buldhana	17.75	17.75	100.00
CADA Nashik	114.30	118.58	96.40
NIC Nanded	66.59	109.35	60.89
NIC Nagpur	29.78	30.15	98.75
UWPC Amravati	9.88	9.88	100.00
YIC Yavatmal	69.17	87.81	78.77
Normal	**958.00**	**1,109.58**	**86.34**
CADA Nagpur	131.55	146.98	89.50
CIPC Chandrapur	35.47	35.92	98.73
GLIC Bhandara	5.51	5.51	100.00
Surplus	**172.54**	**188.41**	**91.57**
CADA Pune	11.99	11.99	100.00
NKIPC Thane	64.64	90.87	71.13
CADA Nagpur	49.04	51.57	95.08
CIPC Chandrapur	53.47	58.88	90.81
KIC Ratnagiri	95.64	104.71	91.34
SIC Sangli	155.77	160.79	96.88
TIC Thane	183.51	183.51	100.00
Abundant	**614.16**	**662.31**	**92.73**
Grand Total:	**2,864.73**	**3,675.75**	**77.94**

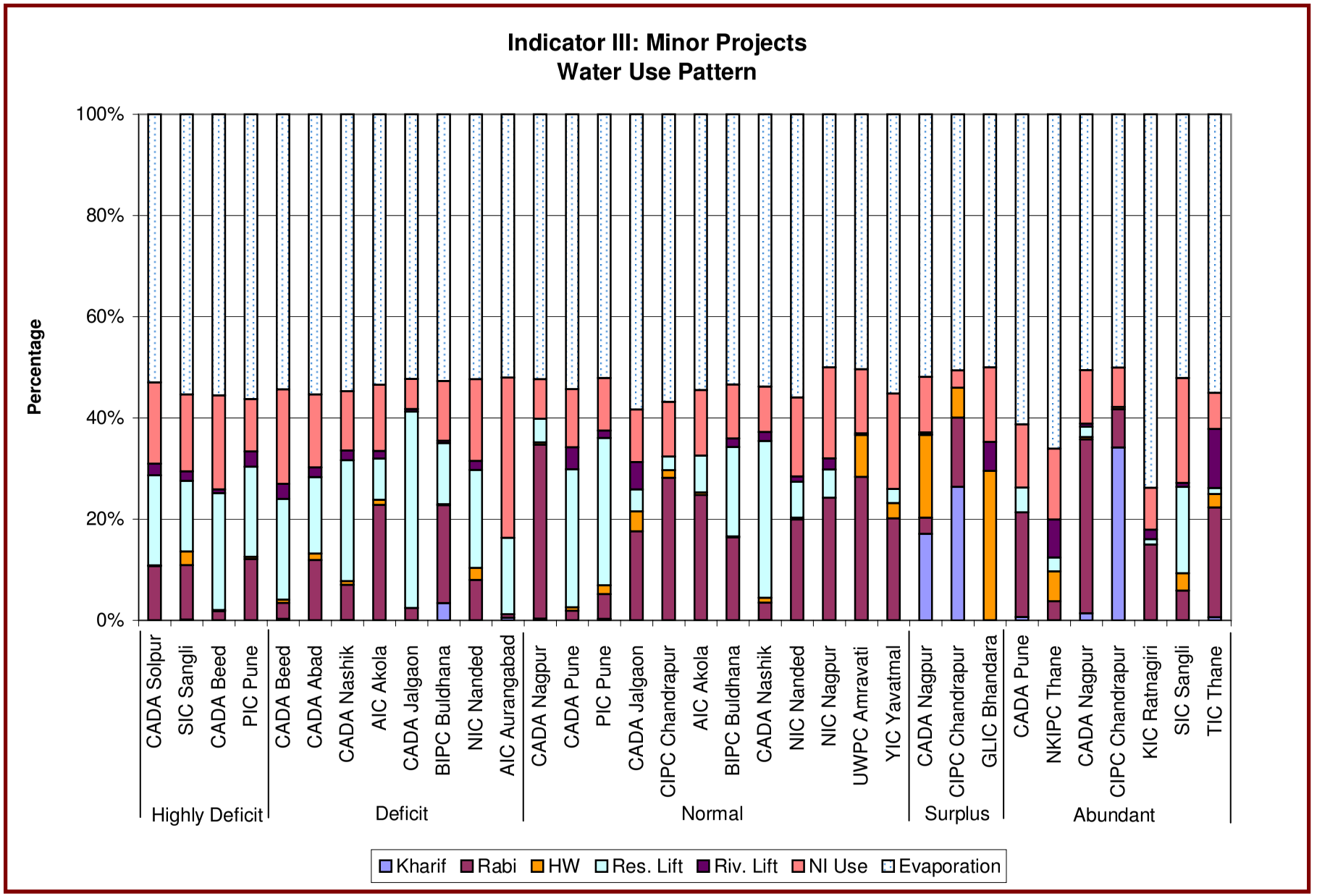
Indicator II:
Percentage Evaporation to Losses to Max.Ls



Indicator II : Percentage of Evaporation Losses to Live Storage in Minor Irrigation Tank

Unit : Mcum

Circle	Evaporation Losses	Max. Live StorageObserved	Precentage
CADA Solpur	19.60	65.76	29.81
SIC Sangli	27.22	111.78	24.35
CADA Beed	41.78	132.65	31.50
PIC Pune	9.42	51.51	18.29
Highly Deficit	**98.02**	**361.69**	**27.10**
CADA Beed	90.04	259.28	34.72
CADA Abad	16.62	75.11	22.13
CADA Nashik	10.59	55.73	19.00
AIC Akola	34.03	139.98	24.31
CADA Jalgaon	0.49	4.40	11.14
BIPC Buldhana	36.80	158.01	23.29
NIC Nanded	10.85	42.29	25.66
AIC Aurangabad	13.37	23.55	56.75
Deficit	**212.79**	**758.34**	**28.06**
CADA Nagpur	5.02	35.25	14.23
CADA Pune	11.17	41.91	26.65
PIC Pune	25.36	123.05	20.61
CADA Jalgaon	21.01	124.97	16.81
CIPC Chandrapur	5.33	29.66	17.97
AIC Akola	68.81	295.70	23.27
BIPC Buldhana	3.86	17.75	21.74
CADA Nashik	17.76	114.30	15.53
NIC Nanded	17.79	66.59	26.71
NIC Nagpur	11.63	29.78	39.04
UWPC Amravati	1.96	9.88	19.84
YIC Yavatmal	19.30	69.17	27.90
Normal	**208.98**	**958.00**	**21.81**
CADA Nagpur	26.16	131.55	19.89
CIPC Chandrapur	2.86	35.47	8.07
GLIC Bhandara	1.63	5.52	29.52
Surplus	**30.65**	**172.54**	**17.77**
CADA Pune	1.90	11.99	15.84
NKIPC Thane	8.56	64.64	13.24
CADA Nagpur	9.00	49.04	18.35
CIPC Chandrapur	7.85	53.47	14.67
KIC Ratnagiri	9.09	95.64	9.51
SIC Sangli	24.00	155.77	15.40
TIC Thane	21.63	183.62	11.78
Abundant	**82.02**	**614.16**	**13.35**
Grand Total	**632.46**	**2,864.73**	**22.00**

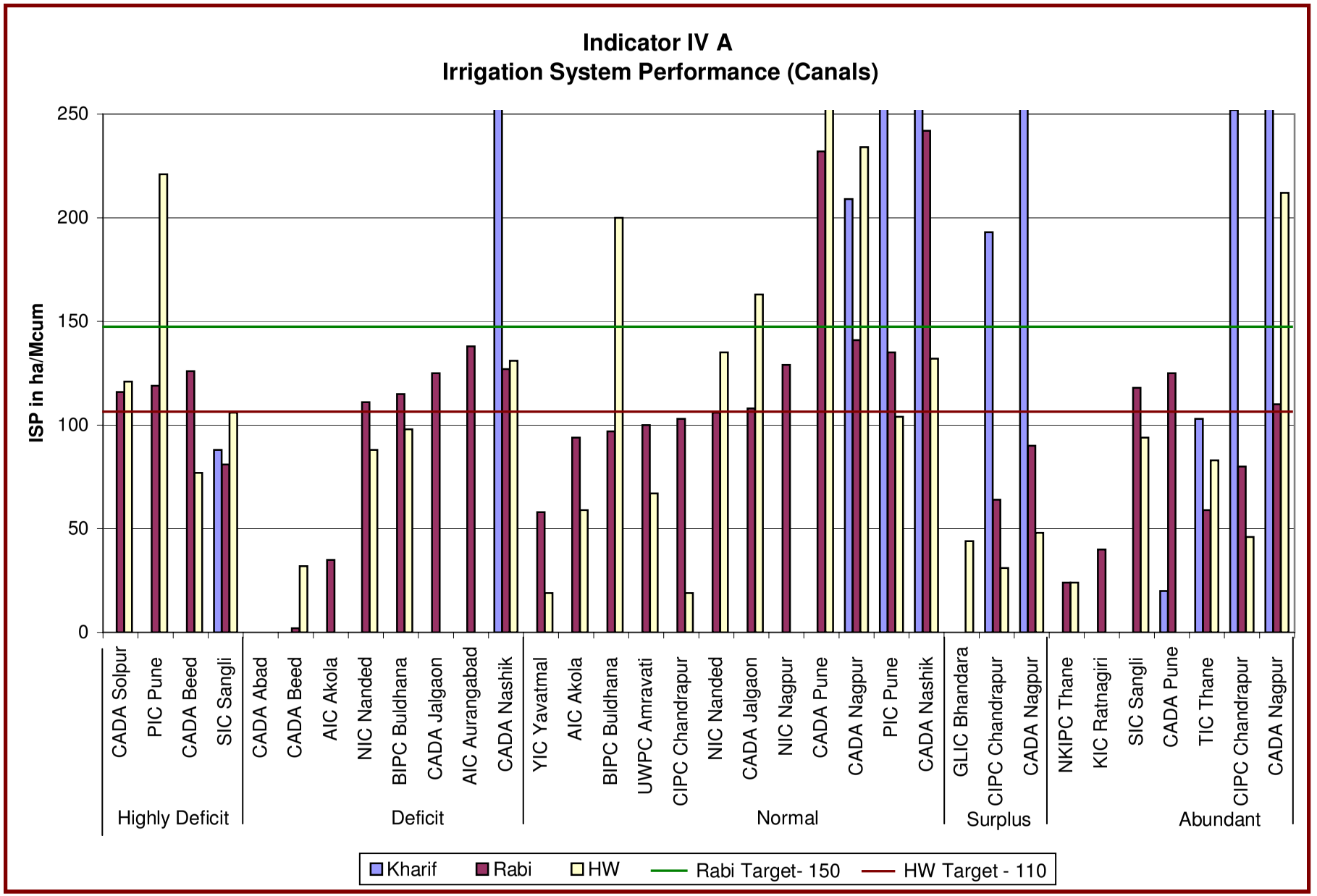

Indicator III: Minor Projects
Water Use Pattern
Percentage
100%
80%
60%
40%
20%
0%
CADA Solpur
SIC Sangli
CADA Beed
PIC Pune
CADA Beed
CADA Abad
CADA Nashik
AIC Akola
CADA Jalgaon
BIPC Buldhana
NIC Nanded
AIC Aurangabad
CADA Nagpur
CADA Pune
PIC Pune
CADA Jalgaon
CIPC Chandrapur
AIC Akola
BIPC Buldhana
CADA Nashik
NIC Nanded
NIC Nagpur
UWPC Amravati
YIC Yavatmal
CADA Nagpur
CIPC Chandrapur
GLIC Bhandara
CADA Pune
NKIPC Thane
CADA Nagpur
CIPC Chandrapur
KIC Ratnagiri
SIC Sangli
TIC Thane
Highly Deficit
Deficit
Normal
Surplus
Abundant
Kharif
Rabi
HW
Res. Lift
Riv. Lift
NI Use
Evaporation

Indicator III : Water Use Pattern
Minor Irrigation Tank

Unit : Mcum

Water Use

Circle	kharif	Rabi	HW	Reservoir	NIuse	Evaporation	Leakage	Total
CADA Solpur	0.00	13.12	0.17	21.73	2.83	19.60	7.36	64.81
SIC Sangli	0.23	19.28	4.89	24.95	3.39	27.22	19.30	99.26
CADA Beed	0.00	4.04	0.49	51.92	1.63	41.78	25.08	124.94
PIC Pune	0.00	11.00	0.39	16.22	2.74	9.42	11.41	51.18
Highly Deficit	**0.23**	**47.43**	**5.95**	**114.82**	**10.59**	**98.02**	**4.00**	**281.03**
CADA Beed	1.32	15.31	3.12	95.98	14.41	90.04	42.33	262.50
CADA Abad	0.00	13.75	1.46	17.41	2.21	16.62	12.43	63.87
CADA Nashik	0.03	6.31	0.63	21.62	1.71	10.59	8.59	49.48
AIC Akola	0.00	59.18	2.60	21.19	3.92	34.03	17.86	138.78
CADA Jalgaon	0.00	0.20	0.00	3.19	0.04	0.49	0.38	4.30
BIPC Buldhana	10.50	60.44	0.47	37.76	1.41	36.80	16.95	164.32
NIC Nanded	0.00	5.36	1.60	13.02	1.22	10.85	3.19	35.24
AIC Aurangabad	0.21	0.29	0.00	6.38	0.00	13.37	1.71	21.96
Deficit	**12.06**	**160.84**	**9.88**	**216.54**	**24.92**	**212.79**	**16.00**	**653.02**
CADA Nagpur	0.20	22.10	0.28	3.01	0.01	5.02	3.05	33.66
CADA Pune	0.00	1.82	0.67	26.55	4.20	11.17	8.45	52.85
PIC Pune	0.67	11.91	4.25	71.14	3.49	25.36	10.50	127.32
CADA Jalgaon	0.00	35.52	7.99	8.83	10.92	21.01	33.81	118.08
CIPC Chandrapur	0.00	13.93	0.74	1.34	0.00	5.33	6.78	28.12
AIC Akola	0.00	131.26	2.87	38.38	0.00	68.81	47.86	289.17
BIPC Buldhana	0.00	5.93	0.07	6.39	0.61	3.86	2.47	19.33
CADA Nashik	0.05	6.78	1.94	61.11	3.48	17.76	15.04	106.15
NIC Nanded	0.00	22.63	0.46	8.05	1.17	17.79	13.56	63.65
NIC Nagpur	0.00	15.63	0.00	3.62	1.42	11.63	0.00	32.30
UWPC Amravati	0.00	4.37	1.28	0.05	0.00	1.96	0.12	7.78
YIC Yavatmal	0.00	20.62	3.09	2.87	0.00	19.30	10.64	56.51
Normal	**0.92**	**292.50**	**23.63**	**231.33**	**25.29**	**208.98**	**36.00**	**818.65**
CADA Nagpur	40.54	7.68	38.81	0.36	0.85	26.16	8.99	123.39
CIPC Chandrapur	21.98	11.42	4.94	0.00	0.00	2.86	1.04	42.24
GLIC Bhandara	0.00	0.00	3.26	0.00	0.63	1.63	0.00	5.52
Surplus	**62.51**	**19.10**	**47.01**	**0.36**	**1.48**	**30.65**	**12.00**	**173.11**
CADA Pune	0.10	3.14	0.00	0.74	0.00	1.90	3.42	9.30
NKIPC Thane	0.00	2.30	3.59	1.69	4.56	8.56	19.61	40.31
CADA Nagpur	1.15	29.30	0.38	1.75	0.50	9.00	0.98	43.06
CIPC Chandrapur	34.42	7.61	0.50	0.00	0.00	7.85	0.10	50.49
KIC Ratnagiri	0.00	16.40	0.00	1.18	2.05	9.09	52.19	80.92
SIC Sangli	0.00	6.80	3.98	19.77	0.89	24.00	4.95	60.38
TIC Thane	1.78	65.87	8.16	3.55	35.48	21.63	30.76	167.22
Abundant	**37.46**	**131.43**	**16.60**	**28.67**	**43.48**	**82.02**	**35.00**	**374.66**
Grand Total :	**113.18**	**651.29**	**103.07**	**591.72**	**105.76**	**632.46**	**271.96**	**2469.44**


Indicator IV A
Irrigation System Performance (Canals)
ISP in ha/Mcum
250
200
150
100
50
0
CADA Solpur
PIC Pune
CADA Beed
SIC Sangli
CADA Abad
CADA Beed
AIC Akola
NIC Nanded
BIPC Buldhana
CADA Jalgaon
AIC Aurangabad
CADA Nashik
YIC Yavatmal
AIC Akola
BIPC Buldhana
UWPC Amravati
CIPC Chandrapur
NIC Nanded
CADA Jalgaon
NIC Nagpur
CADA Pune
CADA Nagpur
PIC Pune
CADA Nashik
GLIC Bhandara
CIPC Chandrapur
CADA Nagpur
NKIPC Thane
KIC Ratnagiri
SIC Sangli
CADA Pune
TIC Thane
CIPC Chandrapur
CADA Nagpur
Highly Deficit
Deficit
Normal
Surplus
Abundant
Kharif
Rabi
HW
Rabi Target- 150
HW Target - 110

Indicator IV :

Irrigation System Performance

Minor Irrigation Tanks

Unit : ha/Mcum

Canal

Circle	Kharif	Rabi	HW
CADA Solpur	0	116	121
SIC Sangli	88	81	106
CADA Beed	0	126	77
PIC Pune	0	119	221
Highly Deficit	**88**	**103**	**111**
CADA Beed	0	52	32
CADA Abad	0	0	0
CADA Nashik	333	127	131
AIC Akola	0	35	0
CADA Jalgaon	0	125	0
BIPC Buldhana	0	115	98
NIC Nanded	0	111	88
AIC Aurangabad	0	138	0
Deficit	**0**	**65**	**37**
CADA Nagpur	209	141	234
CADA Pune	0	232	349
PIC Pune	268	135	104
CADA Jalgaon	0	108	163
CIPC Chandrapur	0	103	19
AIC Akola	0	94	59
BIPC Buldhana	0	97	200
CADA Nashik	280	242	132
NIC Nanded	0	106	135
NIC Nagpur	0	129	0
UWPC Amravati	0	100	67
YIC Yavatmal	0	58	19
Normal	**255**	**106**	**114**
CADA Nagpur	554	90	48
CIPC Chandrapur	193	64	31
GLIC Bhandara	0	0	44
Surplus	**427**	**74**	**45**
CADA Pune	20	125	0
NKIPC Thane	0	24	24
CADA Nagpur	306	110	212
CIPC Chandrapur	252	80	46
KIC Ratnagiri	0	40	0
SIC Sangli	0	118	94
TIC Thane	103	59	83
Abundant	**245**	**73**	**74**
Total	**319**	**88**	**69**

ANNEXURE - IV

SEDIMENTATION STUDIES OF MAJOR AND MEDIUM RESERVOIRS, DONE AT M.E.R.I., NASHIK BY REMOTE SENSING TECHNIQUE.

Sr. No.	Name of reservoir	District	Basin/ Sub basin	C'ment area Sq.km.	Gross Storage Mm3	Live Storage Mm3	Dead Storage Mm3	Year of first impounding	Year of Siltation Survey	Siltation period years	Live storage lost due to sediment Mm3	%loss in Live storage	%Annual loss in Live storage	Designed rate of siltation ha-m/100 sq.km./ year	Observed rate of siltation ha-m/100 sq.km./ year	%of live storages covered
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Karanjwan	Nashik	Godavari	248.00	176.00	166.00	10.00	1974	2001-03	28	14	8.38	0.3	3.57	20.34	90
2	Gangapur	Nashik	Godavari	357.40	212.51	200.51	12.00	1965	2002-03	37	19	9.52	0.4	3.57	11.48	80
3	Darna	Nashik	Godavari	404.00	202.00	200.61	1.39	1916	2001-03	86	14	6.82	0.13	3.57	3.22	82
4	Majalgaon	Beed	Godavari	3840.00	454.00	312.00	142.00	1987	2003-04	15	28	8.82	0.52	n.a.	4.31	92
5	Ozarkhed	Nashik	Godavari	182.00	69.91	61.00	8.91	1984	2002-03	18	1.93	3.06	0.19	3.57	5.89	87
6	Bhandardara	A'nagar	Godavari	121.73	313.00	304.00	9.00	1926	2002-03	77	0	0	0	n.a.	0	95
7	Waghad	Nashik	Godavari	119.00	76.00	72.00	4.00	1979	2002-03	23	2	3.07	0.133	3.57	7.31	98
8	Lower Terna	O'bad	Godavari	1787.00	160.00	114.00	46.00	1989	2002-03	13	23	20.16	1.55	7.5	16.25	100
9	Mukane	Nashik	Godavari	129.60	214.16	203.97	10.19	1994	2002-03	9	12	5.85	0.73	5.144	51.44	80
10	Manjara	Beed	Godavari	2373.00	251.00	173.00	78.00	1982	2000-02	20	23	13.16	0.65	3.57	4.84	100
11	Ujjani	Solapur	Krishna	14856.00	3320.00	1517.00	1803.00	1977	99-2001	24	159	10.55	0.44	3.57	11.35	100
12	Dhom	Satara	Krishna	217.50	382.00	331.00	51.00	1977	99-2000	23	6	1.93	0.08	3.57	13.36	70
13	Kanher	Satara	Krishna	204.56	286.00	272.00	14.00	1984	99-2000	16	3	1.2	0.075	3.57	12.25	57
14	Veer	Pune	Krishna	1756.00	279.00	266.00	13.00	1965	99-2000	35	22	8.28	0.23	3.57	3.31	91
15	Panshet	Pune	Krishna	120.30	303.00	294.00	9.00	1970	99-2000	30	15	5.07	0.17	3.57	33.25	89
16	Bhatghar	Pune	Krishna	331.50	673.00	673.00	0.00	1925	99-2000	75	101	15.5	0.2	n.a.	38.336	71
17	Varasgaon	Pune	Krishna	130.00	374.00	362.00	12.00	1992	99-2000	8	0	0	0	3.57	0	70
18	Upper Wardha	Amravati	Wardha	4302.00	786.00	615.00	171.00	1990	2002-03	12	26	4.25	0.35	3.57	4.26	86
19	Bor	Wardha	Wardha	380.75	139.00	127.00	12.00	1965	2002-03	37	5	3.96	0.1	3.57	3.15	88
20	Lower Wunna	Nagpur	Wardha	1076.00	153.00	136.00	17.00	1997	2002-03	6	1	0.46	0.07	7.5	1.54	78
21	Totala Doh	Nagpur	Wainganga	4283.00	1241.00	1091.00	150.00	1980	2002-03	22	46	4.23	0.19	3.57	4.46	88
22	Vaitarna	Nashik	Konkan	160.80	353.96	331.31	22.65	1976	2001-03	28	0.215	0.064	0.002	n.a.	0.478	73

Annexure-V

Organisation Chart of Irrigation Management

Secretary (CAD)