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Report On
BENCHMARKING OF IRRIGATION SYSTEMS IN MAHARASHTRA STATE
2008-09

WATER RESOURCES DEPARTMENT

Government Of Maharashtra, India

March 2010

This report is available on following web site

1) **Water Resources Department, Government of Maharashtra**
www.mahawrd.org

This report and data is also available on following web site

1) **Maharashtra Water Resources Development Centre, Aurangabad**
www.mwrdc.org

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WATER RESOURCES DEPARTMENT
GOVERNMENT OF MAHARASHTRA, INDIA
MARCH 2010

FOREWORD

Water is an important and valuable natural resources. It is said that water is life. On these terms it has become important to plan and co ordinate the available resource. The distribution of water resources is not even anywhere on this earth, so it is uneven in our Maharashtra State. With the development of Industries, the water availability for the crop production is becoming lesser every year. It has become necessary to utilize water in a very stringent manner.

In Maharashtra there are 71Major, 243 Medium and 2940 Minor projects fully or partially completed up to June 2008. In compliance to commitment in State Water Policy about transparency in water use and to identify the areas of problems in seeking objective set in the project planning, benchmarking of irrigation system in the State is in practice since last 6 years.

Benchmarking is a systematic process for securing continual improvement through comparison with relevant and achievable internal or external norms & standards. To achieve this every indicator is compared with last five years average, year (2007-08) & (2008-09). This enables to compare the performance with predecessors as well as own performance of the last year.

Use of benchmarking has conferred success in elevating the performance level of irrigation projects. Increase in potential utilization from 1.708 Mha to 2.732 Mha and revenue recovery from Rs. 252 crores to 673 crores is significant achievement of Water Resources Department during last five years.

More improvement in project performance can be attained if results of benchmarking are systematically utilized for framing and implementing the project wise action plan. Looking to this aspect from this year one new chapter on benchmarking of individual projects with 3 important parameters is added in the report.

In near future, there will be a shift of irrigation Water Management from Water Resources Department to Water Users Associations. Naturally, benchmarking of WUA will be also helpful for performance evaluation and creating awareness amongst water management staff and office bearers of WUA's.

Lastly, I appeal all project authorities to use benchmarking as an effective management tool to improve the current performance level of the irrigation projects.

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

I also appreciate the co-operation extended by The Director General, WALMI, Aurangabad for getting this report printed at Aurangabad.

Comments & suggestions on this report will be appreciated.

M.S. Mundhe
Secretary (CAD**)**

Maharashtra Water Resources Development Centre, Aurangabad

Team associated with Benchmarking Report

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Shri R. R. Kulkarni	Typist
Shri L. R. Jadhav	Typist
Smt. M. S. Tupe	Typist

ABBREVIATIONS

Avg Per	Average performance
BCM	Billion Cubic Metre
CAD	Command Area Development
CBIP	Central Board of Irrigation & Power
CCA	Culturable Command Area
CRT	Converted Regular Temporary
DIRD	Directorate of Irrigation Research & Development
FAO	Food & Agriculture Organisation
FY Avg	Five years average
GCA	Gross Command Area
GOI	Government of India
GOM	Government of Maharashtra
TS	Two Seasonals
ha	Hectare
HW	Hot weather
ICID	International Commission on Irrigation & Drainage
IMD	Indian Meteorological Department
INCID	Indian National Committee on Irrigation & Drainage
IPTRID	International Programme for Technology and Research in Irrigation and Drainage
IWMI	International Water Management Institute
m	Metre
M cum/ Mm^3	Million Cubic metre
Mha	Million Hectare
MKVDC	Maharashtra Krishna Valley Development Corporation
MWSIP	Maharashtra Water Sector Improvement programme
MMISF ACT	Maharashtra Management of Irrigation System by farmers Act 2005.
Mm	Millimeter
MWIC	Maharashtra Water & Irrigation Commission
MWRDC	Maharashtra Water Resources Development Centre
NLBC	Neera Left Bank Canal
NRBC	Neera Right Bank Canal
O & M	Operation & Maintenance
Past Max	Maximum value observed in Past
Past Min	Minimum value observed in Past
PIM	Participatory Irrigation Management
PIP	Preliminary Irrigation Programme
PLBC	Paithan Left Bank Canal
PRBC	Paithan Right Bank Canal
PWD	Public Works Department
Sq km	Square Kilometre

State Tar	State target
WALMI	Water and Land Management Institute, Aurangabad
WRD	Water Resources Department
WUA	Water Users' Association
ISP	Irrigation system performance
AIC Akola	Akola Irrigation Circle, Akola
AIC Aurangabad	Aurangabad Irrigation Circle, Aurangabad.
BIPC Buldhana	Buldhana Irrigation Project Circle, Buldhana
CADA A'bad	Command Area Development Authority, Aurangabad
CADA Beed	Command Area Development Authority, Beed
CIPC Chandrapur	Chandrapur Irrigation Project Circle, Chandrapur
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
NIPC Dhule	Nashik Irrigation Project Circle, Dhule
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 Yeotmal	Yeotmal Irrigation Circle, Yeotmal

C O N T E N T S

Executive Summary

The methodology and main performance Indicators for Benchmarking are adopted as per the guidelines issued by Indian National Committee on Irrigation & Drainage (INCID) in 2002.

The year wise indicators selected for benchmarking since 2001-02 along with their Domain are enlisted below:-

Year	Domain	Performance Indicator
2001-02	1. System Performance	i) Annual irrigation water supply per unit irrigated area
	2. Agricultural Productivity	i) Output per unit irrigated area, ii) Output per unit irrigation supply
	3. Financial Aspects	i) Cost Recovery Ratio ii) Total O&M cost per unit area iii) Revenue per unit volume of water supplied iv) Maintenance cost to revenue ratio v) Mandays for O&M per unit area vi) Total O&M cost per unit volume of water supplied
	4. Environmental Aspects	i) Land damage index
2002-03	1. Deleted Indicator	Maintenance Cost to Revenue Ratio
	2.Additional Indicators	1. Potential Created and Utilised Equity Performance
2003-04	Additional Indicator	Assessment Recovery Ratio a. Irrigation b. Non-irrigation
2004-05	No Change	
2006-07	1 Deleted	Mandays per unit area
2007-08	No Change	
2008-09	System performance	New indicator 1 a, Annual Area irrigated per unit of water supplied is added

Initially, the exercise was conducted for 84 projects in 2001-02 with 10 indicators. The number of projects increased to 254 in 2002-03 with 11 indicators. Instead of presenting the data of all these projects individually, an irrigation circle was considered as a unit for evaluation of performance. Here also, it was observed that some of the characteristics of projects under a circle are not identical and to make the comparison still on better grounds, from the year 2003-04, projects under a circle in a sub basin are grouped together and comparison is made with other projects in a particular plan group.

In carrying out the Benchmarking exercise, following categorization of irrigation schemes into similar types have been done for comparison.

a)	Type of control for Supply of water	Fixed proportional division, manual control, automatic control "Manual Control" is applicable in this Benchmarking Exercise.
b)	Method of allocation and distribution of water.	Supply-oriented arranged-demand, on demand The method applicable in this case is "on-demand."
c)	Water Availability	Abundant, Scarce. Highly deficit to Abundant.
d)	Water Source	Surface water, groundwater or both. Surface water is applicable
e)	Size	Major, Medium, Minor. All sizes applicable

This is the eighth consecutive report of benchmarking of irrigation projects in the State with 262 projects and 12 indicators. The plan group wise number of projects selected for benchmarking during 2008--09 is as follows.

Sr. No	Plan Group	Nagpur, Amravati Region			Pune, Konkan Region			Aurangabad, Nashik Region			
		Major	Medium	Minor	Major	Medium	Minor	Major	Medium	Minor	
1	Highly Deficit	--	--	--	1	11	3	-	16	4	35
2	Deficit	4	10	13	--	--	--	10	44	18	99
3	Normal	4	13	5	6	1	2	10	16	8	65
4	Surplus	3	22	4	--	--	--	--	--	--	29
5	Abundant	2	2	1	8	10	11	--	--	--	34
	Total	**13**	**47**	**23**	**15**	**22**	**16**	**20**	**76**	**30**	**262**

Grand Total: 262

Out of 12 indicators as mentioned above, one indicator regarding "Mandays Per Unit Area" was deleted and only 11 indicators are selected now.

Methodology

The data presented in this report is based on information collected from each of the circle in-charge of the project.

The following process was used in development of this report.

- For achieving consistency in monitoring & evaluation, same projects which are considered for benchmarking during 2007-08 are considered in year 2008-09.
- The data about water use and area irrigated is correlated with water accounts (2008-09) of relevant projects.

- The presentation for every indicator is done with past-past (5 year average), recent past (2007-08) and present year (2008-09) in order to compare the performance with predecessors as well as own performance of last year.

  Based on performance for 2008-09, indicator wise average performance is found out for the plan group of circles under consideration, setting aside the exceptionally high/low values.

. For financial indicator of output per unit irrigated area and output per unit irrigation water supply, fixed prices of 1998-99 are considered to obviate effect of price rise.

There are 2940 completed minor irrigation projects in the State. Therefore, it has been decided to carryout benchmarking and monitoring of minor projects at circle level itself. To get an idea about performance of minor projects, some sample schemes which were considered in last year's report are analysed and included in this report.

Benchmarking of WUA

Till June 2008, potential to the tune of 4.486 Mha has been created on state level projects.

In view of the huge capital cost investment in construction of projects as well as in rehabilitation of canal systems along with intention of securing the advantage of benchmarking, benchmarking of WUAs was felt necessary. Accordingly the issue of Benchmarking of WUA was under consideration for last two years.

To initialise the process, 9 Indicators feasible to determine the performance of individual WUA are designed and data in prescribed proforma was received from selected 12 WUA's on 7 Major projects.

The details about objectives of Benchmarking of WUA's, Proformae used for calling the data along with indicator wise, WUA wise analysis has been given as a case study in a separate chapter (Chapter 6) in this report.

Indicator wise Performance of Maharashtra State for the Years 2002-03 to 2008-09

Indicator – I: Annual Irrigation Water Supply per Unit Irrigation Area:
Unit: Cum/ha

Annual Irrigation water supplied for major projects in Maharashtra state is higher in 2008-09 i.e. 10253 cum/ha as compared to the same in the year 2007-08 i.e. 8289 cum/ha. And for medium project it is lower in the year 2008-09 i.e. 7447 cum/ha. compared to previous year 2007-08 i.e. 8449 cum/ha. For minor project the water use is less in the year 2003-04 i.e. 5945 cum/ha. and maximum in the year 2005-06 i.e. 9738 cum/ha and for the year 2008-09 the indicator value is 6575 cum/ha.

Indicator – I a: Annual Area Irrigated per unit of water supplied:
Unit: ha/Mm^3

The area irrigated per unit of water supplied in 2008-09 is 98 ha./Mm3 which is less than last year value i.e. 121 ha/Mm3 for Major projects. In case of Medium project indicator value is 134 ha/Mm3 for 2008-09, which is more than last year (2007-08) value i.e. 118 ha/Mm3. For Minor irrigation projects indicator values for the year 2008-09 is 152 ha./Mm3 which is more than last years value i.e. 145 ha./Mm3

Indicator –II: Potential created and utilized: **Unit: Ratio**

For Major Projects the maximum utilized potential was in the year 2006-07. The utilized potential is increasing yearly from 0.46 in the year 2002-03 to 0.91 in the year 2006-07. The utilized potential is 0.80 for current year. For medium projects the ratio in the year 2008-09 is 0.74. For minor Projects utilized potential was 0.42 in the year 2003-04 and it is improving for last four years and 0.89 in the year 2006-07, it has slightly decreased for the current year i.e. 0.63.

Indicator-III: Output per Unit Irrigated Area: **Unit: Rs/ha**

For Major Projects agricultural output shows variations in last five years. Maximum agricultural output of Rs. 36730/ha is in the year 2008-09 and minimum of Rs. 26758/ha is in the year 2003-04. For medium project the agricultural output of Rs. 42613/ha was maximum in 2005-06 and minimum of Rs. 25358/ha in the year 2004-05. For this year the indicator value is Rs. 28259/ha. For Minor Projects

agricultural output is maximum of Rs. 36176/ha in 2007-08 and minimum of Rs. 21015/ha in the year 2006-07. For this year the indicator value is Rs 22571/ha.

Indicator–IV: Out Put per Unit Irrigation Water Supply: Unit: Rs/Cum

For Major Project the output per cum was Rs. 2.93/cum in the year 2002-03 and went on increasing year by year and reached to a maximum of Rs 5.25/cum in the year 2008-09. For Medium Projects maximum output of Rs. 4.84/cum is in the year 2008-09. For minor projects the output of Rs 3.84/cum for the year 2008-09 year and minimum of Rs. 3.75/cum in the year 2006-07.

Indicator –V: Cost Recovery Ratio: Unit: Ratio

For major projects the ratio for the year 2008-09 is 0.95. For medium projects the ratio was in between 0.30 to 0.43 for last five years, for current year the ratio is maximum i.e., 0.39. In case of Minor Projects ratio was in between 0.28 to 0.35 for four years. But in 2005-06 the ratio was maximum i.e. 0.83, for this year the ratio is 0.23.

Indicator - VI: O & M Cost Per Unit Irrigated Area: Unit: Rs/ha

For Major Projects the O & M Cost per Unit Area is on higher side of state target for previous years it was nearly three times the state target except in the year 2006-07. It is Rs. 3687/ha in the current year. It is due to excess expenditure on maintenance. In Medium Project O & M expenditure increased from the year 2002-03 to 2008-09 consistently. For Minor Projects the O & M Cost Per Unit Area was minimum of Rs. 981/ha in the year 2002-03 and increased year by year to a maximum of Rs. 5035/ha in the year 2005-06. For the current year it is Rs 3574/ha.

Indicator – VII: O & M Cost per Unit Water Supply: Unit: Rs/Cum

For Major Projects O & M Cost per Unit water Supply ranges between Rs. 0.18/cum to Rs. 0.40/cum from year 2002-03 to 2007-08. However for the current year it is Rs. 0.28 /cum. For Medium Projects excessive O & M expenditure resulted in poor performance for last five years. It is Rs.0.37/cum for current year. For Minor projects the O & M Cost per Unit Water Use was in between Rs. 0.16/cum to Rs. 0.9/cum for five years. This year it is Rs. 0.45/cum.

Indicator – VIII: Revenue Per Unit Water Supply: Unit: Rs/cum

For Major Project in Maharashtra State, Revenue Per Unit Water Supply, for last five years, ranged from Rs. 0.20/cum to Rs. 0.24/cum. This year it has increased to Rs. 0.3/cum. For medium project the revenue was Rs. 0.07/cum in the year 2002-03 and went on increasing to Rs. 0.15/cum in the year 2005-06. The indicator value is Rs 0.12/cum for current year. For Minor Projects revenue per unit water use was in between Rs. 0.04/cum to Rs. 0.11/cum. For current year the ratio is Rs 0.05/cum.

Indicator – X: Land Damage Index Unit: Ratio

In some of the projects like Bhima, Jayakwadi, Manjra, Kukdi, Upper Penganga, Khadakwasla, Nira, Krishna and Radhanagri land damage to certain extent is observed. In Bhima, Jayakwadi, Upper Penganga the land damage index is slightly increasing. In remaining projects, either it is same or decreasing.

Indicator – XI: Equity performance: Unit: Ratio

In almost all projects the ratio in head reaches is more except in projects of CADA Nagpur. There are some projects like Khadakwasla, NLBC and Krishna where equity is maintained in all three reaches where as in NRBC the ratio of tail reach is more than remaining two.

Indicator – XII: Assessment Recovery Ratio (Irrigation): Unit: Ratio

For Major Project Assessment Recovery Ratio was minimum in the year 2005-06 i.e. Rs. 0.22. But in the year 2007-08 it increased to 0.40 due to improvement in recovery of irrigation water charges however it has been slightly decreased to 0.37 for the year 2008-09. For Medium Projects ratio shows ups and downs year wise. It was 0.22 in the year 2003-04 and increases to 0.67 in 2005-06, for the current year it is 0.33. For Minor Project Assessment Recovery Ratio was in between 0.43 to 0.81 for five years. For the current year it is 0.56.

Indicator – XII: Assessment Recovery Ratio (Non Irrigation): Unit: Ratio

For Major projects the ratio for the last six years is between 0.81 to 1.09, for the current year it is 0.73. For medium projects the ratio is between 0.64 to 1.85, for the current year it is 0.79. In minor projects the ratio is in between 0.40 to 1.07, for the current year it is 0.79.

CHAPTER - 1

INTRODUCTION

1.0.0 Benchmarking is a very powerful management tool for analysing and improving the performance of water resources projects. It is widely accepted all over the World. IPTRID, IWMI, ICID, World Bank & FAO advocate use of benchmarking – since 2000.

For evaluation and improvement in performance of water resources projects, Government of Maharashtra has undertaken the benchmarking exercise in the State since 2000-01. The first Benchmarking Report was published in 2001-02.

Considering a shift in Irrigation Water Management from Water Resources Department to Water User's Associations to secure the advantages of benchmarking, benchmarking of WUA'S was under consideration for last two years. To set an example before the Project Authority, an attempt in the form of benchmarking of selected 12 WUA'S on 7 major projects under different 5 Irrigation circles has been done in this year. Details about objectives, indicators selected, proformae framed for calling information of WUA, indicator values procurred etc is given in detail in chapter 6 of this report. This will be helpful to Project Authority and office bearers of WUA's for improving the performances of their WUA'S.

Maharashtra is the first State in India, which has introduced the Benchmarking technique for Irrigation Projects & now with our experience and CWC's follow-up other States are also adopting it.

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c)	Water Availability	Abundant, Scarce. Highly deficit to Abundant.
d)	Water Source	Surface water, groundwater or both. Surface water is applicable
e)	Size	Major, Medium, Minor. All sizes applicable

Details of year wise benchmarking done for irrigation projects are mentioned as below.

Year:	No. of Projects.				No. of Indicators	Year of publication
	Major	Medium	Minor	Total		
2001-02	30	26	28	84	10	March 2003
2002-03	49	142	63	254	11	March 2004
2003-04	49	143	69	261	12	March 2005
2004-05	49	144	69	262	12	February 2006
2005-06	49	144	69	262	12	March 2007
2006-07	49	144	69	262	11	March 2008
2007-08	48	145	69	262	11	March 2009
2008-09	48	145	69	262	12	March 2010

Note: RajaNala Project which was previously included in Major Project is now included as Medium Project as per Project Authority report.

1.1.0 Maharashtra at a glance

Map of India showing location of Maharashtra State

Maharashtra occupies main portion of the Indian Sub-continent. The geographical location of Maharashtra is bounded between latitude 16.4^{o} to 22.1^{o} N and longitude 72.6^{o} to 80.9^{o} E and has an area of 307.71 thousand sq km, which is about 9.4 percent of the total geographical area of India. Maharashtra stands first amongst the major states in India in income & growth rate. The State has 720 km long coastline along Arabian Sea. The western hill ranges are almost parallel to this coastline. The State is divided into two physiographic regions of Konkan and rest of the State (Deccan Plateau). The Deccan Plateau spread over on the east side of *Ghat* has west-east slope. In general, the altitude of the plateau varies between 300 to 600 m. Maharashtra is bounded by Gujarat on north-west, Madhya Pradesh on north, Chhattisgadh on east and Andhra Pradesh, Karnataka and Goa on south.

1.2.0 Physiography

The State is divided into five major regions physiographically:

i) Konkan strip on western side (ii) Sahyadri ranges iii) Plateau on eastern side (iv) Hilly ranges of Satpuda and adjacent area on north and (v) Hilly and forest region of north-south Wainganga basin on East side of State.

1) Konkan Strip

The narrow strip of land extending from Damanganga basin in north to the border of Goa State in south is the Konkan. It has Sahyadri ranges on east and Arabian Sea on west. The Konkan strip is about 53 to 60 km wide and 500 km long along north-south. The widest stretch is about 100 km. Width decreases as one proceeds towards south. The region becomes hilly and altitude increases from the depressed coastline towards east.

2) Sahyadri Ranges

These continuous mountain ranges extend almost parallel to the western coastline. It is known as Western *Ghat*. The average height of Sahyadri in Maharashtra is 900 m. It is more in the north and diminishes towards south.

3) Eastern Plateau Region (Deccan Plateau)

The height of this plateau goes on diminishing from 600 m on western side to 300 m in the Wainganga basin on east. This region is formed from lava of igneous rocks. All the districts of Khandesh[1], Marathwada[2], Western Maharashtra and the western districts of Vidarbha[3] fall in this region.

4) Satpuda Ranges and Tapi – Purna basin on North

Satpuda hill ranges lie on the northern boundary of the State. This region is spread over in the districts of Amravati, Akola, Jalgaon and Dhule.

5) Eastern Region Consisting of Wainganga basin

Eastern region comprises of eastern side of the State and flat paddy field region lies along both the banks of the river at an elevation of about 300 m. On the

[1] Khandesh includes Dhule, Nandurbar & Jalgaon districts
[2] Marathwada includes Aurangabad, Jalna, Parbhani, Nanded, Osmanabad, Latur, Hingoli & Beed districts
[3] Vidarbha includes Akola, Washim, Amravati, Yeotmal, Wardha, Nagpur, Bhandara, Gondia, Chandrapur, Buldhana & Gadchiroli districts.

eastern side of this flat region along the Maharashtra - Chhattisgadh boundary are the hills of different geological formations other than the Deccan Trap. Many eastern tributaries of Wainganga originate from this hill range. The height of this hilly plateau is around 800 m.

Detailed information with regard to river basins, availability of water resources, climate, rainfall, agro climatic zones, etc of Maharashtra is given in Appendix-VII

Rainfall during 2008-09

In the State on average the Rainfall starts from 7th June by South West monsoon. In the year 2008 the rainfall started from 6^{h} June 2008 and got spread throughout the state by 12th June. In the month of July excluding Satara, Kolhapur, Chandrapur and Gadchiroli districts the intensity of rainfall decreased in the rest of all the districts. In the month of July excluding east Vidharbh most of the districts experienced dry spell for more than two to three weeks. By the first fortnight of August there was heavy rainfall throughout the State.

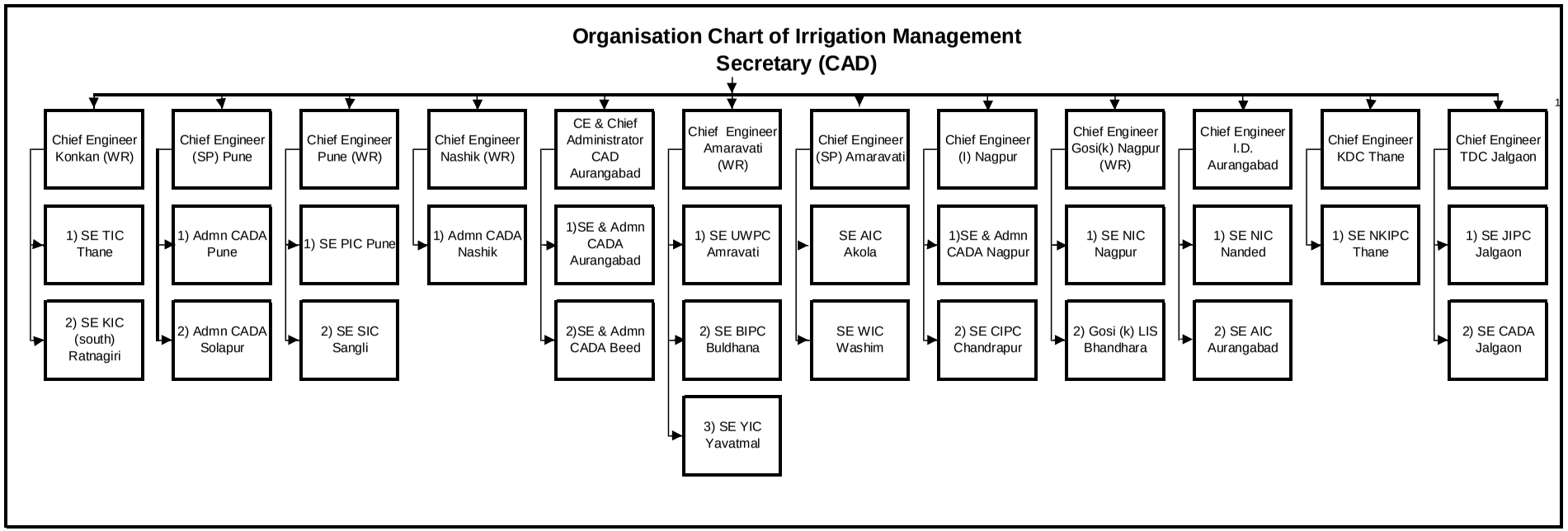
In the state out of 33 districts (excluding Mumbai and Mumbai suburbs) 11 districts lesser than average rainfall (41 to 80%). 21 districts got average rainfall 81 to 119% and Only one district got more than 120% rainfall.

Taluka wise rainfall in the month of June, July, August, September and October were 87, 65,101,141, and 57% respectively. In monsoon there was an average rainfall of 91%.In State of total 355 talukas 126 talukas had 41 to 80% rainfall, 202 talukas had 81 to 119% rainfall, & 27 talukas had more than 120% rainfall.

1.4.0 Irrigation Development during Post-independence Period

Maharashtra State as of today came into existence in 1960. The increasing population was facing shortage of food grains. This has led to the need of increasing agricultural production. By giving priority to agricultural development, attempt has been made to achieve irrigation development in a planned manner.

Hardly, 0.274 Mha, irrigation potential was created in the State during pre-plan period i.e. before 1950. Agriculture has been the prominent occupation to provide food and fiber to the growing population of the State. Adequate, timely and guaranteed water supply is of paramount importance in agriculture production and irrigation development plays a key role in alleviating rural poverty. The State has


Organisation Chart of Irrigation Management
Secretary (CAD)
Chief Engineer Konkan (WR)
1) SE TIC Thane
2) SE KIC (south) Ratnagiri
Chief Engineer (SP) Pune
1) Admn CADA Pune
2) Admn CADA Solapur
Chief Engineer Pune (WR)
1) SE PIC Pune
2) SE SIC Sangli
Chief Engineer Nashik (WR)
1) Admn CADA Nashik
CE & Chief Administrator CAD Aurangabad
1)SE & Admn CADA Aurangabad
2)SE & Admn CADA Beed
Chief Engineer Amaravati (WR)
1) SE UWPC Amravati
2) SE BIPC Buldhana
3) SE YIC Yavatmal
Chief Engineer (SP) Amaravati
SE AIC Akola
SE WIC Washim
Chief Engineer (I) Nagpur
1)SE & Admn CADA Nagpur
2) SE CIPC Chandrapur
Chief Engineer Gosi(k) Nagpur (WR)
1) SE NIC Nagpur
2) Gosi (k) LIS Bhandhara
Chief Engineer I.D. Aurangabad
1) SE NIC Nanded
2) SE AIC Aurangabad
Chief Engineer KDC Thane
1) SE NKIPC Thane
Chief Engineer TDC Jalgaon
1) SE JIPC Jalgaon
2) SE CADA Jalgaon

Executive Engineer in charge of the irrigation projects. The management circle headed by the Superintending Engineer controls three to four divisions. The regional head of the Superintending Engineers (four to five circles) is either Chief Engineer or the Chief Administrator in case of CAD projects.

The Superintending Engineers in-charge of irrigation circles are responsible for full utilisation of the water stored in reservoir and maintenance of public utilisation system, as well as recovery of water charges through their subordinate offices. The organisation chart of department is enclosed herewith on page no 18.

1.4.3 Crops Irrigated

Variation in the crops grown is significant within the regions as well as projects under region. Details of principle crops grown in different regions are categorised plan group wise and shown as below.

Region	Plan group	Principle crops grown
Eastern Vidarbha	Abundant & Surplus	Kharif Paddy, HW Paddy
Western Vidarbha	Normal	Cotton, Wheat, Gram, Sunflower, Orange
Marathwada	Normal & Deficit	Cotton, Wheat, Gram, Sunflower, G.nut, Sugarcane, Banana
Central Maharashtra	Normal	Rabi Jawar, Maize, Wheat, Bajara, Cotton, Vegetable, Grapes, Sugarcane, Banana
Western Maharashtra	Normal & Abundant	Maize, Wheat, Vegetable, Sugarcane,
Konkan	Abundant	Paddy, Vegetable

1.4.4 Management of Systems

The irrigation systems are constructed and mostly managed by the GOM. Operation and maintenance of irrigation projects is looked after by irrigation divisions, which are administratively controlled by circle office. GOM has taken a policy decision to supply water for irrigation through Water Users' Associations only. Accordingly the MMISF Act was passed by the Government in year 2005. Formation of Water Users' Associations in command areas of irrigation projects is in progress. Irrigation management of area under their jurisdiction is being transferred to them. Recently, a major project Waghad in North Maharashtra region is handed over to Federation of WUAs for irrigation management.

The National Productivity Council, New Delhi under Ministry of Commerce and Industries, GOI has awarded National Productivity Award for 2000-01 & 2001-02 to Waghad & Katepurna projects in the State. Similarly Pench & Shekdari projects were awarded the National Productivity Award for 2002-03 & 2003-04. The Medium project Waghad from Nasik region got National Productivity Award for 2006-07, this award was given some months before. The award is given second time to this project. For innovative water management, Waghad project got prestigious ICID and WATSAVE awards.

To corroborate the process of handing over the culturable command area (668850 ha) of selected 286 projects to the WUAs within stipulated time frame, Maharashtra Water Services Improvement Project has been taken up with the help of World Bank

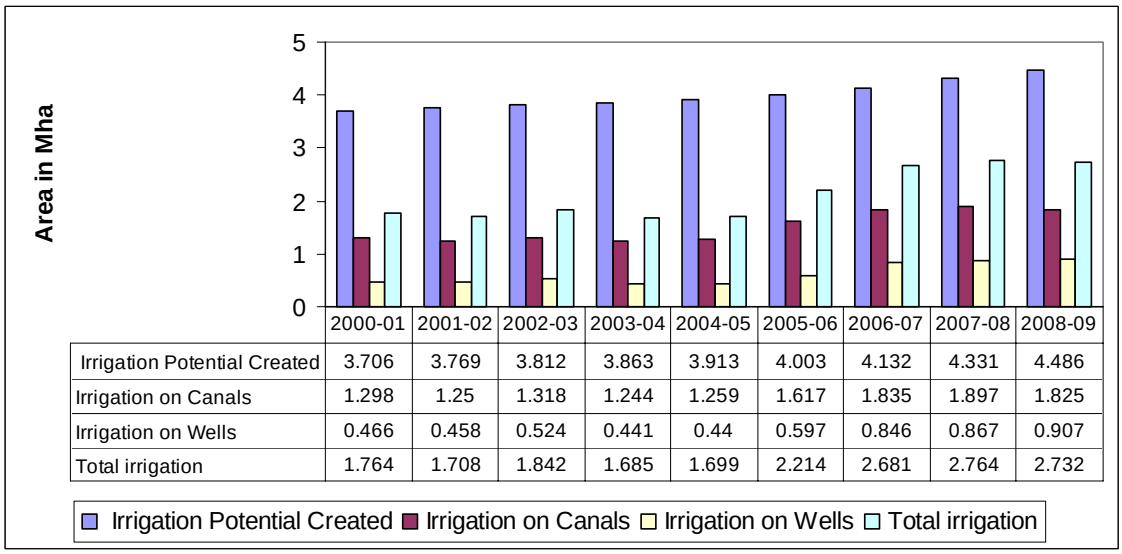
1.4.5 Area under modern irrigation methods

Area under drip & sprinkler irrigation in the State by March 2009 was 4.87 lakh ha And 2.23 lakh ha respectively. The region wise area under drip irrigation is as follows:

Sr.No.	Region	Area under Drip irrigation in ha. (up to March 2009)	Percentage
1	Konkan	12199	3
2	Nashik	196496	40
3	Pune	120298	25
4	Aurangabad	84993	17
5	Amravati	58970	12
6	Nagpur	13873	3
Maharashtra State		486829	100

Out of 486829 ha under drip irrigation, maximum area is in Nashik (40%). Drip irrigation is applied 90% under these following 8 crops i.e. Banana, Grapes, Sugarcane, Oranges, Pomegranate, Cotton, Mango & Vegetable crops. Out of total 486829 ha under drip irrigation, the area under Banana (92120ha) & grapes, (78765ha) is remarkably high.

1.5.0 Present Status of Irrigation Utilisation



	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Irrigation Potential Created	3.706	3.769	3.812	3.863	3.913	4.003	4.132	4.331	4.486
Irrigation on Canals	1.298	1.25	1.318	1.244	1.259	1.617	1.835	1.897	1.825
Irrigation on Wells	0.466	0.458	0.524	0.441	0.44	0.597	0.846	0.867	0.907
Total irrigation	1.764	1.708	1.842	1.685	1.699	2.214	2.681	2.764	2.732

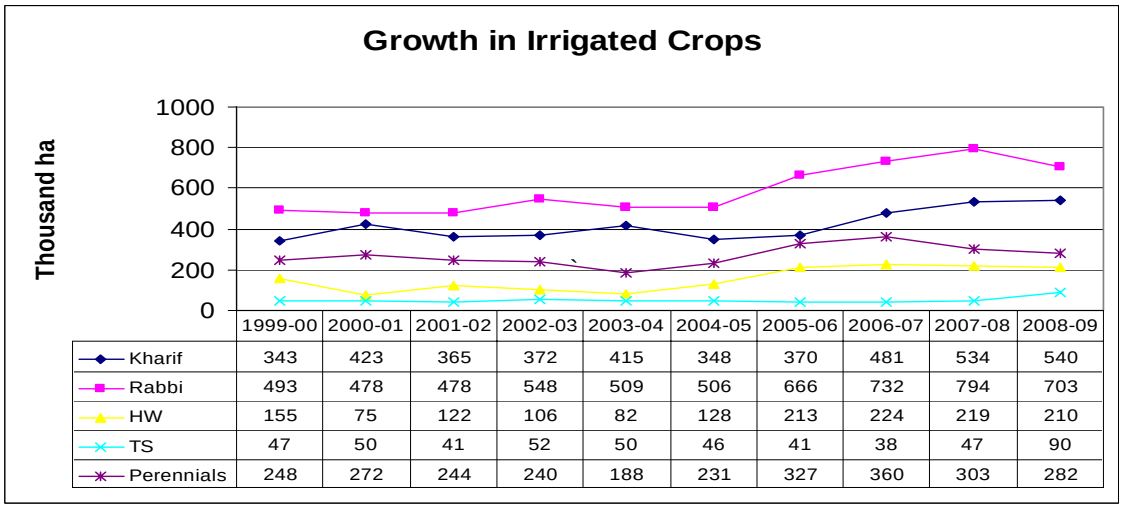
In spite of various measures taken so far, there is a gap between potential created and utilized.

The overall reasons for less utilization are as follows

i) Low water yield in the reservoirs ii) Diversion of irrigation water to non-irrigation uses iii) Tendency of farmers to grow cash crops which are highly water intensive like sugarcane, banana iv) Low utilisation during kharif (Rainy) season v) Reduction in storage capacity due to silting vi) Lapses in assessment of the irrigated area in the command vii) Non accounting of irrigated area outside the command (influence area) viii) Poor maintenance of the infrastructure due to financial constraints ix) Non participation of beneficiaries in irrigation management.

Year wise data of potential created and actual utilisation is exhibited in graphical form above. From this information, it is clear that till the year 2004-05, actual maximum utilisation (canal+wells) was 48% of the potential created. Under utilisation has always remained a point of concern. Therefore, based on past experience, a special drive was taken at State level during the year 2006-07, in which circle wise targets for potential utilisation were fixed. Project Authority tried their level best to achieve the set goals. As a result, total actual potential utilization in the year 2006-07 has improved to 2.681 Mha (65% of potential created). In the year 2007-08 it has further improved to 2.764 Mha. For the year 2008-09 there is a slight decrease in area (0.032Mha) as the total actual potential utilization is to the tune of 2.732 Mha.

Details of year wise, Season wise area irrigated are given below.



	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Kharif	343	423	365	372	415	348	370	481	534	540
Rabbi	493	478	478	548	509	506	666	732	794	703
HW	155	75	122	106	82	128	213	224	219	210
TS	47	50	41	52	50	46	41	38	47	90
Perennials	248	272	244	240	188	231	327	360	303	282

From the above table, it is observed that, due to satisfactory rainfall in most of the parts in the State, area irrigated in Kharif season & TS has increased as compared to last year (2007-08). Slight decrease in area is seen under Rabbi, HW & perennial crops at State level.

1.6.0 Participation of Beneficiaries in Water Resources Management

National Water Policy 2002 and Maharashtra State Water Policy 2003 advocate Participatory Irrigation Management. In view of these, water users associations were setup in command areas of various projects in different parts of the State. By the end of 2008-09 in all 1235 WUAs were in full operation with operational area of 4.16 lakh ha. Besides this the number of WUAs which have been registered and entered into agreement during 2008-09 was 1380 covering an area of about 5.02 lakh ha.

Looking at the slow pace of PIM in last decade and to bridge the gap between irrigation potential created and its actual utilization and to optimise the benefits by ensuring proper use of surface & ground water by increased efficiency in distribution, delivery, application and drainage of irrigation systems and for achieving this objective, to give statutory recognition to the constitution & operation of WUAs, an act has been passed by the State legislature. The act is known as "Maharashtra Management of Irrigation Systems by Farmers Act, 2005". As per this act, all the beneficiaries in the command of a distributaries / minor will become the members of WUA, once the area is notified under the act.


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

Attach orginasation chart

CHAPTER - 2

Benchmarking of Irrigation Projects

Benchmarking can be defined as a systematic process for securing continual improvement through comparison with relevant and achievable internal or external norms and standards.

2.1.0 Background

This is the eighth consecutive report of benchmarking of irrigation projects in the State with 262 projects and 12 indicators. The plan group wise number of projects selected for benchmarking during 2008-09 is as follows.

Sr. No	Plan Group	Nagpur, Amravati Region			Pune, Konkan Region			Aurangabad, Nashik Region			Total Projects
		Major	Medium	Minor	Major	Medium	Minor	Major	Medium	Minor	
1	Highly Deficit	--	--	--	1	11	3	-	16	4	35
2	Deficit	4	10	13	--	--	--	10	44	18	99
3	Normal	4	13	5	6	1	2	10	16	8	65
4	Surplus	3	22	4	--	--	--	--	--	--	29
5	Abundant	2	2	1	8	10	11	--	--	--	34
	Total	**13**	**47**	**23**	**15**	**22**	**16**	**20**	**76**	**30**	**262**

Grand Total: 262

2.2.0 About this report

Following 12 indicators are selected for benchmarking in 2008-09.

Sr No	Indicator No	Title Of Indicator
		System Performance
1	1 1a	Annual Irrigation Water Supply Per Unit Irrigated Area Annual Area irrigated per unit of water supplied
2	2	Potential Created And Utilised
		Agricultural Productivity
3	3	Output (Agricultural Production) Per Unit Irrigated Area
4	4	Output (Agricultural Production) Per Unit Irrigation Water Supply
		Financial Aspects
5	5	Cost Recovery Ratio

6	6	Total O&M Cost Per Unit Area
Sr No	**Indicator No**	**Title Of Indicator**
7	7	Total O&M Cost Per Unit Volume Of Water Supplied
8	8	Revenue Per Unit Volume Of Water Supplied
9	12(I)	Assessment Recovery Ratio Irrigation
10	12(NI)	Assessment Recovery Ratio Non Irrigation
		Environmental Aspects
11	10	Land Damage Index
		Social Aspects
12	11	Equity Performance

The report is available on websites **www.mahawrd.org & www.mwrdc.org**

2.3.0 Methodology

The data presented in this report is based on information collected from each of the circle in-charge of the project.

The following process was used in development of this report.

- Irrigation projects are selected, representing the main geographical regions of State and of categories viz. major (CCA more than 10000 ha), medium (CCA more than 2000 ha and below 10000 ha) and minor (CCA less than 2000 ha).
- For achieving consistency in monitoring & evaluation, same projects which are considered for benchmarking during 2007-08 are considered in year 2008-09.
- Data is collected in revised spread sheet containing 30 columns from the concern Project Authority and analysed in MWRDC office. An explanatory note containing detailed instructions about working out the figures of different indicators was issued to field officers.
- The data about water use and area irrigated is co-related with water accounts (2008-09) of relevant projects.
- The presentation for every indicator is done with past-past (5 year average), recent past (2007-08) and present year (2008-09) in order to compare the performance with predecessors as well as own performance of last year.

- The draft report is scrutinised in MWRDC, Aurangabad & Mantralaya, Mumbai.
- Reasons for deviation from last year's performance and State norm are called from each circle.

  Looking at the large number of projects, for better monitoring, the analysis is carried out considering irrigation circle as a unit and projects therein with similar plan groups of sub basins. Performance of projects in a circle against each indicator is collective performance as given in Chapter 4.
- Based on performance during the year 2008-09, indicator wise average performance is evaluated for the plan group of circles under consideration, setting aside the exceptionally high/low values.
- State targets for indicator No III & IV are set as per plan group. However for other Indicators, state target value is common for all plan groups. The targets are different for major, medium & minor projects for indicator no. I, VI, VII, & VIII.
- For benchmarking of projects at circle level, each circle has defined its own targets considering specific conditions of project areas, crop type, condition of canal system etc.
- Target values are revised with experience gained in the process.
- For financial indicator of output per unit irrigated area and output per unit irrigation water supply, fixed prices of year 1998-99 are considered to obviate effect of price rise.
- Some circles are not having major, medium or minor projects; therefore, only relevant circles are shown in graphs of each indicator. Thus total of circles may not tally to 21 in each graph, for example for major projects category, there are only 15 circles.
- At a glance evaluation of performance of all projects in Maharashtra State with respect to each indicator is also given in Chapter 4.
- There are 2940 completed minor irrigation projects in the State. Therefore, it has been decided to carryout benchmarking and monitoring of minor projects at circle level itself. To get an idea about performance of minor projects, some

sample schemes which were considered in last year's report are analysed and included in this report.

- Actions taken by GOM for improvement of performance are included in Chapter 5.

2.4.0 Overview of Irrigation Projects

An overview showing details such as sub basin, designed and actual storage during the year, command area, crops grown, etc. is enclosed as **Appendix No.III**

2.5.0 Benchmarking of WUA

Till June 2008, potential to the tune of 4.486 Mha has been created on state level projects. National Water Policy and Maharashtra Water and Irrigation Commission (1999) have recommended the active participation of farmers in Irrigation Water Management. Water Resources Department has also concentrated its efforts in that direction.

In response to above recommendations, an act namely MMISF (Maharashtra Management of Irrigation System by Farmers) - 2005 has been passed in the State assembly. Against the total potential creation of 4.486 Mha, potential to the tune of 0.416 Mha is handed over to 1235 WUAs.

At present, 286 projects (0.67Mha area) selected under MWSIP to which the act is made applicable, are financially aided by the World Bank. The cost of the project is about 1700 crores.

In view of the huge capital investment in construction of projects as well as in rehabilitation of canal systems along with intention of securing the advantage of benchmarking, benchmarking of WUAs was felt necessary. Accordingly the issue of Benchmarking of WUA was under consideration for last two years.

To initialise the process, 9 Indicators feasible to determine the performance of individual WUA are designed and data in prescribed proforma was received from selected 12 WUA's on 7 Major projects.

Out of 12 WUAs only two WUAs on Mula project are functioning under MMISF Act 2005. Rest of 10 WUAs are functioning under co-operative Act.

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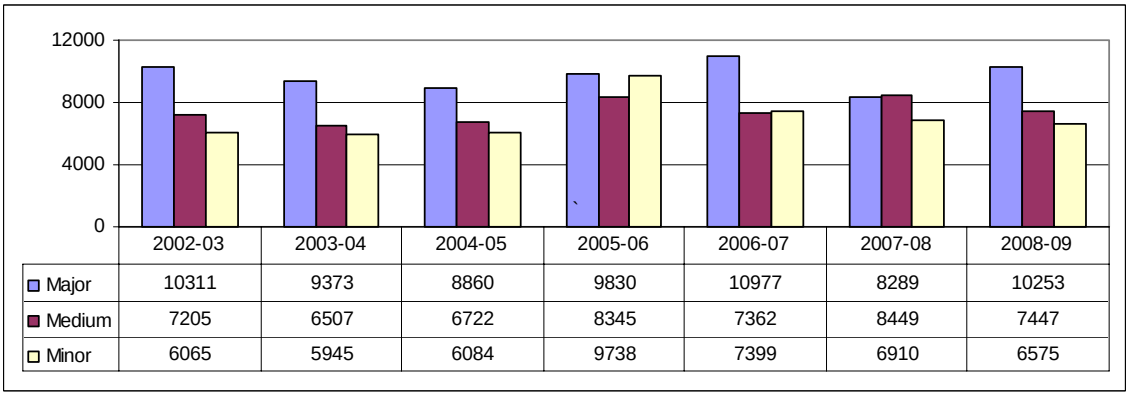
Chapter 4
Overall status of Benchmarked projects in Maharashtra
Indicator wise Performance of Maharashtra State for the Years 2002-03 to 2008-09

Indicator – I: Annual Irrigation Water Supply per Unit Irrigation Area:

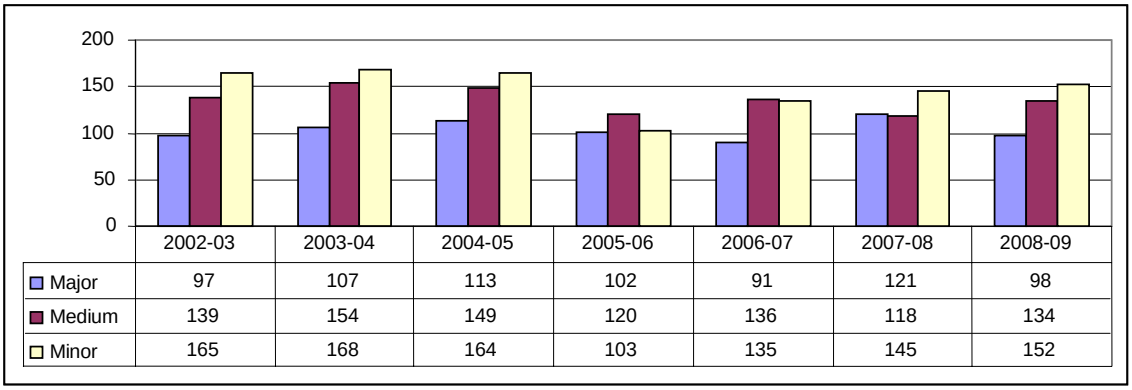
Unit: Cum/ha



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	10311	9373	8860	9830	10977	8289	10253
Medium	7205	6507	6722	8345	7362	8449	7447
Minor	6065	5945	6084	9738	7399	6910	6575

Annual Irrigation water supplied for major projects in Maharashtra state is higher in 2008-09 i.e. 10253 cum/ha as compared to the same in the year 2007-08 i.e. 8289cum/ha. And for medium project it is lower in the year 2008-09 compared to previous year 2007-08. For minor project the water use is less in the year 2003-04 i.e. 5945 cum/ha. and maximum in the year 2005-06 i.e. 9738 cum/ha and for the year 2008-09 it is on higher side i.e. 6575 cum/ha.

Indicator – I a: Annual Area Irrigated per unit of water supplied: Unit: ha/Mm^3

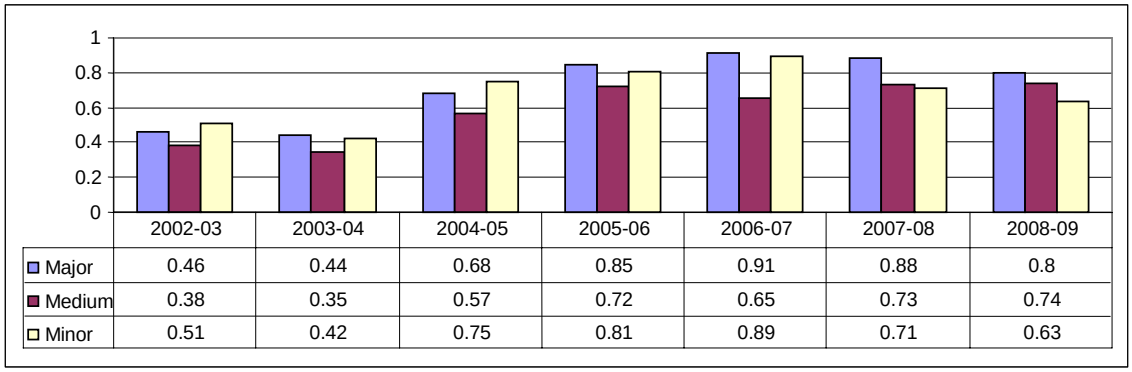


	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	97	107	113	102	91	121	98
Medium	139	154	149	120	136	118	134
Minor	165	168	164	103	135	145	152

The area irrigated per unit of water supplied in 2008-09 is 98 ha./Mm3 which is less than last year value i.e. 121 ha/Mm3 for Major projects. In case of Medium project indicator value is 134 ha/Mm3 for 2008-09, which is more than last year (2007-08) value

i.e. 118 ha/Mm3. For Minor irrigation projects indicator values for the year 2008-09 is 152 ha./Mm3 which is more than last years value i.e. 145 ha./Mm3.

Indicator –II: Potential created and utilised: **Unit: Ratio**

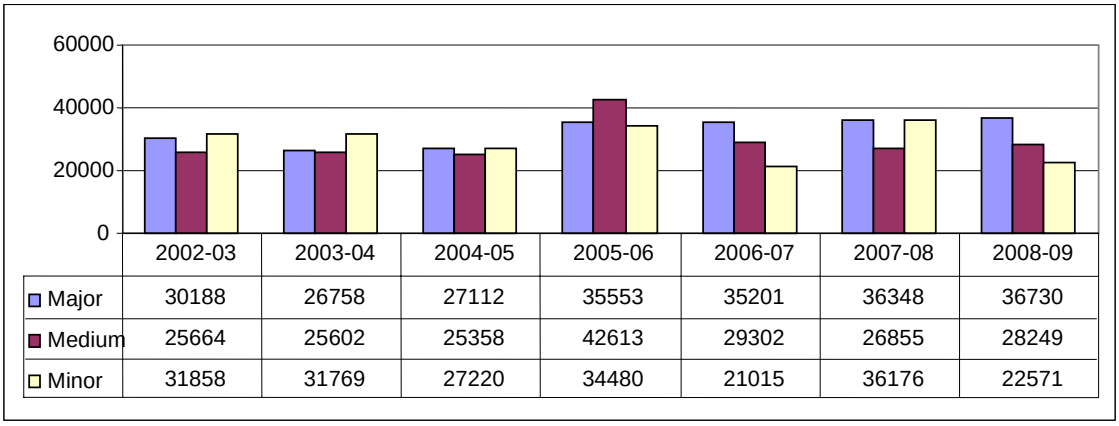


	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	0.46	0.44	0.68	0.85	0.91	0.88	0.8
Medium	0.38	0.35	0.57	0.72	0.65	0.73	0.74
Minor	0.51	0.42	0.75	0.81	0.89	0.71	0.63

For Major Projects the maximum utilised potential was in the year 2006-07. The utilised potential is increasing yearly from 0.46 in the year 2002-03 to 0.91 in the year 2006-07. The ratio is marginally less (0.80) for current year. For medium projects the ratio in the year 2008-09 is 0.74. For minor Projects utilised potential was 0.42 in the year 2003-04 and it is improving for last four years and 0.89 in the year 2006-07, it has slightly decreased for the current year i.e,.0.63.

Indicator-III: Output per Unit Irrigated Area:

Unit: Rs/ha

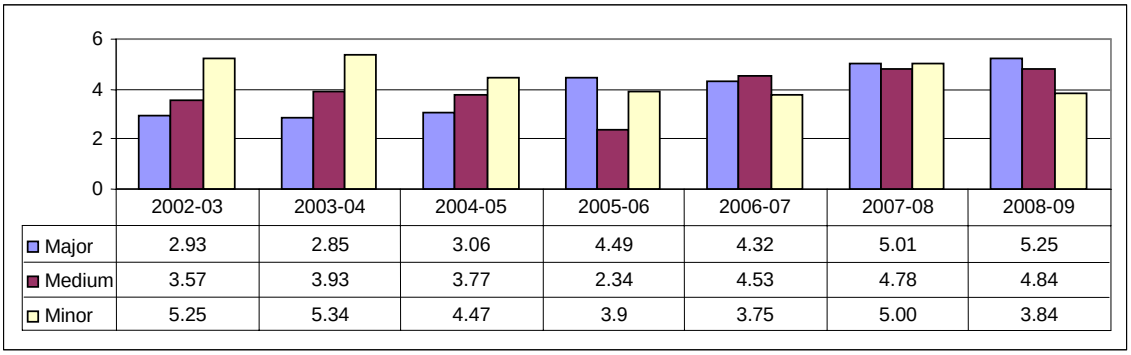


	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	30188	26758	27112	35553	35201	36348	36730
Medium	25664	25602	25358	42613	29302	26855	28249
Minor	31858	31769	27220	34480	21015	36176	22571

For Major Projects agricultural output shows variations in last five years. Maximum agricultural output of Rs. 36730/ha is in the year 2008-09 and minimum of Rs. 26758/ha is in the year 2003-04. For medium project the agricultural output of Rs.42613/ha was maximum in 2005-06 and minimum of Rs 25358/ha in the year 2004-

05. For Minor Projects agricultural output is maximum of Rs. 36176/ha in 2007-08 and minimum of Rs. 21015/ha in the year 2006-07.

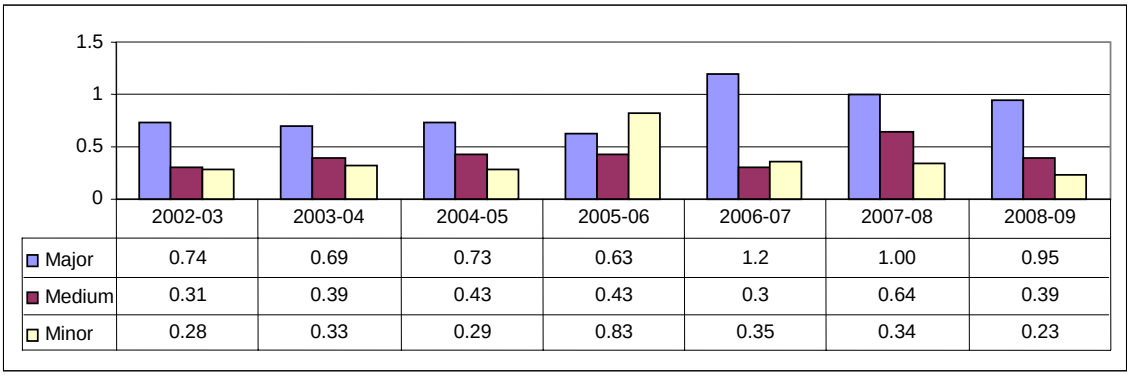
Indicator – IV: Out Put per Unit Irrigation Water Supply: Unit: Rs/Cum



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	2.93	2.85	3.06	4.49	4.32	5.01	5.25
Medium	3.57	3.93	3.77	2.34	4.53	4.78	4.84
Minor	5.25	5.34	4.47	3.9	3.75	5.00	3.84

For Major Project the output per cum was Rs. 2.93/cum in the year 2002-03 and went on increasing year by year and reached to a maximum of Rs 5.25/cum in the year 2008-09. For Medium Projects maximum output of Rs. 4.84/cum is in the year 2008-09. For minor projects the output of Rs 3.84/cum for the year 2008-09 year and minimum of Rs. 3.75/cum in the year 2006-07.

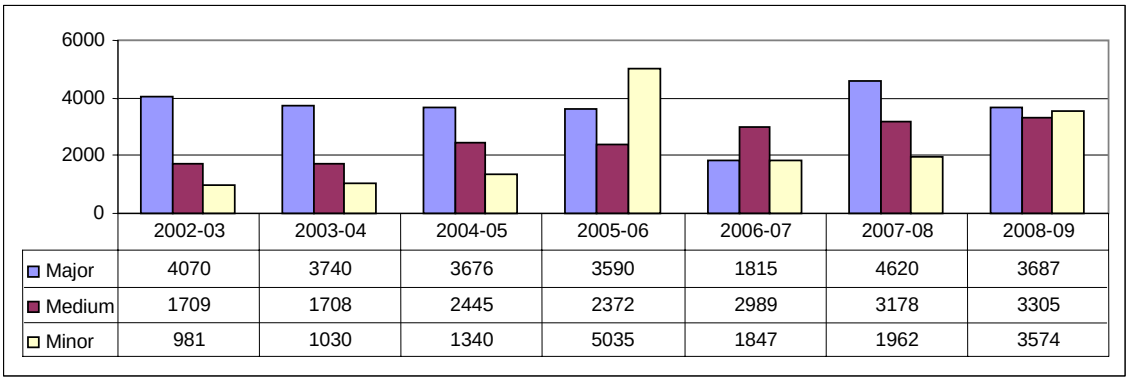
Indicator –V: Cost Recovery Ratio: Unit: Ratio



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	0.74	0.69	0.73	0.63	1.2	1.00	0.95
Medium	0.31	0.39	0.43	0.43	0.3	0.64	0.39
Minor	0.28	0.33	0.29	0.83	0.35	0.34	0.23

For major projects the ratio for the year 2008-09 is 0.95. For medium projects the ratio was in between 0.30 to 0.64 for last five years, for current year the ratio is maximum i.e., 0.39 In case of Minor Projects ratio was in between 0.28 to 0.35 for four years. But in 2005-06 the ratio was maximum i.e., 0.83, for this year the ratio is 0.23.

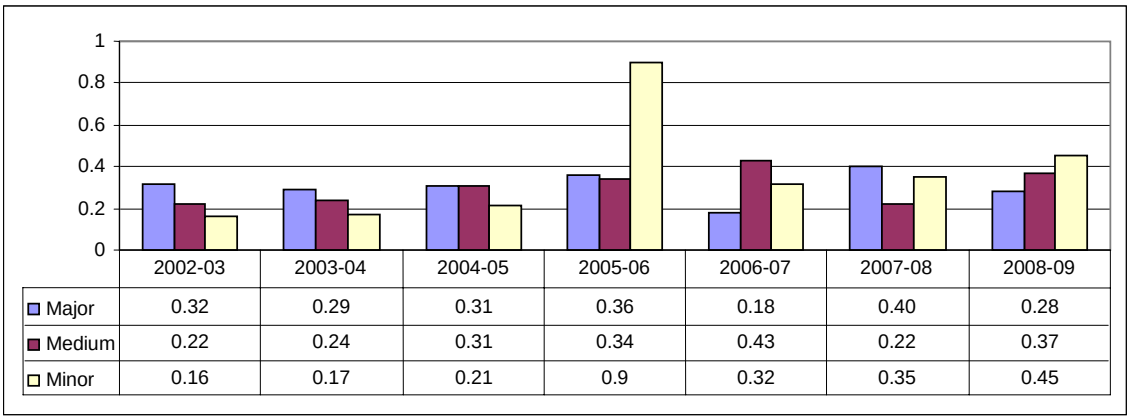
Indicator-VI: O & M Cost Per Unit Irrigated Area: **Unit: Rs/ha**



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	4070	3740	3676	3590	1815	4620	3687
Medium	1709	1708	2445	2372	2989	3178	3305
Minor	981	1030	1340	5035	1847	1962	3574

For Major Projects the O & M Cost Per Unit Area is on higher side of state target for previous years it was nearly three times the state target except in the year 2006-07, it is Rs 3687/ha in the current year. It is due to excess expenditure on maintenance. In Medium Project O & M expenditure increased from the year 2002-03 to 2008-09 consistently, For Minor Projects the O & M Cost per Unit Area was minimum of Rs. 981/ha in the year 2002-03 and increased year by year to a maximum of Rs. 5035/ha in the year 2005-06.For the current year it is Rs 3574/ha.

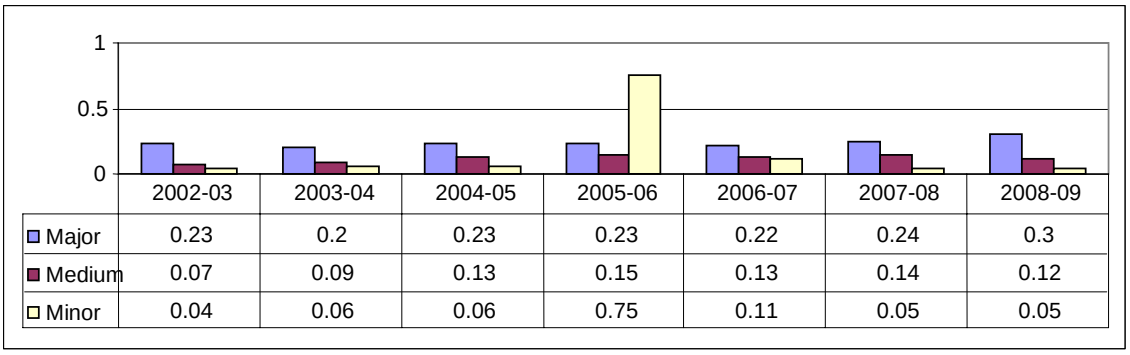
Indicator – VII: O & M Cost Per Unit Water Supply: **Unit: Rs/Cum**



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	0.32	0.29	0.31	0.36	0.18	0.40	0.28
Medium	0.22	0.24	0.31	0.34	0.43	0.22	0.37
Minor	0.16	0.17	0.21	0.9	0.32	0.35	0.45

For Major Projects O & M Cost per Unit Water Supply ranges between Rs. 0.18/cum to Rs. 0.40/cum from year 2002-03 but for the current year it is Rs. 0.28 /cum. For Medium Projects excessive O & M expenditure resulted in poor performance for last five years. It is Rs.0.37/cum for current year. For Minor projects the O & M Cost per Unit Water Use was in between Rs. 0.16cum to Rs. 0.9 for five years. This year it is Rs. 0.45/cum.

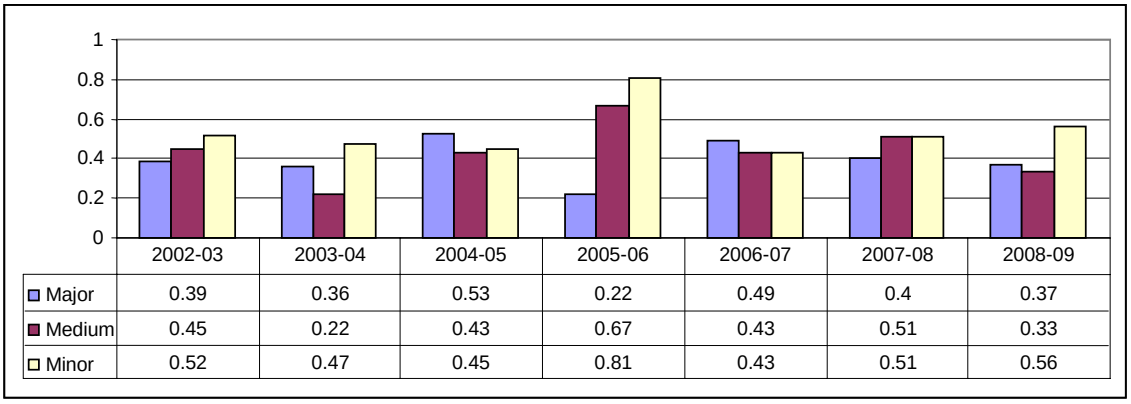
Indicator – VIII: Revenue Per Unit Water Supply: **Unit: Rs/cum**



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	0.23	0.2	0.23	0.23	0.22	0.24	0.3
Medium	0.07	0.09	0.13	0.15	0.13	0.14	0.12
Minor	0.04	0.06	0.06	0.75	0.11	0.05	0.05

For Major Project in Maharashtra State, Revenue Per Unit Water Supply, for last five years, ranged from Rs. 0.20/cum to Rs. 0.24/cum. This year it has increased to Rs.0.3/cum. For medium project the revenue was Rs. 0.07/cum in the year 2002-03 and went on increasing to Rs. 0.15/cum in the year 2005-06. In 2006-07 it comes to Rs. 0.13/cum, it is Rs 0.12/cum for current year. For Minor Projects revenue per unit water use was in between Rs. 0.04/cum to Rs. 0.11/cum. For current year the ratio is Rs 0.05/cum.

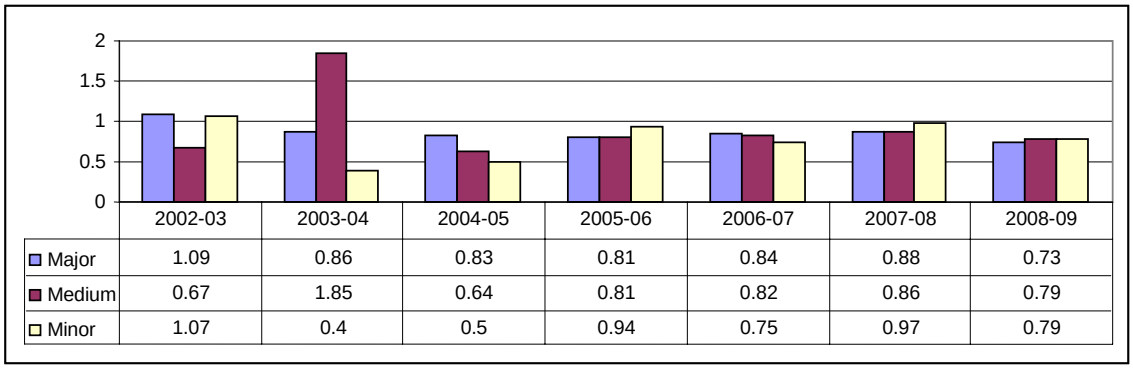
Indicator – XII: Assessment Recovery Ratio (Irrigation): **Unit Ratio**



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	0.39	0.36	0.53	0.22	0.49	0.4	0.37
Medium	0.45	0.22	0.43	0.67	0.43	0.51	0.33
Minor	0.52	0.47	0.45	0.81	0.43	0.51	0.56

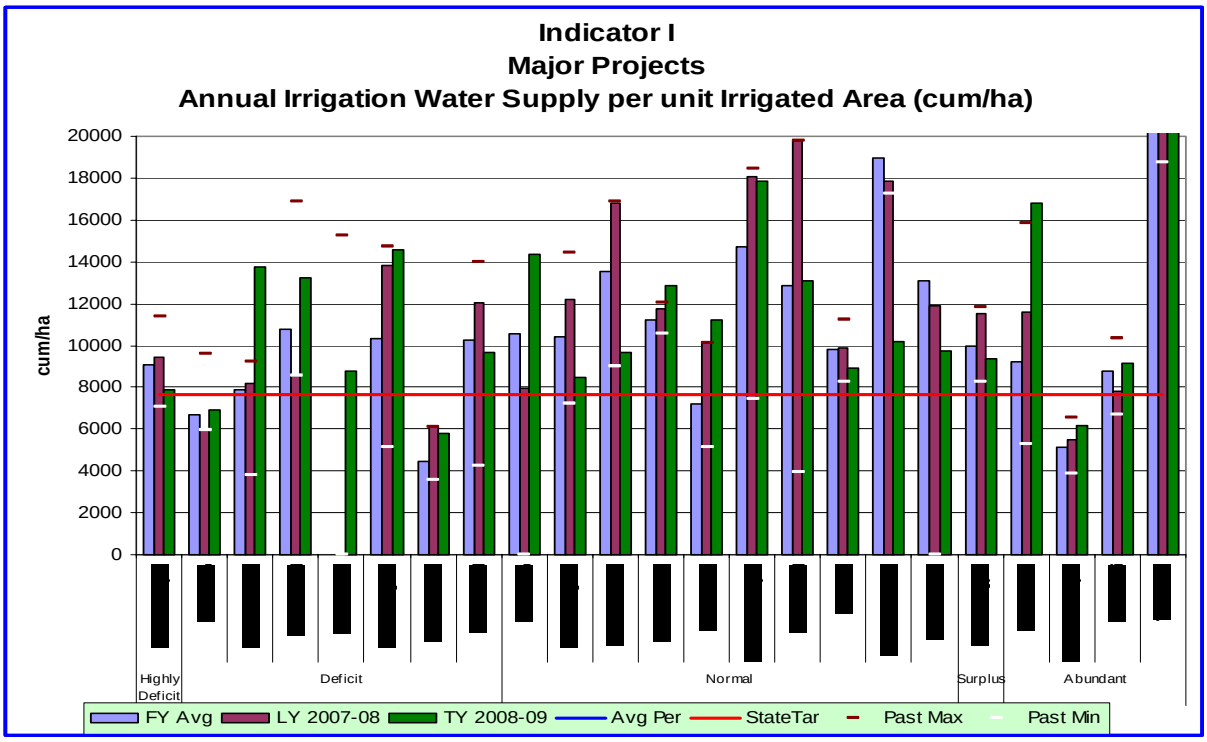
For Major Project Assessment Recovery Ratio was minimum in the year 2005-06 i.e. Rs. 0.22. But in the year 2006-07 it increased to 0.49 due to improvement in recovery of irrigation water charges. It has slightly decreased to 0.37 for the year 2008-09. For Medium Projects ratio shows ups and downs year wise. It was 0.22 in the year 2003-04 and increases to 0.67 in 2005-06, for the current year it is 0.33. For Minor Project Assessment Recovery Ratio was in between 0.43 to 0.52 for four years but in 2005-06 it was 0.81, for the current year it is 0.56.

Indicator – XII: Assessment Recovery Ratio (Non Irrigation): Unit: Ratio



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Major	1.09	0.86	0.83	0.81	0.84	0.88	0.73
Medium	0.67	1.85	0.64	0.81	0.82	0.86	0.79
Minor	1.07	0.4	0.5	0.94	0.75	0.97	0.79

For Major projects the ratio for the last six years is between 0.81 to1.09, for the current year it is 0.73. For medium projects the ratio is between 0.64 to 1.85, for the current year it is 0.79. In minor projects the ratio is in between 0.40 to 1.07, for the current year it is 0.79.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Solapur	9100	9474	7906	11397	7094	7906	7692
Deficit	AIC Akola	6675	5972	6946	9622	5972		
	BIPC Buldhana	7905	8210	13741	9199	3759		
	CADA Abad	10758	8541	13238	16899	8541		
	CADA Beed	12208	11918	14090	15240	4227	9044	7692
	CADA Jalgaon	10309	13846	14553	14749	5146		
	CADA Nashik	4490	6119	5799	6119	3586		
	NIC Nanded	10242	12035	9690	13970	4250		
Normal	AIC Akola	10574	7951	14381	21110	0		
	CADA Jalgaon	10408	12194	8499	14433	7201		
	CADA Nagpur	13499	16837	9663	16840	8996		
	CADA Nashik	11256	11767	12868	12033	10553		
	CADA Pune	7209	10122	11244	10122	5158		
	CIPC Chandrapur	14698	18081	17824	18444	7422	10238	7692
	NIC Nanded	12877	19785	13064	19785	3927		
	PIC Pune	9814	9894	8958	11261	8286		
	UWPC Amravati	18943	17830	10177	20665	17268		
	YIC Yavatmal	13106	11898	9749	24600	0		
Surplus	CADA Nagpur	9951	11514	9349	11806	8232	9349	7692
Abundant	CADA Pune	9183	11585	16784	15806	5298		
	CIPC Chandrapur	5158	5474	6167	6578	3870		
	SIC Sangli	8784	7788	9173	10367	6662	7670	7692
	TIC Thane	27573	23099	26657	41502	18712		

Observations and conclusions
Major Projects

Indicator I: Annual Irrigation Water Supply per Unit Irrigation Area (cum/ha)

Highly Deficit Plan group:

CADA Solapur: In Bhima (Ujjani) project the overall performance is 7906 cum/ha, however, it is slightly more than the state norm of 7692 cum/ha. The water use in this year is reduced compared with last year (9474 cum/ha)

Deficit Plan group:

AIC Akola: Annual irrigation water use on projects (Katepurna & Nalganga) under Akola Irrigation Circle was 6946 cum/ha. If Katepurna and Nalganga projects are considered individually, no water use on Katepurna due to less storage but on Nalganga per unit area irrigated is 6946 cum/ha which is close to the state norm.

BIPC Buldhana: Wan project is the only major project under BIPC Buldhana under this plan group. Water use per unit area irrigated was 13741 cum/ha which is very high than the state norm and the last year performance. As repeatedly said previously, Project authorities are required to adhere strictly to the guide lines issued about irrigation management for improvement in performance.

CADA Aurangabad: In Jayakwadi project Stage-I (PLBC) the water use per unit irrigated area is 13238 cum/ha., which is 1.75 times higher than State norms. Efforts are required at field level to restrict the water use within the stipulated norms to achieve State target.

CADA Beed: In Majalgaon project the water use per ha. is increased from 12824 to 15227 cum/ha as compared to last year and it is very higher than State norms. In this year though area irrigated is slightly increased by 486 ha. water utilization is increased by 43 Mcum resulting into higher utilization of water. Project authorities are advised to pay more attention for improvement in performance because in this year though perennial crops are reduced from 59 to 35% water use is increased which is not desirable.

In Manjra project the water use per hectare has increased from 8208 to 9552 cum/ha. As compared to last year, this is due to15% increased water utilization & 5% reduction in area irrigated (67 to 62%) under perennial crops in this year.

In Lower Terna project the water use has increased from 6619 to 7186 Cum/ha. This is due to 20% increase in water use but only 10% increase in area irrigated though it is well within the State norms.

In Jayakwadi project Stage-I (PRBC) the water use per unit irrigated area has increased from 15976 to 20119 cum/ha. i.e. more than 2.5 times of state norms, resulting into overall water use of this circle increase from 11918 to 14090 cum/ha.

CADA Jalgaon: In Girna project, the water use per unit irrigated area is increased from 13846 cum/ha (2007-08) to 14553 cum/ha (2008-09) and it is 1.9 times more than the state target. Project authorities are required to take efforts for improvement in the performance duly preparing the action plan.

CADA Nashik: In Chankapur project, the annual water use per unit irrigated area is lowered from 6119 cum/ha (2007-08) to 5799 cum/ha (2008-09) and has not exceeded the state norm.

NIC Nanded: In Manar project the water use per unit irrigated area is increased from 8631 to 9169 cum/ha. There is decrease in irrigated area from 12988 ha to 918 ha. As compared to last year that also from reservoir lifts only, as the availability of live storage is 28% no irrigation by canal flow. Project authorities are advised to pay more attention towards water use by reservoir lift In Vishnupuri project water use has decreased from 7978 to 7803 cum/ha. This shows improvement.

In Purna project the water use has drastically decreased from 15705 to 10835 cum/ha as compared to last year but still it is 1.2 times more than the State norms. As per field officer's report that embankment work of the canal was carried out with available material and without hearting zone resulting heavy leakages through banking work and from structures also, about 25 to 30% of released water in canal thus indirectly regenerate wells & nallas in command area of the project increasing total utilized potential.

Normal Plan Group:

AIC Akola: In case of Pus Project, water use per unit irrigated area was 14381cum/ha. which is twice the state norm value. More attention of Project authorities are required in improvement of performance.

CADA Jalgaon: In Hatnur project, though the water use per unit irrigated area is lowered from 12194 cum/ha (2007-08) to 8499 cum/ha (2008-09) it is 1.1 times more than the state target.

CADA Nagpur: On Lower Wunna Project water use (9663 cum/ha.) during the irrigation year as compared to last years 16837 cum/ha. As compared to the state norm it is 26% more.

CADA Nashik: In Bhandardara project, the water use per unit irrigated area is increased from 12048 cum/ha (2007-08) to 13055 cum/ha (2008-09) which is 1.7 times higher than the state target. As per Project authorities, though this project is for eight monthly cropping pattern, it is obligatory to fulfill the demand of water for sugar cane. Also efforts are being taken by field officers to reduce water use per ha duly taking necessary remedial measures i.e. desilting of canal, increasing height of banks, minimizing leakages and supply of water by volumetric basis duly forming water users associations.

In Kadawa project, the water use is consistently more than the state target. As per Project authorities, more water use/ha is due to more conveyance losses in the canal system. Remedial measures are being taken in hand i.e. selective lining, pitching to improve the performance.

In Mula project, the water use/ha is 13428 cum/ha, which is on (1.7times) higher than the state norm. As per Project authorities, though this project, at present, is having eight monthly cropping pattern, it is obligatory to supply the water to sugar cane as per demand of cultivators as there are four sugar factories in the command. Efforts are being taken by the field officers to lower the water use/ha by training the farmers to reduce the sugarcane and also to avoid flood irrigation.

In Waghad project, the water use/ha is 10230 cum/ha, which is increased than that of last year (8853 cum/ha) and it is on higher than the state norm. As water is supplied fully on volumetric basis on this project, more efforts are required at field level to use the water economically.

In Gangapur project, the water use per unit area is lower than the state target (6997 cum/ha.)

In Darna project, the water use per unit irrigated area is 5639 cum/ha.

CADA Pune: In Kukdi Project the annual irrigation water supply per unit area is 11850 cum/ha. The water utilization has remarkably increased this year as

compared to state norms. In Ghod Project the water utilization for irrigation is 9512 cum/ha. There is slight increase in value as compared to last year value of 8491 cum/ha. It is also above the state norms.

CIPC Chandrapur: Actual water use per unit area irrigated on Bor project is 17824 cum/ha, which is 232% of the state norm. There is no major change in performance level as compared to last year performance. (18081 cum/ha) According to field officers, old canal system of Bor Project requires major repairs and is responsible for poor performance.

NIC Nanded: In Upper Penganga Project the water use per unit irrigated area has decreased from 19785 to 13064 cum/ha. as compared to last year. The Project authorities are required to take hard efforts to improve the performance by judicious use of water to achieve the state target of 7692 cum/ha.

PIC Pune: In Khadakwasla Project the water utilization is 7989 cum /Ha. This is better than the last year's 9352 cum/ha. Performance in N.L.B.C. the water utilization is 12615 cum/ha. This is less than last year but above the state target performance. It is due to heavy leakage through masonry structures on canals. In NRBC the performance improved as compared to last year. The improvement is achieved because of repairs of canal system. In Pawna Project the water utilization is 18647 cum/ha. which is three times of last year performance (6010 cum/ha). The Project authorities are advised to do needful to reduce the water utilisation per unit area.

UWPC Amrawati: On Upper Wardha project, the rate of water use per unit area irrigated (10177 cum/ha) is considerably high than the state norm, it is 132 %. It appears that Project authorities had taken positive steps for improving the performance but more efforts are required to achieve state norms.

YIC Yeotmal: Water use in Arunavati project was high (9749cum/ha.) as compared to the state norm (127%). Project authorities should take positive efforts for satisfactory performance.

Surplus Plan Group:

CADA Nagpur: Overall performance of the projects under this circle is reduced from 11514 cum/ha up 9349 cum/ha. The projects are Pench, Itiadoh & Bagh. Compared to last year water use per unit area is increased & it is more than the state target value (7692 cum/ha.)

Abundant Plan Group:

CADA Pune: In Krishna Project the water utilization for irrigation is 16784 cum/ha. It is increased than last year 11585 cum/ha. The water utilization is more than state norms. The Field Officers are advised to do needful to reduce the water utilization per unit area.

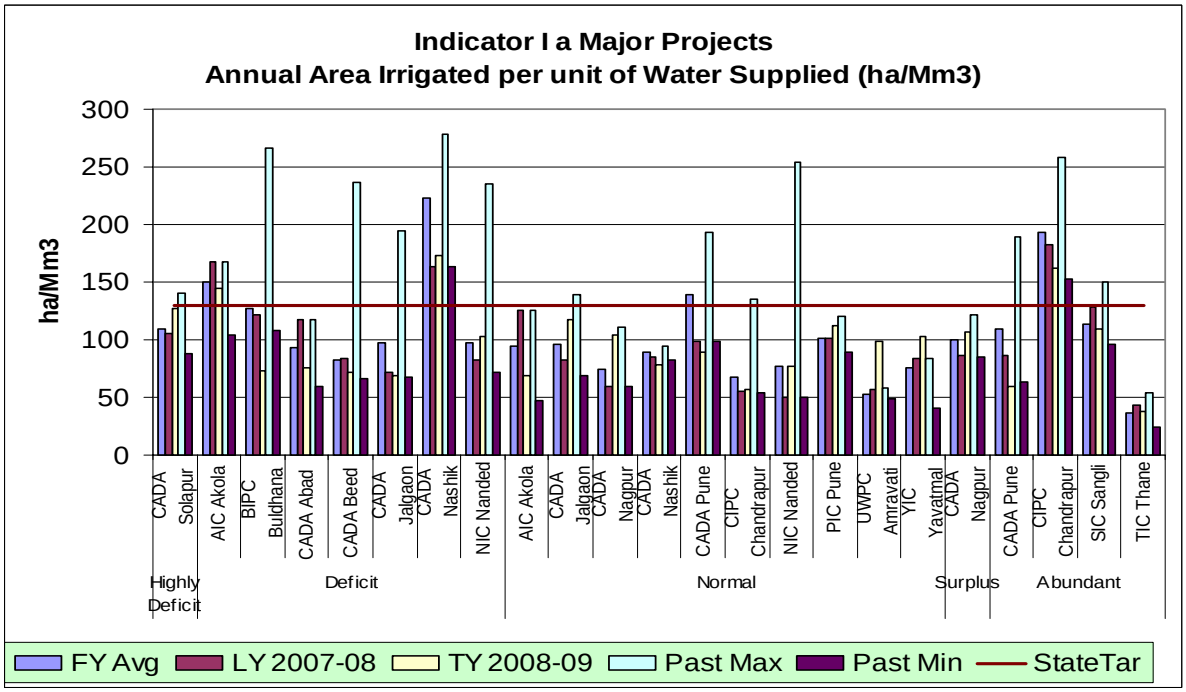
CIPC Chandrapur: Ninety percent of total water use on Asolamendha & Dina projects under CIPC Chandrapur is for kharif paddy crops. These projects lie in assured rainfall zone, obviously irrigation is in the form of protective irrigation.

Overall performance of Asolamendha & Dina projects is 6167 cum/ha. As compared to the last year, water use increased to some extent & less than the state value target.

SIC Sangli: Water use for irrigation in different projects under this circle against State norm (7692 cum/ha) are as under; Overall average water use on Radhanagri, Tulsi, Warna , & Dhudhganga is (9173).Over all water use on all the projects is comparatively more than the State norm. Due to irregular supply of electricity, at night time there are frequent operations of starting and

stopping which results in loss of water. Accurate measurement of water lifted for irrigation is not possible. Compared with the last year, water supply is 18 % more & it is more than the state norms.

TIC Thane: Water use for irrigation in different projects under this circle against State norm (7692 cum/ha) are as under; Over all water use on Bhatsa, Kal-Amba, & Surya is 26657cum/ha. it is more than triple the state norm. Reasons for more water use, put forth by project authorities are as under.-Steep Geographical topography, water loss is more.-Mostly rice crop is taken, & water requirement for rice crop is 5 to 6 times more. Efforts are being made to reduce rate of water use by promoting farmers by developing horticulture in command area. Compared with last year, it is increased to some extent.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Solapur	110	106	126	141	88	126	130
Deficit	AIC Akola	150	167	144	167	104		
	BIPC Buldhana	127	122	73	266	109		
	CADA Abad	93	117	76	117	59		
	CADA Beed	82	84	71	237	66	123	130
	CADA Jalgaon	97	72	69	194	68		
	CADA Nashik	223	163	172	279	163		
	NIC Nanded	98	83	103	235	72		
Normal	AIC Akola	95	126	70	126	47		
	CADA Jalgaon	96	82	118	139	69		
	CADA Nagpur	74	59	103	111	59		
	CADA Nashik	89	85	78	95	83		
	CADA Pune	139	99	89	194	99		
	CIPC Chandrapur	68	55	56	135	54	101	130
	NIC Nanded	78	51	77	255	51		
	PIC Pune	102	101	112	121	89		
	UWPC Amravati	53	56	98	58	48		
	YIC Yavatmal	76	84	103	84	41		
Surplus	CADA Nagpur	100	87	107	121	85	107	130
Abundant	CADA Pune	109	86	60	189	63		
	CIPC Chandrapur	194	183	162	258	152		
	SIC Sangli	114	128	109	150	96	136	130
	TIC Thane	36	43	38	53	24		

Indicator I a: Annual Area irrigated per unit of water supplied (ha/Mm3)

Highly Deficit Plan group:

CADA Solapur: Overall area irrigated per unit of water supplied is 126 ha/Mm3 in this year. Compared with last year it is increased by 19% & it is just below the state target

Deficit Plan group:

AIC Akola: The area irrigated per unit of water supplied is satisfactory during this year in Nalganga project and water is not available for irrigation in Katepurna project.

BIPC Buldhana: The area irrigated per unit of water supplied is very low as compared to past years as well as state norm in Wan project reduction in irrigated area is the main reason for low ISP.

CADA Aurangabad: In Jayakwadi (PLBC) area irrigated per unit of water supply is very low i.e. only 73 ha/Mm3 which is nearly 50% of state target. Even though out of 98117 ha. area is irrigated 14943 ha. area is on reservoir lift. This shows that project authorities or not paying attention towards the water use either by canal flow or reservoir lift.

CADA Beed: In Jayakwadi (PRBC) area irrigated per unit of water supply is reduced from 84 ha/Mm3 (2007-08) to 71 ha./Mm3 which is far below the state target. Proper watch on water use is needed to improve this indicator.

CADA Jalgaon :: The area irrigated per unit of water supplied is low than the state target because of 50 to 60 years old canal system under Jamda weir old pervious strata in tail reach in Girna project.

CADA Nashik: The area irrigated per unit of water supplied seems on higher side of the state norm due to fewer rotations (2 Nos) in Rabi season under Chnakapur project.

NIC Nanded: There is improvement to some extent in area irrigated per unit of water supply compared to last year. But still it is below the state target.

Normal Plan Group:

AIC Akola: Project authorities asked to concentrate to increase irrigated area & minimize the water losses.

CADA Jalgaon: The area irrigated per unit of water supplied is lower than the state norms due to following reason.

i) Irrigation on seated area
ii) No Night irrigation
iii) Indicator to irrigation on wells instead of flow irrigation.

CADA Nagpur: Area irrigated per unit of water supplied on lower Wunna project during this year is 103 ha/Mm3 which is below the State Norms.

CADA Nashik: The area irrigated is low as compared to state target due to more conveyance losses in Bhandardara & Kadawa projects.

CADA Pune: Overall area irrigated per unit of water supplied is 89 ha/Mm3 in this year. Compared with last year it is decreased by 10% & it is 32% below the state target

CIPC Chandrapur: Area irrigated per unit of water supplied during this year is 77 ha/Mm3 which is 50% of the State Norms.

NIC Nanded: In Upper Penganga project though the indicator value is improved (77 ha/Mm3) in 2008-09 compared to last year value. (51 ha/Mm3) though it is for below the state target.

PIC Pune: Overall area irrigated per unit of water supplied is 112 ha/Mm3 in this year. Compared with last year it is increased by 11% & it is 14% below the state target

UWPC Amrawati: The area irrigated per unit of water supplied is low on Upper Wardha project. Project authorities asked to concentrate increase irrigated area & minimize water losses.

YIC Yeotmal: On Arunawati project the area irrigated per unit of water supplied is 103 ha.Mm3.

Surplus Plan Group:

CADA Nagpur: More area (107 ha/Mm3) is irrigated per unit of water supplied as compared to last years value (87 ha/Mm3) under the projects of this circle.

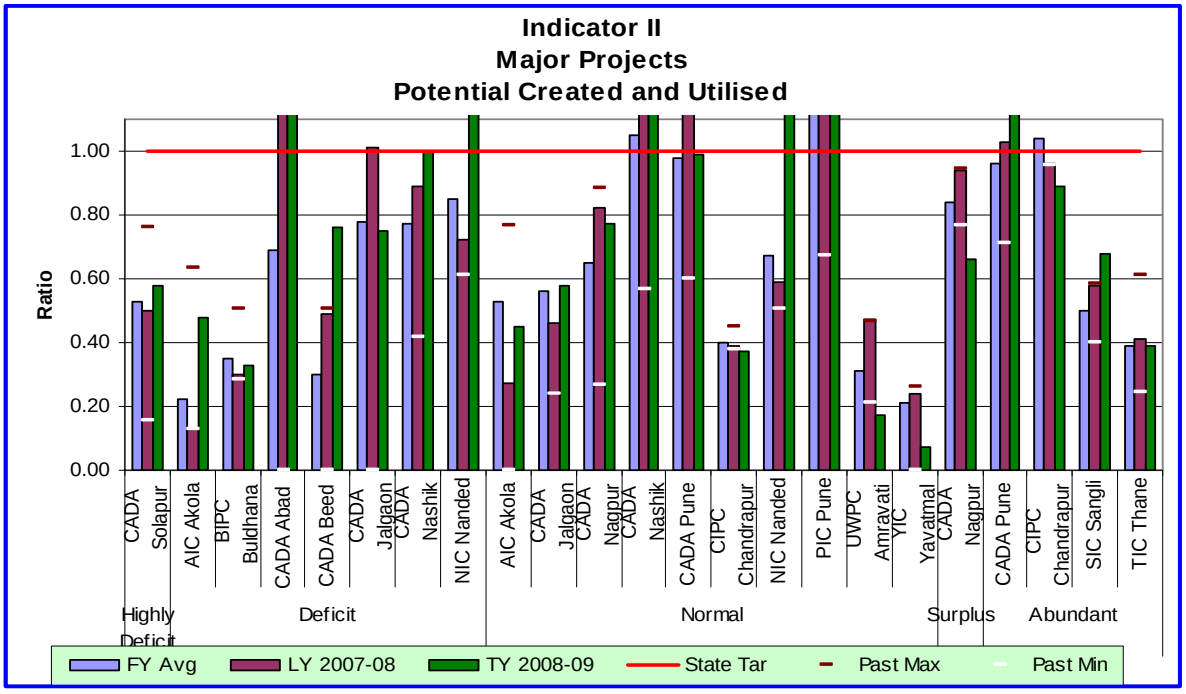
Abundant Plan Group:

CADA Pune: Overall area irrigated per unit of water supplied is 60 ha/Mm3 in this year. Compared with last year it is decreased by 31% & it is 54% less than the state target

CIPC Chandrapur: Comparatively less area (162 ha/Mm3) is irrigated per unit of water supplied as compared to last year (183 ha/Mm3) under the project of this circle.

SIC Sangli: Overall area irrigated per unit of water supplied is 109 ha/Mm3 in this year. Compared with last year it is decreased by 15% & it is 16% below the state target

TIC Thane: Overall area irrigated per unit of water supplied is 38 ha/Mm3 in this year. Compared with last year it is decreased by 12% & it is 77% less than the state target



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Solapur	0.53	0.50	0.58	0.76	0.15	0.58	1
Deficit	AIC Akola	0.22	0.13	0.48	0.63	0.13		
	BIPC Buldhana	0.35	0.30	0.33	0.51	0.28		
	CADA Abad	0.69	1.27	1.12	1.27	0.00	0.99	1
	CADA Beed	0.30	0.49	0.69	0.50	0.00		
	CADA Jalgaon	0.78	1.01	0.75	1.19	0.00		
	CADA Nashik	0.77	0.89	1.00	6.14	0.42		
	NIC Nanded	0.85	0.72	1.50	1.33	0.61		
Normal	AIC Akola	0.53	0.27	0.45	0.76	0.00		
	CADA Jalgaon	0.56	0.46	0.58	1.77	0.24		
	CADA Nagpur	0.65	0.82	0.77	0.88	0.27		
	CADA Nashik	1.05	1.43	1.53	1.56	0.56		
	CADA Pune	0.98	1.15	0.99	1.55	0.60	0.77	1
	CIPC Chandrapur	0.40	0.39	0.37	0.45	0.38		
	NIC Nanded	0.67	0.59	1.45	4.00	0.51		
	PIC Pune	1.28	1.87	1.31	1.87	0.67		
	UWPC Amravati	0.31	0.47	0.17	0.47	0.21		
	YIC Yavatmal	0.21	0.24	0.07	0.26	0.00		
Surplus	CADA Nagpur	0.84	0.94	0.66	0.94	0.77	0.66	1
Abundant	CADA Pune	0.96	1.03	1.26	1.29	0.71		
	CIPC Chandrapur	1.04	0.96	0.89	1.44	0.95		
	SIC Sangli	0.50	0.58	0.68	0.58	0.40	0.81	1
	TIC Thane	0.39	0.41	0.39	0.61	0.25		

Indicator II: Potential created and utilized (Ratio)

Highly deficit Plan group:

CADA Solapur: In Bhima (Ujjani) Project, utilized irrigation potential is 50%. Performance is 26%less than last year. Large percentage of the potential utilized, is from river lifts, and reservoir lifts. More efforts are needed to utilize the potential of canals.

Deficit Plan group:

AIC Akola: Actual potential utilization on Katepurna and Nalganga project was 0% and 73% respectively.

BIPC Buldhana: In case of Wan Project, potential utilization is 33% of effective potential created. There appears to be no improvement over its last year's performance 30%) though the 88% storage was in the project.

CADA Aurangabad: In Jayakwadi project (PLBC) the ratio has decreased from 1.27 to 1.12.

CADA Beed: In all four major projects viz. Majalgaon, Manjra, Lower Terna & PRBC the over all ratio is below State norms. The average value of indicator is 0.69 which has increased over last year's value 0.49. PRBC has increased from 0.33 to 0.96 as compared to last year affect overall improvement in indicator value of the circle.

CADA Jalgaon: In Girna project, 75% effective potential is utilised in this year.

CADA Nashik: In Chankapur project, full effective potential is utilised in this year.

NIC Nanded: In Vishnupuri & Purna projects the ratio is 1.34 & 2.3 respectively whereas in Manar due to lesser availability the ratio is very less i.e. 0.22, though overall average performance of circle is increased from 0.72 to 1.5**.**This shows that the irrigation in command area of projects through wells & nallas is more than that of canal flow & reservoir lift. Project authorities are advised to be very watchful in measuring irrigated area of respective source in time to assess accordingly as it has been observed from the annual accounts of the projects submitted that maximum Bhusar crops are irrigated on wells & nallas which gives no revenue to Government.

Normal Plan Group:

AIC Akola: Actual potential utilization on Pus project was 45%. It appears to be better performance compared to last year performance 27%) &less than past five years average performance (53%).

CADA Jalgaon: In Hatnur project the utilisation is improved from 0.46 to0.58 in this year.

CADA Nagpur: The ratio figure of this indicator is 0.77. It is 23% less than the state target value & 5% less than the last year value.

CADA Nashik: All major projects except Darna have achieved the state norm.

CADA Pune: In Kukadi Project the utilized potential is 77%. It shows decrease in performance since last year by 23%. In Ghod Project the ratio utilized irrigated potential with effective created potential comes to one.

CIPC Chandrapur: The ratio value of this indicator is 0.37. It is 63% less than the last year value.

NIC Nanded: In Upper Penganga Project the ratio has increased from 0.59 to 1.45.

PIC Pune: In Khadakwasla Project the ratio comes to 1.00 as that of last year performance. In N.R.B.C & N.L.B.C. the ratio comes to 1.00 as compared to 1.00 of last year value. In Pawana Project the ratio decreased from 0.44 of last year to 0.37 this year still it is below the state norms. The field officers are advised to take efforts for improving the performance.

UWPC Amaravati: Potential utilization during year 2008-09 was very low (17%) as compared to last year performance (47%).

YIC Yeotmal: Actual potential utilization on Arunavati project (7%) during the year 2008-09.

Surplus Plan Group:

CADA Nagpur: The ratio figure of this indicator is 0.66. It is 44% less than the state target value. As. compared with last year; it is decreased to some extent.

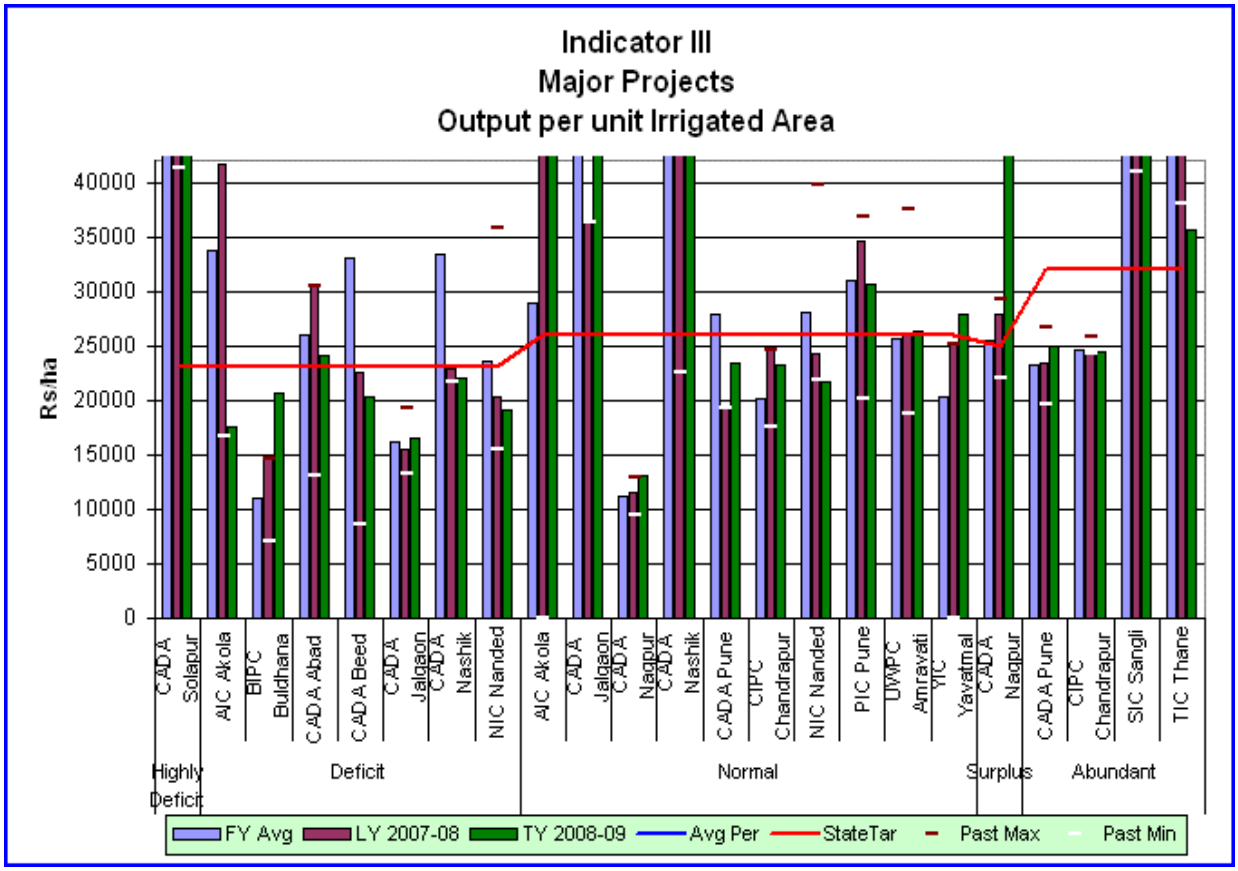
Abundant Plan Group:

CADA Pune: In Krishna Project the ratio comes to 1.26 this year which is same as compared to last year.

CIPC Chandrapur: The ratio figure of this indicator is 0.89. It is 11% less than the state target value & decreased by 8% than the last year value.

SIC Sangli: The average ratio of utilized irrigation potential to effective created potential in different projects under this circle is 0.68, projects are Radhanagri, Tulsi, Warna & Dhudhganga. On Dhudhganga project canal system is under progress, hence potential ratio is lower. Compared with last year, little improvement in utilization of potential created is observed to some extent.

TIC Thane: The average Ratio figure of utilized irrigation potential to effective created potential in different projects under this circle is 0.39. Major projects are Bhatsa, Kal-Amba & Surya. The ratio is decreased to some extent, Overall performance is below State norm. Sincere efforts & improvement is necessary to some extent in this regard.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Solapur	46642	44770	43666	52374	41367	43666	21000
Deficit	AIC Akola	33709	41632	17633	42150	16658	20051	23000
	BIPC Buldhana	10952	14619	20593	14619	6979		
	CADA Abad	25981	30463	24170	30463	13126		
	CADA Beed	33052	22571	20369	47369	8580		
	CADA Jalgaon	16103	15465	16454	19250	13334		
	CADA Nashik	33314	22827	21952	54857	21710		
	NIC Nanded	23643	20320	19187	35801	15545		
Normal	AIC Akola	28918	60864	52858	60864	0	23774	26000
	CADA Jalgaon	55202	36315	53560	79686	36315		
	CADA Nagpur	11246	11485	13147	12892	9409		
	CADA Nashik	45225	68973	66420	68973	22548		
	CADA Pune	27874	19262	23447	45757	19262		
	CIPC Chandrapur	20143	24650	23228	24650	17535		
	NIC Nanded	28126	24312	21749	39808	21803		
	PIC Pune	30911	34583	30712	36834	20062		
	UWPC Amravati	25683	26050	26294	37535	18719		
	YIC Yavatmal	20363	25153	27839	25153	0		
Surplus	CADA Nagpur	25504	27902	46835	29214	22058	46835	25000
Abundant	CADA Pune	23208	23352	25026	26705	19599	28369	32000
	CIPC Chandrapur	24692	24500	24500	25904	24261		
	SIC Sangli	52580	56190	55495	64516	40936		
	TIC Thane	42887	43172	35582	48919	38006		

Indicator III: Output per Unit Irrigated Area (Rs./ha)

Highly Deficit Plan Group:

CADA Solapur: In Bhima project, Agricultural output is Rs 43666/ha. Overall performance is very good. Due to more sugarcane crop percentage in this project the out put is more than state norm.

Deficit Plan Group:

AIC Akola: On Nalganga Project, out put rate achieved was Rs 17633/ha. which is low than the state norm though the cash crops were over the 40% area .

BIPC Buldhana: Though 5% cash crops, &1.7%perennial crops on Wan Project output per unit area irrigated was 20% low of the norm (Rs20593).

CADA Aurangabad: On PLBC the agricultural out put has decreased from Rs. 30463 to 24170/ha as compared to last year.

CADA Beed: In three projects namely Majalgaon, Manjra & Lower Terna agricultural output has slightly decreased compared to last year where as in PRBC out put fall down from 21159 to 11195 Rs/ha. which affect overall performance of the circle.

CADA Jalgaon: In Girna project, output/ha is increased from Rs. 15465/ha (2007-08) to Rs. 16454/ha (2008-09) which is about 72% of the state norm.

CADA Nashik: In Chankapur project, the output per ha is reduced from Rs. 22827/ha to Rs. 21952/ha which is just near the state norm.

NIC Nanded: In the projects viz. Manar, Vishnupuri & Purna the agricultural out put is Rs.18977/ha, Rs 22847/ha & Rs 17635/ha.respectively which it is still below state norms.

Normal Plan Group:

AIC Akola: Output observed on Pus Project (Rs.52858/ha) was more than the state norm of Rs.26000 per ha irrigated area. Oil seeds 5%, cash crops 8% &perennial crops 4% may be the responsible for appreciable increase.

CADA Jalgaon: In Hatnur project, the output /ha is increased from Rs. 36315/ha (2007-08) to Rs. 53560/ha (2008-09) and it is on higher side of the state norms.

CADA Nagpur: In case of Lower Wunna project, output per unit area irrigated was Rs 13147/ha. which shows increase in performance as compared to last year performance of Rs. 11485 /ha. Still out put is low compared to the state target (Rs.26000 /ha) and other projects under this circle.

CADA Nashik: In all the projects, the output/ha is above the state norm.

CADA Pune: In kukadi Project the output is Rs. 22957/ha. It is increased than last year performance but still below the state target. In Ghod Project the output increased from Rs 21284/ha. to Rs 21717./ha.this year but, it is still below the state norms.

CIPC Chandrapur: Output per unit area on Bor Project (Rs.23228/ha) has been decreased as compared to its performance in 2007-08 (Rs 24650/ha). Performance is low compared to the state norm probably due to rabbi seasonal crops mainly gram with meager perennial crops (2.5%) sown in the command.

NIC Nanded: In Upper Penganga Project the out put is decreased from Rs 24312/ha (2007-08) to Rs.21749/ha (2008-09), water availability is very less in this year.

PIC Pune: In Khadakwasla Project the output comes to Rs. 43990 as compared to last years output of Rs. 42982. In N.R.B.C the output is Rs. 27262/ha. Which is less than last year and just above the state target. In N.L.B.C. output is Rs. 28355/ha. It is decreased than last year and just above the state norms. In Pawna Project the output is Rs. 41597/ha. decreased as compared to last year value of Rs.50794/ha**.** In Ghod Project the output increased from Rs21717/ha. to Rs24483./ha.this year but it is still below the state norms.

UWPC Amaravati: Out put per unit ha on Upper Wardha project was Rs 26294/ha which is just at par with the state norm.

YIC Yeotmal: On Arunavati Project output during the irrigation year 2008-09 is high (Rs27839/ha) as compared to out put realized in 2007-08 (Rs25153/ha) & to the state norm of Rs. 26000/ha.

Surplus Plan Group:

CADA Nagpur: Overall output per unit irrigated area realized on Bagh, Itiadoh & Pench projects is Rs.46835/ha. compared to last year it is improved well & value is more than the state target value, hence performance is very good (Rs.25000/ha)

Abundant Plan Group:

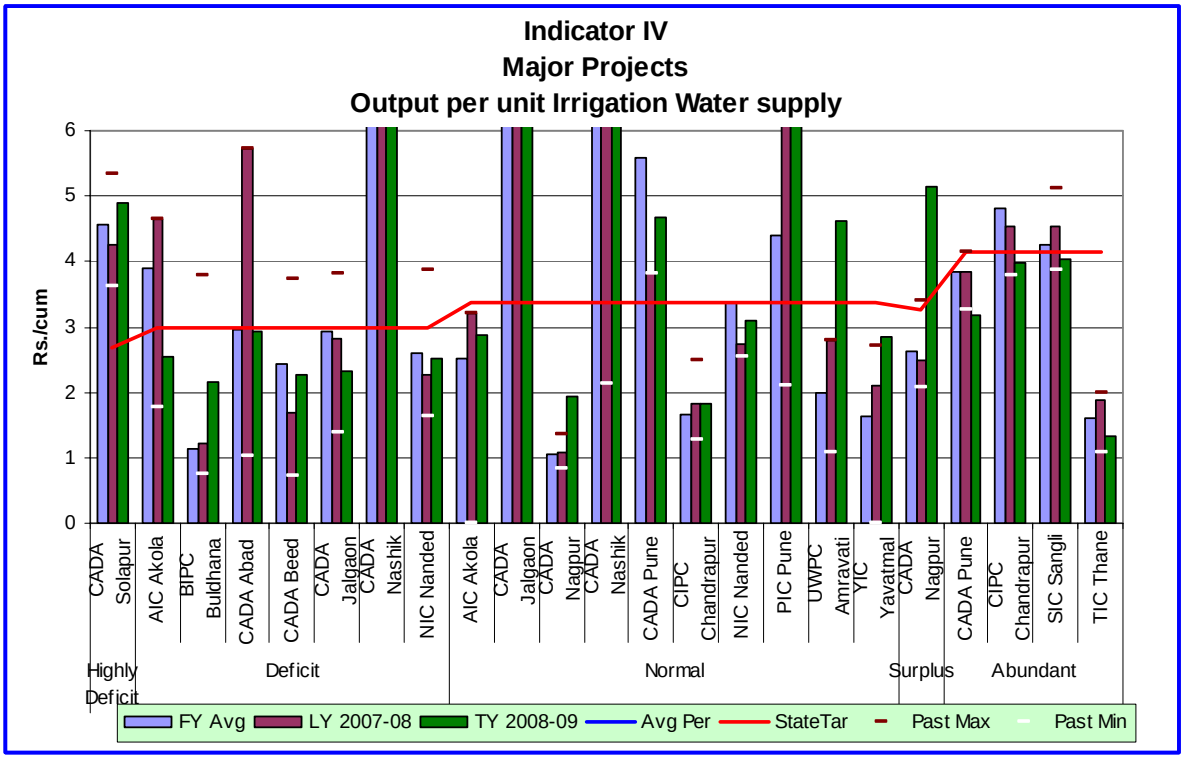
CADA Pune: In Krishna Project the output is Rs. 25026/ha.shows decrease than last year performance of Rs. 33352/ha. and is still below state target.

CIPC Chandrapur: Output observed on Asolamendha and Dina was Rs.24500/ha which is same as per last year out put.

Asolamendha & Dina projects are paddy growing projects. Obviously the output per unit irrigated area on these projects is likely to be low compared to state target (Rs.32000/ha)

SIC Sangli: The average Agricultural output per unit area in different projects under this circle is (Rs 55495/ha). The projects are Radhanagri, Tulsi, Warna & Dhudhganga. Pest attack on sugarcane crop is controlled and hence increase in yield, hence achievement is more than the state norm (Rs32000/ha) Overall performance is very good on all the projects.

TIC Thane : The average agricultural output per unit area in different projects under this circle is Rs 35582/ha. Projects are Bhatsa, Kal-Amba & Surya. Due to horticulture crops in place of rice crops the output is much more the state norm (Rs 32000/Ha).Over all performance of Agricultural output is very good.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Solapur	4.55	4.26	4.89	5.35	3.63	4.89	2.69
Deficit	AIC Akola	3.89	4.65	2.54	4.65	1.78		
	BIPC Buldhana	1.14	1.22	2.17	3.80	0.74		
	CADA Abad	2.97	5.72	2.94	5.72	1.01	2.46	2.99
	CADA Beed	2.42	1.69	2.28	3.74	0.72		
	CADA Jalgaon	2.92	2.81	2.31	3.81	1.37		
	CADA Nashik	12.71	12.83	12.45	15.30	10.89		
	NIC Nanded	2.60	2.28	2.52	3.88	1.62		
Normal	AIC Akola	2.51	3.20	2.88	3.20	0.00		
	CADA Jalgaon	9.28	10.40	13.48	11.07	6.72		
	CADA Nagpur	1.06	1.09	1.94	1.36	0.83		
	CADA Nashik	7.14	13.27	13.87	13.27	2.14	3.20	3.38
	CADA Pune	5.58	3.83	4.68	11.38	3.83		
	CIPC Chandrapur	1.66	1.83	1.82	2.48	1.26		
	NIC Nanded	3.37	2.74	3.09	6.76	2.55		
	PIC Pune	4.40	6.91	6.50	6.91	2.09		
	UWPC Amravati	1.98	2.79	4.62	2.79	1.08		
	YIC Yavatmal	1.64	2.11	2.86	2.70	0.00		
Surplus	CADA Nagpur	2.64	2.48	5.15	3.41	2.08	5.15	3.25
Abundant	CADA Pune	3.83	3.83	3.18	4.14	3.26		
	CIPC Chandrapur	4.81	4.54	3.97	6.27	3.78		
	SIC Sangli	4.27	4.53	4.04	5.11	3.88	3.13	4.16
	TIC Thane	1.59	1.87	1.33	1.99	1.07		

Indicator IV: Output per Unit Irrigation Water Supply (Rs./cum)

Highly Deficit plan group:

CADA Solapur: In Bhima (Ujjani) project, output per unit water supply for Irrigation is Rs. 4.89/cum. Over all performance is very good.

Deficit plan group:

AIC Akola On Nalganga project despite of the volumetric water supply the ratio (Rs2.54/cum) is low compared to the state target (Rs2.99/cum}.

BIPC Buldhana Output realized per unit of irrigation water supply on Wan project (Rs 2.17/cum) was better than previous year but low compared to state norm of Rs2.99/cum.

CADA Aurangabad: In Jayakwadi project (PLBC) indicator value has decreased from Rs.5.72/cum to 2.94/cum as more area is covered by food grain crops.

CADA Beed: In Majalgaon project the indicator value is decreased from 2.15 to 2.06 this year so it is still away from the State target. The field officers are required to improve the indicator value by judicious water use as ISP of canal for both Rabi & HW is below than 50% of the target. Where as on PRBC the value is increased from Rs1.26/cum (2007-08) to Rs1.49/m3 (2008-09). On Manjra & Lower Terna the values increased from Rs 3.94/cum to Rs 4.82/cum & Rs 3.16/cum to Rs 3.95/cum respectively, which are more ahead of State norms.

CADA Jalgaon: In Girna project, the output per unit irrigation water supply is reduced from Rs2.81/Cum to Rs 2.31/Cum which is below the state norm.

CADA Nashik: In Chankapur project, out put per unit irrigation water supplied is on higher side (Rs. 12.45/cum) as the water use per unit irrigated area has not exceeded the state norms i.e. water is utilised for irrigation precisely in 2 rotations only.

NIC Nanded: In Manar project the value increased from Rs2.28/m3 (2007-08) to Rs.3.31/m^3 (2008-09) since area irrigated on wells & nallas is 85% of total area irrigated. In Vishnupuri the value has decreased from Rs.3.28 to 2.97/m3 & Purna project has increased from Rs2.03/cum to Rs 2.30/m3 respectively as compared to last year.

Normal Plan Group:

AIC Akola: In spite of, excessive water use per unit irrigated area, good realization of output on Pus Project gave value as 2.88. Lower than state norm & last year's performance.

CADA Jalgaon: In Hatnur project, the output per unit irrigation water supply is increased from Rs.10.40/cum (2007-08) to Rs. 13.48/Cum (2008-09) which is on higher side of the state norms due to cash crops (Banana & Sugar cane) in the command.

CADA Nagpur: On Lower Wanna Project the indicator value is Rs. 1.94 /cum which is below the state norm.

CADA Nashik: In all the projects, the output per unit irrigation water supply is quite higher as compared to the state norm due to cash crops in the command.

CADA Pune: In Kukdi Project the output works out to Rs. 3.98/cum. Shows slight improvement as compared to last year performance. In Ghod Project output is increased (Rs. 7.16/cum) than last year (Rs. 5.50/cum).

CIPC Chandrapur: Though the output per unit irrigated area on Bor Project is fair as compared to the state target, ultimate out put per unit water supply was Rs.1.82/cum due to excessive irrigation water use. Compared to last year it is decreased to some extent.

NIC Nanded: In Upper Penganga project the value of indicator is increased from Rs2.74/cum to Rs 3.09/cum this year, this is due to decrease in water use 28% but only 10% reduction in utilized potential compared to last year.

PIC Pune: In Khadakwasla Project the output is Rs. 8.30/cum. In N.L.B.C. the output decreased from Rs.6.32/cum to Rs. 4.91/cum this year. In N.R.B.C. the output increased from Rs. 6.84/cum to 6.85/cum this year because of repairs to canal system and rainfall during rotation period causes less utilisation of water. In Pawna the output is decreased from Rs. 10.89/cum of last year to Rs. 2.23/cum this year. The overall performance of project under this circle is above the state target.

UWPC Amaravati: Exceptionally high water use per unit area irrigated but good output resulted value (Rs.4.62/cum) above the state norm value.

YIC Yeotmal: Good realization of output gave value (Rs.2.86/cum) but low to the state norm value.

Surplus Plan Group:

CADA Nagpur: Overall ratio in case of Bagh & Itiadoh Projects is Rs.5.15/cum. Performance in case of Itiadoh project compared to Bagh is some what low due to Hot Weather paddy grown on it. Where as on Pench project, low output is on account of more water use and low out put per hectare area irrigated. Overall compared with the last year performance is improved marginally & it is more than the state target value, hence performance is satisfactory.

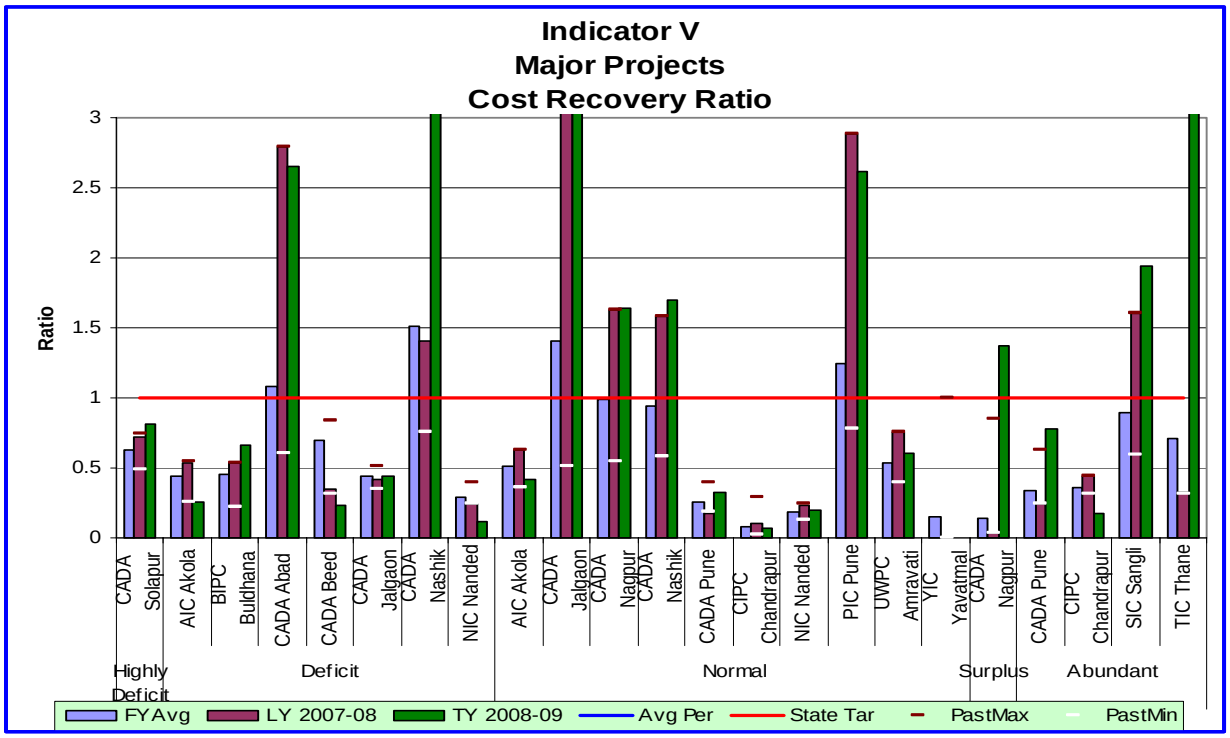
Abundant Plan Group:

CADA Pune: In Krishna Project the output comes out to Rs. 3.18/cum which is less than state norms and last year performance.

CIPC Chandrapur: Overall performance on Asolamendha and Dina project is Rs. 3.97/cum. Irrigation is mainly in the form protective irrigation. The performance is lower down compared to the state norm, than the last year performance.

SIC Sangli: The output per unit water supply in different projects under this circle is Rs4.04/cum. Projects are Radhanagri, Tulsi, Warna & Dudhaganga. Sincere efforts are being made for improvements. Compared with the last years overall performance is reduced to some extent.

TIC Thane: The average out put per unit water supply in different projects under this circle is Rs1.33/cum. The projects are Bhatsa, Kal-Amba, & Surya. Compared with last year, overall performance is decreased to some extent.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Solapur	0.63	0.72	0.81	0.75	0.49	0.81	1.00
Deficit	AIC Akola	0.44	0.54	0.26	0.54	0.26		
	BIPC Buldhana	0.45	0.54	0.66	0.54	0.22		
	CADA Abad	1.08	2.79	2.65	2.79	0.61	2.85	1.00
	CADA Beed	0.70	0.35	0.23	0.84	0.31		
	CADA Jalgaon	0.44	0.42	0.44	0.52	0.34		
	CADA Nashik	1.51	1.41	3.04	4.08	0.75		
	NIC Nanded	0.29	0.25	0.12	0.39	0.25		
Normal	AIC Akola	0.51	0.63	0.42	0.63	0.36		
	CADA Jalgaon	1.41	3.67	5.11	3.80	0.51		
	CADA Nagpur	0.99	1.63	1.64	1.63	0.55		
	CADA Nashik	0.94	1.58	1.70	1.58	0.58		
	CADA Pune	0.26	0.18	0.33	0.40	0.18	2.00	1.00
	CIPC Chandrapur	0.08	0.11	0.07	0.29	0.02		
	NIC Nanded	0.19	0.23	0.20	0.25	0.13		
	PIC Pune	1.24	2.88	2.62	2.88	0.78		
	UWPC Amravati	0.53	0.76	0.60	0.76	0.39		
	YIC Yavatmal	0.15	0.00	0.00	1.00	0.00		
Surplus	CADA Nagpur	0.14	0.04	1.37	0.85	0.04	1.37	1.00
Abundant	CADA Pune	0.34	0.25	0.78	0.62	0.25		
	CIPC Chandrapur	0.36	0.44	0.17	0.44	0.31		
	SIC Sangli	0.90	1.60	1.94	1.60	0.60	4.72	1.00
	TIC Thane	0.71	5.35	11.44	4.78	0.72		

Indicator V: Cost Recovery Ratio

Highly Deficit Plan Group:

CADA Solapur: In Bhima (Ujjani) project, cost recovery ratio is 0.81. It is less than the state norm Compared to last year. It is improved to some extent.

Deficit Plan Group:

AIC Akola: On Katepurna appreciable achievement is on account of notable NI water recovery, however on Nalganga project, the cost recovery ratio (0. 04) is very poor compared to state norm. There is low revenue recovery on the part of irrigation & Non-irrigation water supply along with heavy operation (salary) cost. As previously mentioned reasons for such large operation cost when the Most of the area on Nalganga project is managed by WUA needs to be sorted out at field level.

BIPC Buldhana: On Wan Project, ratio observed was (0.66). It is low compared to state target. Low irrigation recovery along with high operation cost has affected the cost recovery ratio.

CADA Aurangabad: The ratio on PLBC is has slightly decreased from 2.79 to 2.65 this year.

CADA Beed: Over all decrease in recovery & increase in O & M cost affects the ratio to fall down compared to last year. In Majalgaon project the ratio has drastically decreased from 0.34 to 0.12 this year, as recovery of non irrigation has reduced from Rs. 87.00 lakh to Rs 25.39 lakh this year. In Manjra there is decrease in ratio 0.85 to 0.55 this year, as the NI recovery has decreased from Rs189 lakh to Rs 96 lakh in this year. In Lower Terna, the ratio has decreased from 0.20 to 0.13this year, due to decrease in recoveries. In PRBC the ratio has declined over last year from 0.31 to 0.14 this year, due to lesser recovery specially of irrigation.

CADA Jalgaon: In Girna project, the ratio is increased from 0.42 (2007-08) to 0.44 (2008-09). This is mainly due to increase in revenue by 111%.

CADA Nashik: In Chankapur project, the ratio is increased from 1.41 (2007-08) to 3.04 (2008-09).

NIC Nanded: In Vishnupuri project the cost recovery ratio has decreased from 0.87 to 0.14 this year. On Purna project the ratio has decreased from 0.17 to 0.09 this year, in Manar project the ratio has decreased from 0.07 to 0.05 this year, here the availability of water has decreased for the year, field officers are required to take efforts for recovery of irrigation & non irrigation to achieve state target.

Normal Plan Group:

AIC Akola: On Pus project, the ratio was low (0.42) compared to state norm but lower than last year performance (0.63). It is so on account of very low irrigation recovery and high operation cost. It is again reminded for Suitable measures to increase the irrigation recovery.

CADA Jalgaon: In Hatnur project, the ratio is above state norm (5.11). The increase is due to high recovery of N.I. water use.

CADA Nagpur: On lower Wanna Project the cost recovery ratio observed is good (1.64) as compared to state norm. 100% Non Irrigation water use recovery along with appreciable irrigation recovery is responsible to cross the target.

CADA Nashik: In Bhandardara project, the ratio is lowered from 1.00 (2007-08) to 0.71 (2008-09). In Mula project, the ratio is lowered from 0.34 (2007-08) to 0.28 (2008-09). In Ozerkhed project, the ratio is lowered from 0.22 (2007-

08) to 0.13 (2008-09).In Palkhed project the ratio has been increased from 0.96 (2007-08) to 1.09 (2008-09).In Waghad project, due to increase in revenue, the ratio is improved from 0.22 (2007-08) to 0.26 (2008-09). In Darna project, the ratio is above state norm since last three years. In Gangapur project the ratio has been reduced from 19.78 to 11.47. In Kadwa project, due to high O & M cost, the ratio is below the state norm (0.07).

Project authorities are required to take necessary efforts to improve the performance in the projects where the ratio is below the state norm.

CADA Pune: In Kukdi Project the cost recovery ratio comes to 0.18 shows increase than last year's value of 0.09 the ratio is below the state norms. The field officers have to take more efforts for better recovery. In Ghod Project ratio decreased from 0.92 to 0.88 this year. The performance is lowered due to less recovery and excess amount of expenditure on maintenance.

CIPC Chandrapur: On Bor Project the ratio has rolled down (0.07), compared to last year (0.40). It is very low compared to the state norm.

NIC Nanded: The ratio in UPP has decreased from 0.23 to 0.20 as compared to last year; it is below the State norms. Project authorities are advised to be more vigilant so as to reduce the maintenance cost and take efforts in revenue collection to achieve state norms.

PIC Pune: In Khadakwasla, N.L.B.C. N.R.B.C. and Pawna Project the cost recovery ratio is 2.08, 1.40, 0.38 and 18.49 respectively this year. All the four projects shows decrease in performance than last year, but except in N.R.B.C. the performance is above the state target.

In Pawna Project the more recovery of N.I. use causes remarkable performance of this indicator.

UWPC Amaravati: On Upper Wardha Project cost recovery ratio has slightly lowered (0.60) compared to last year (0.76).

YIC Yeotmal: The information regarding cost per year seems to be insignificant.

Surplus Plan Group:

CADA Nagpur: In case of all the three projects under this circle namely Bagh Itiadoh and Pench the value is 1.37. The achievement in respect of Cost recovery ratio is better than the past year performance of overall 0.04 as well as state norm (except Pench). On Pench performance looks to be very good as compared to state norm due to considerable NI water use and recovery on that part. Low Percentage of irrigation revenue recovery on all the three projects has pulled down the performance of the circle. More efforts are needed towards maximum irrigation revenue recovery on these projects as a whole for improving the performance.

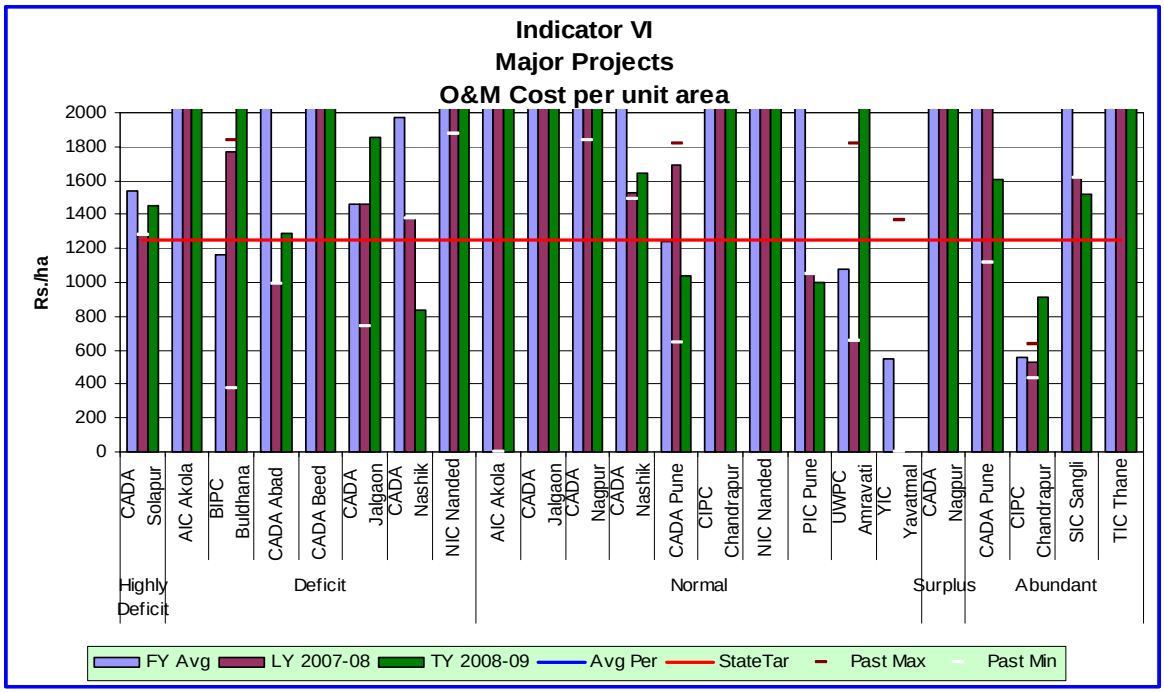
Abundant Plan Group:

CADA Pune: In Krishna Project the ratio comes to 0.78 which is more than last year. But it is below the state target. The field officer has to take more efforts for better recovery.

CIPC Chandrapur: On both the projects(Dina & Asolamendha) cost recovery ratio was 17% of the state target. Low achievement obviously is due to low irrigation recovery. Compared with last year, it is decreased by 23%.

SIC Sangli: The average Cost Recovery ratio in different projects under this circle is 1.94. The projects are Radhanagri, Tulsi, Warna & Dudhaganga. Substantial increase in O & M cost, old project & KT weirs newly rectified & fully repaired. It is 21% more than the last year value

TIC Thane: The average cost Recovery ratio in different projects under this circle is 11.44**.**



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Tar
Highly Deficit	CADA Solapur	1540	1278	1449	3492	1278	1449	1250
Deficit	AIC Akola	5716	5046	15619	15100	4131		
	BIPC Buldhana	1160	1772	2521	1839	372		
	CADA Abad	2752	988	1292	21401	988		
	CADA Beed	12052	4158	3093	18949	3563	1325	1250
	CADA Jalgaon	1462	1460	1852	7113	739		
	CADA Nashik	1975	1378	832	5617	1378		
	NIC Nanded	2364	2376	4228	2631	1877		
Normal	AIC Akola	2434	3310	4122	3310	0		
	CADA Jalgaon	7181	2189	3844	18471	2189		
	CADA Nagpur	2920	2671	2060	3854	1837		
	CADA Nashik	2467	1525	1642	4392	1493		
	CADA Pune	1241	1694	1038	1820	643		
	CIPC Chandrapur	5701	2689	4927	16020	2049	1225	1250
	NIC Nanded	2567	2058	2810	7103	2058		
	PIC Pune	2445	1047	996	4454	1047		
	UWPC Amravati	1080	658	2515	1818	658		
	YIC Yavatmal	548	0	0	1364	0		
Surplus	CADA Nagpur	14400	56450	2354	56450	2094		1250
Abundant	CADA Pune	2686	3925	1602	4389	1111		
	CIPC Chandrapur	554	528	916	633	437		
	SIC Sangli	2530	1611	1517	3703	1611	1345	1250
	TIC Thane	8833	7459	11885	10404	9204		

Indicator VI: O & M Cost per Unit Irrigated Area (Rs./ ha)

Highly Deficit Plan Group:

CADA Solapur: In Bhima (Ujjani) project O & M cost per unit area is Rs.1449/ha, which is 16% more than the state norm, hence performance is good.

Deficit Plan Group:

AIC Akola: Due to no irrigation on Katepurna & less irrigation on Nalganga, the indicator value has raised exceptionally to Rs.15619/ha against state norm of Rs.1250/ha.

BIPC Buldhana: On Wan Project, O & M cost per unit irrigated area has been increased to Rs.2521/ha as compared to its last year performance of Rs 1772/ha.

CADA Aurangabad: In Jayakwadi project (PLBC) the O & M cost per unit area has increased from Rs.871/ha to Rs1291.8/ha as compared to last year, which is slightly above the State norms.

CADA Beed: In Majalgaon project the indicator value has increased from Rs 4830/ha to Rs 5721/ha as a compared to last year, which is very high nearly 3.8 times to State norms.

In Manjra project the indicator value has increased from Rs 2934/ha to Rs4104/ha. as compared to last year. But it is still higher nearly 2.3 times than State norms.

In Lower Terna though the indicator value is decreased from Rs. 4904/ha to Rs 4740/ha. as compared to last year, it is still very high nearly 4.0 times to State norms. In Jayakwadi project (PRBC) the ratio has decreased from Rs3071/ha. to Rs 1088/ha. as compared to last year, which has attained the State norms.

CADA Jalgaon: In Girna project, the O&M cost per unit irrigated area is increased from Rs. 1460/ha (2007-08) to Rs. 1852/ha (2008-09) and it is on higher side of the state norm (Rs1250/ha).

CADA Nashik: In Chankapur project, the O & M cost per unit irrigated area is reduced from Rs1378/Cum to Rs 832/cum which has not exceeded the state norms.

NIC Nanded: In Manar project the indicator value has increased from Rs.1998/ha to Rs 17207/ha as compared to last year, very higher than the State norms.

In Vishnupuri project the indicator value has decreased from Rs 2103/ha to Rs2049/ha as compared to last year, which is above the State norms.

In Purna project the indicator value has increased from Rs 2289/ha to Rs3551/ha as compared to last year, which is above the State norms.

Normal Plan Group:

AIC Akola: On Pus project, the ratio was (3.30 times) higher (Rs4122/ha.) than the state norm.

CADA Jalgaon: In Hatnur project, though the O & M cost per unit irrigated area is increased from Rs.2189/ha (2007-08) to Rs. 3844/ha (2008-09) still it is on higher side (3.08 times) of state norms. Project authorities are required to take remedial measures to improve the performance.

CADA Nagpur: On Lower Wunna project O&M cost per unit area irrigated (Rs 2060/ha) was on higher side on account of low potential utilisation as well as more expenditure on maintenance and operation than the standard norms (Rs.1250/ha) it is less as compared to last years performance (Rs.2671/ha)**.**

CADA Nashik: In, Ozerkhed, Waghad, Kadwa and Palkhed projects, the O&M cost per unit irrigated area is well within the state norm. However, in, Bhandardara, Darna, Gangapur & Mula projects, the O & M cost per unit irrigated area is on higher side of state norm.

CADA Pune: In Kukdi Project the O & M cost per unit area is Rs. 1202/ha which decreased from Rs.1897/ha.of last year. In Ghod Project the O & M cost per unit area is considerably decreased from Rs. 901/ ha. of last year to Rs. 691/ha. this year due to curtailment in expenditure on maintenance.

CIPC Chandrapur: Overall O & m cost per unit area is Rs.4927/ha. O & M cost as compared with the last year nearly doubled

NIC Nanded: In UPP the indicator value has increased from Rs2058/ha to Rs2810/ha as compared to last year, which is still higher than the state norms.

PIC Pune: In Khadakwasla Project the O. & M. cost per unit area is Rs. 2474/ha. it increases from Rs. 2033/ha.of last year's due to increase in expenditure as compared to last year. In N.L.B.C. the O & M cost per unit area is Rs. 632/ha. Shows slight decrease in cost than last year of Rs. 646/ha.due to less expenditure on establishment. In NRBC Cost per unit area is Rs. 560/ha which is on lower side of last year value of Rs. 632/ha. In Pawna this year the value increases from Rs. 3970/ha. of last year to Rs.12018/ha. Enhancement in indicator value is due to increase in expenditure on maintenance cost and reduction of irrigated area.

UWPC Amaravati: The high expenditure on maintenance against the cost of operation of Irrigation Management has raised the ratio twice the state norm.

YIC Yeotmal: On Arunavati project there was no flow irrigation during 2008-09.

Surplus Plan Group:

CADA Nagpur: O&M cost per unit area of 3 projects under the circle is Rs. 2354 /ha which is more than the state norm. In spite of good potential utilisation on Bagh & Itiadoh projects, the ratio observed, which suggest more O&M expenditure on these projects compared to the state norm.

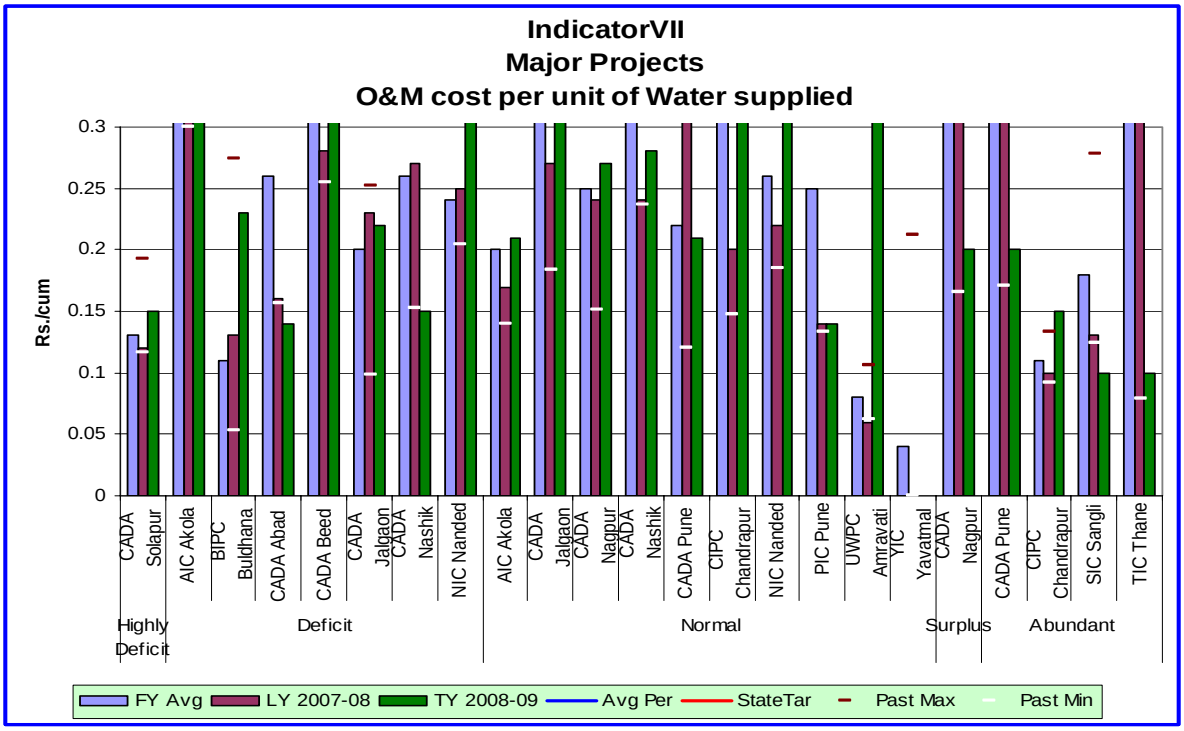
Abundant Plan Group:

CADA Pune: In Krishna Project the O & M cost per unit area reduces this year from Rs. 3861 /ha. to Rs. 1602/ha. The reason for better performance is because of reduction in expenditure on maintenance and establishment cost.

CIPC Chandrapur: Better potential utilisation and low expenditure on O & M has curbed the O & M cost per unit area irrigated well below the state norm on overall projects under this circle Rs.916/ha. It is doubled as compared with last year.

SIC Sangli: The average O & M cost per unit area in different project under this circle is Rs1517/ha. The projects are Radhanagri, Tulsi, Warna & Dudhaganga. Comparing with last year ratio is decreased by 6%, further efforts are being taken to reduce O & M cost & increasing irrigation area. Overall performance in Warna project & Dhudhganga project is good & improved marginally compared with last year. Due to huge repair work on Radhanagari & Tulsi, indicator value is too much more than the state target.

TIC Thane: The average O & M cost per unit area in different project under this circle is Rs11885/ha. The projects are Bhatsa, Kal-Amba & Surya. Overall performance is more than the state norm.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Solapur	0.13	0.12	0.15	0.19	0.12	0.15	0.16
Deficit	AIC Akola	0.44	0.41	1.60	1.02	0.30		
	BIPC Buldhana	0.11	0.13	0.23	0.27	0.05		
	CADA Abad	0.26	0.16	0.14	0.56	0.16		
	CADA Beed	0.77	0.28	0.32	4.69	0.26	0.19	0.16
	CADA Jalgaon	0.20	0.23	0.22	0.25	0.10		
	CADA Nashik	0.26	0.27	0.15	0.37	0.15		
	NIC Nanded	0.24	0.25	0.38	0.37	0.20		
Normal	AIC Akola	0.20	0.17	0.21	2.52	0.14		
	CADA Jalgaon	0.48	0.27	0.31	0.85	0.18		
	CADA Nagpur	0.25	0.24	0.27	0.48	0.15		
	CADA Nashik	0.31	0.24	0.28	0.46	0.24		
	CADA Pune	0.22	0.33	0.21	0.33	0.12	0.22	0.16
	CIPC Chandrapur	0.47	0.20	0.39	1.46	0.15		
	NIC Nanded	0.26	0.22	0.32	0.64	0.18		
	PIC Pune	0.25	0.14	0.14	0.38	0.13		
	UWPC Amravati	0.08	0.06	0.31	0.11	0.06		
	YIC Yavatmal	0.04	0.00	0.00	0.21	0.00		
Surplus	CADA Nagpur	1.28	4.59	0.20	4.59	0.17	0.20	0.16
Abundant	CADA Pune	0.43	0.63	0.20	0.66	0.17		
	CIPC Chandrapur	0.11	0.10	0.15	0.13	0.09		
	SIC Sangli	0.18	0.13	0.10	0.28	0.12	0.14	0.16
	TIC Thane	0.63	1.25	0.10	1.25	0.08		

Indicator VII: O & M Cost per Unit Water Supply (Rs. /cum)

Highly Deficit Plan Group:

CADA Solapur: In Bhima (Ujjani) project, the O & M cost is Rs. 0.15 /cum, It is 6% below the state norm. Overall performance is good.

Deficit Plan Group:

AIC Akola: O & M cost per unit water supplied on Katepurna & Nalganga Projects under AIC Akola was more than state norm on account of increase in maintenance expenditure during year 2008-09.

BIPC Buldhana: On Wan Project performance was slightly higher than state norm.

CADA Aurangabad: In Jayakwadi project (PLBC) the value is decreased from 0.16 to 0.14 achieving state target.

CADA Beed: In Majalgaon, the indicator value has increased from 0.32 to 0.38, Manjra has increased over last year's value 0.27 to 0.35, Lower Terna has slightly decreased from 0.65 to 0.59 this year. PRBC is retained its last years value i.e. 0.20 which is still higher to State norms.

CADA Jalgaon: In Girna project, though the O & M cost per unit water supplied is reduced from Rs. 0.23/cum (2007-08) to Rs. 0.22/cum (2008-09), still it is 1.4 times more than the state norm.

CADA Nashik: In Chankapur project, the O & M cost per unit water supplied is just nearer the state norm (Rs.0.15/cum).

NIC Nanded: In Purna & Manar projects the ratio have increased from 0.23 & 0.24 to 0.38 & 1.14 respectively, where as in Vishnupuri project the ratio is slightly decreased from 0.27 to 0.24 as compared to last year.

Normal Plan Group:

AIC Akola: The ratio on Pus was just higher than state target.

CADA Jalgaon: In Hatnur project, the O&M cost per unit water supplied is increased from Rs0.27/cum to Rs 0.31/cum and is on higher side of the state norm.

CIPC Chandrapur & CADA Nagpur: The ratio on Bor, Lower Wunna project was more than the state target.

CADA Nashik: In all the projects the O & M cost per unit water supplied is above state norm. The indicator value ranges from Rs.0.21/cum to Rs. 1.02/cum.Field officers are required to take care to improve the performance.

CADA Pune: In Kukdi Project the O & M cost is Rs. 0.21/cum which is decreased over last year performance of Rs. 0.35/cum.because of increase in water utilisation. In Ghod Project, this year O & M cost is Rs. 0.22/cum which is same as last year. Decrease in performance in both the project is due to high maintenance expenditure.

NIC Nanded: In UPP the ratio has increased from 0.22to 0.32 which is still higher than State norms.

PIC Pune: In Khadakwasla, N.L.B.C., N.R.B.C. and Pawna Projects O & M cost Per Unit water supply is Rs. 0.19, 0.11, 0.10 and 0.09/cum.respectively. The performances of all projects are up to satisfactorily level.

UWPC Amravati: The ratio on Upper Wardha was twice the state norm.

YIC Yeotmal: On Arunavati Project the indicator value is zero due to insignificant information given by field officers.

Surplus Plan Group:

CADA Nagpur: Overall performance O & M cost per unit water supply is Rs. 0.20/cum compared with last year, it is substantially decreased & slightly more than state target value (0.16)

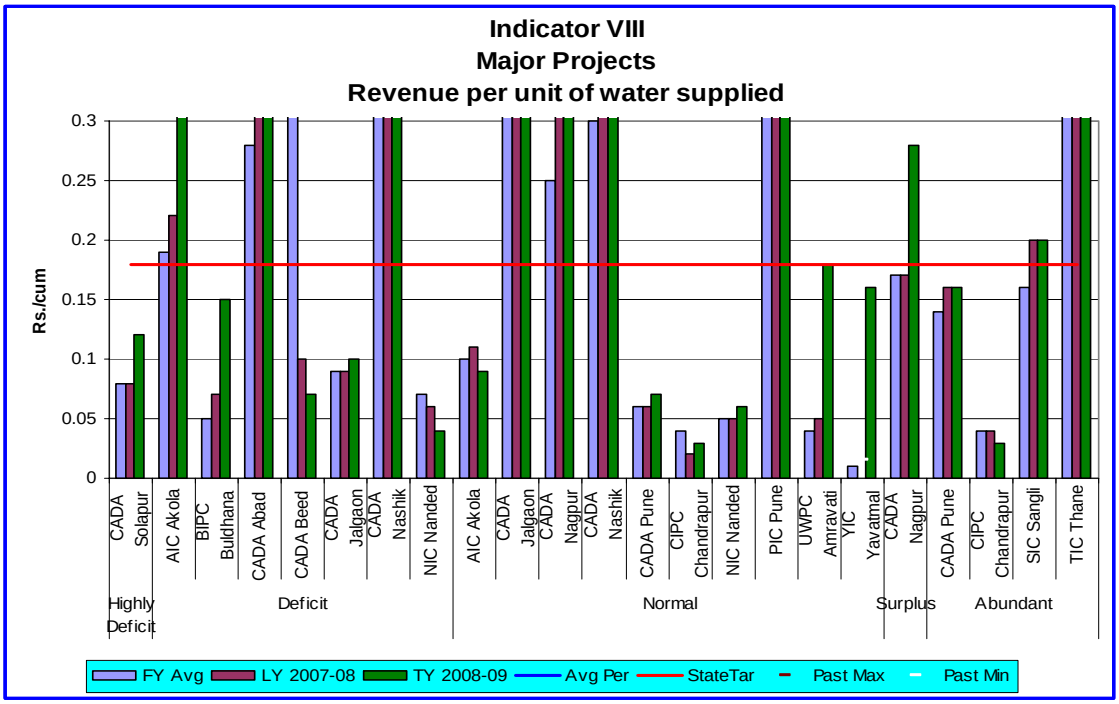
Abundant Plan Group:

CADA Pune: In Krishna Project the O & M Cost is Rs. 0.20/cum decreases from 0.63 /cum of last year, it is due to reduction of expenditure on maintenance cost over last year.

CIPC Chandrapur: Protective irrigation in Kharif on Asolamendha & Dina project under CIPC Chandrapur has restricted the O & M cost per unit water supply well within the state norm.

SIC Sangli: The average O & M cost per cubic meter of water supply for irrigation in different projects under this circle is Rs0.10/cum. The projects are Radhanagari, Tulsi , Warna & Dudhaganga compared with last year it is reduced to some extent & below the state norm.

TIC Thane: The average O & M Cost per cubic meter of water supply for irrigation in different projects under this circle is Rs0.10/cum. The projects are Bhatsa, Surya & Kal-Amba.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Solapur	0.08	0.08	0.12	0.94	0.63	0.12	0.18
Deficit	AIC Akola	0.19	0.22	0.42	4.15	1.00		
	BIPC Buldhana	0.05	0.07	0.15	1.46	0.21		
	CADA Abad	0.28	0.43	0.36	4.35	1.55		
	CADA Beed	0.54	0.10	0.07	30.21	0.99	0.11	0.18
	CADA Jalgaon	0.09	0.09	0.10	1.07	0.49		
	CADA Nashik	0.40	0.38	0.47	6.25	2.03		
	NIC Nanded	0.07	0.06	0.04	1.04	0.58		
Normal	AIC Akola	0.10	0.11	0.09	10.30	0.54		
	CADA Jalgaon	0.68	0.98	1.58	9.84	2.02		
	CADA Nagpur	0.25	0.38	0.45	3.83	1.83		
	CADA Nashik	0.30	0.37	0.47	3.85	2.04		
	CADA Pune	0.06	0.06	0.07	0.71	0.47	0.10	0.18
	CIPC Chandrapur	0.04	0.02	0.03	0.59	0.23		
	NIC Nanded	0.05	0.05	0.06	1.14	0.35		
	PIC Pune	0.31	0.40	0.37	4.01	2.37		
	UWPC Amravati	0.04	0.05	0.18	0.49	0.33		
	YIC Yavatmal	0.01	0.00	0.16	0.41	0.01		
Surplus	CADA Nagpur	0.17	0.17	0.28	2.23	1.40	0.28	0.18
Abundant	CADA Pune	0.14	0.16	0.16	1.65	1.01		
	CIPC Chandrapur	0.04	0.04	0.03	0.49	0.32	0.13	0.18
	SIC Sangli	0.16	0.20	0.20	2.01	1.48		
	TIC Thane	0.45	0.40	1.15	7.28	3.08		

Indicator VIII: Revenue per Unit Water Supply (Rs./cum)

Highly Deficit Plan Group:

CADA Solapur: In Bhima (Ujjani) project, the revenue is Rs. 0.12/cum which is below the state target. Overall performance is below average.

Deficit Plan Group:

AIC Akola: Projects under AIC Akola are Katepurna & Nalganga. The ratio (Rs0.42/cum) is improved when compared with the performance of last year.

BIPC Buldhana: On Wan Project the indicator value is Rs 0 .15/cum.

CADA Aurangabad: In Jayakwadi project (PLBC) the value decreased from 0.43 to 0.36

CADA Beed: In Majalgaon & Lower Terna the ratio is 0.11 (decreased from 0.22) & 0.13 (increased from 0.0.5) respectively , which is below the state norms (0.18), in PRBC it has decreased from 0.10 to 0.06 as compared to last year where as Manjra project has ratio of 0.23 (increased from 0.16) achieving state target.

CADA Jalgaon: In Girna project, the ratio is below the state norm since last three years.

CADA Nashik: In Chankapur project, the performance is much better (Rs.0.47/cum) as compared to state norm.

NIC Nanded: In all the three projects viz. Manar, Vishnupuri & Purna revenue has decreased per cum of water supply this year. i.e. in the range of 0.21 to 0.07.

Normal Plan Group:

AIC Akola: In Pus project the value is Rs 0.09/cum.

CADA Jalgaon: In Hatnur project the ratio is above state norm. (Rs.1.58/cum).

CADA Nagpur: This year **t**he ratio is 0.45 as compared to last years ratio 0.38.

CADA Nashik: The revenue per unit water supplied is above state norm in Gangapur, Darna & Palkhed projects since last two years. However, the ratio is below state norm (varying from 11%to83%) in Kadwa, Bhandardara, Ozerkhed, Mula and Waghad projects.

CADA Pune: In Kukdi Project revenue is Rs. 0.04/cum shows slight increase over last year performance of Rs. 0.03/cum. It is also far below the state norms. In Ghod project revenue per unit water supply is Rs. 0.19/cum which shows slight decrease from Rs. 0.20/cum of last year.

CIPC Chandrapur: This year **t**he ratio is 0.03 as compared to last years ratio 0.02.

NIC Nanded: UPP has retained last year's value 0.06, as recovery being negligible for successive years.

PIC Pune: In Khadakwasla revenue is Rs. 0.39/cum increased from Rs. 0.38/cum of last year because of increase in revenue of irrigation and non irrigation use. In N.L.B.C. revenue Per Unit water supply is Rs. 0.15/cum. In N.R.B.C. the value is 0.10. In Pawna Project the value decreased from Rs. 2.10/cum to Rs. 1.67/cum. The variation in performance is due to increase or reduction of recovery of irrigation water charges.

UWPC Amravati: In Upper Wardha project the value is Rs. 0.18/cum.

YIC Yeotmal: In Arunavati project the value is Rs 0.16/cum which is close to state norm.

Surplus Plan Group:

CADA Nagpur: Overall low revenue recovery along with excessive water use on all projects under CADA Nagpur is responsible to low performance as compared to state target.

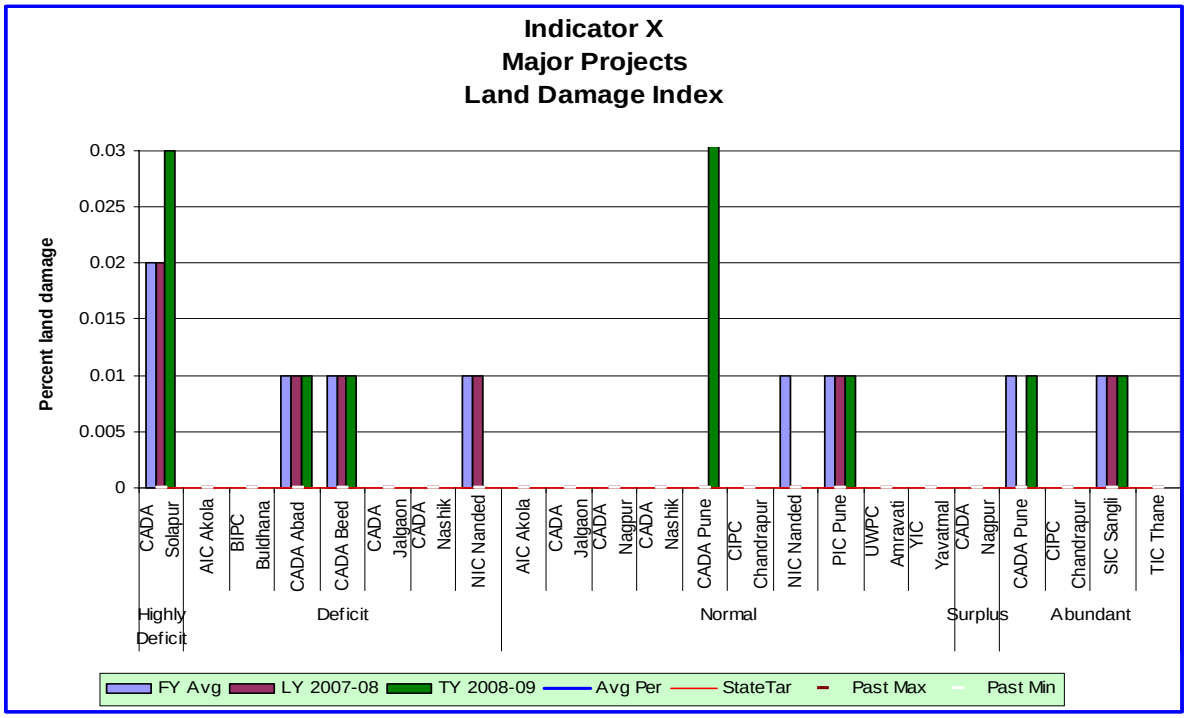
Abundant Plan Group:

CADA Pune: In Krishna Project the performance is same as Rs. 0.16/cum of last year.

CIPC Chandrapur: On Asolamendha & Dina projects under CIPC Chandrapur value is low (Rs 0.03/cum) as compared to the state norm (0.18).

SIC Sangli: The average revenue value per cubic meter of water supply, in different projects under this circle is Rs 0.20/cum. the projects are Radhanagri, Tulsi, Warna & Dudhaganga. The performance is very good. It is as per the last year value.

TIC Thane: The average revenue per cubic meter water supply in different projects under this circle is Rs1.15/cum. The projects are Bhatsa, Kal-Amba & Surya. The performance is very good.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	state target
Highly Deficit	CADA Solapur	0.02	0.02	0.03	0.00	0.00	0.03	0.00
Deficit	AIC Akola	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BIPC Buldhana	0.00	0.00	0.00	0.00	0.00		
	CADA Abad	0.01	0.01	0.01	0.00	0.00		
	CADA Beed	0.01	0.01	0.01	0.00	0.00		
	CADA Jalgaon	0.00	0.00	0.00	0.00	0.00		
	CADA Nashik	0.00	0.00	0.00	0.00	0.00		
	NIC Nanded	0.01	0.01	0.00	0.00	0.00		
Normal	AIC Akola	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CADA Jalgaon	0.00	0.00	0.00	0.00	0.00		
	CADA Nagpur	0.00	0.00	0.00	0.00	0.00		
	CADA Nashik	0.00	0.00	0.00	0.00	0.00		
	CADA Pune	0.00	0.00	0.11	0.00	0.00		
	CIPC Chandrapur	0.00	0.00	0.00	0.00	0.00		
	NIC Nanded	0.01	0.00	0.00	0.00	0.00		
	PIC Pune	0.01	0.01	0.01	0.00	0.00		
	UWPC Amravati	0.00	0.00	0.00	0.00	0.00		
	YIC Yavatmal	0.00	0.00	0.00	0.00	0.00		
Surplus	CADA Nagpur	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Abundant	CADA Pune	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	CIPC Chandrapur	0.00	0.00	0.00	0.00	0.00		
	SIC Sangli	0.01	0.01	0.01	0.00	0.00		
	TIC Thane	0	0	0	0	0		

Indicator X: Land Damage Index:

Highly Deficit Plan Group:

CADA Solapur: In Bhima (Ujjani) project land damage index is 0.03 compared with last year it is increased by 50%.

Deficit Plan group:

CADA Aurangabad: In Jayakwadi Project (PLBC) the land damage increased from 1305 ha to 2228ha this year.

CADA Beed: In Manjra project the affected area has decreased from 487ha to 408ha. as compared to last year, resulting in to slight variation in ratio.

NIC Nanded: In all the three projects the land damage index is nil.

Normal Plan Group:

CADA Pune: Average land damage index of this circle is 0.11.In Ghod Project there is no land damage this year. In Kukdi Project land damage ratio is 0.13 this year.

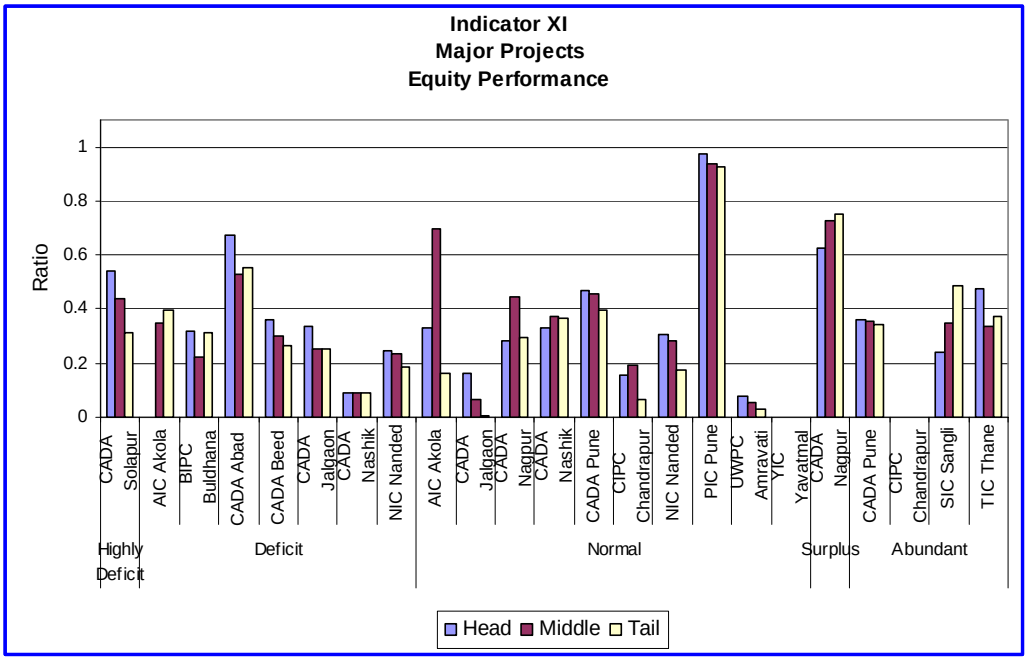
NIC Nanded: In UPP, there is increase in land damage area from 270 ha to 298 ha this year, resulting increase in % of indicator.

PIC Pune: In Khadakwasla, N.L.B.C., N.R.B.C. and Pawna Projects the land damage index is 0, 2.14, 0.6 and Nil this year respectively.

Abundant Plan Group:

CADA Pune: In Krishna Project the land damage ratio is 0.01 this year.

SIC Sangli: The average Land damage index value in Radhanagri is 0.01. It is same as per last year value.



Plan group	Circle	2008-09		
		Head	Middle	Tail
Highly Deficit	CADA Solapur	0.54	0.44	0.31
Deficit	AIC Akola	0.00	0.35	0.40
	BIPC Buldhana	0.32	0.22	0.31
	CADA Abad	0.68	0.53	0.56
	CADA Beed	0.36	0.30	0.26
	CADA Jalgaon	0.34	0.25	0.25
	CADA Nashik	0.09	0.09	0.09
	NIC Nanded	0.25	0.23	0.19
Normal	AIC Akola	0.33	0.69	0.16
	CADA Jalgaon	0.16	0.07	0.01
	CADA Nagpur	0.28	0.45	0.30
	CADA Nashik	0.33	0.38	0.36
	CADA Pune	0.47	0.46	0.40
	CIPC Chandrapur	0.16	0.20	0.06
	NIC Nanded	0.31	0.28	0.17
	PIC Pune	0.97	0.94	0.93
	UWPC Amravati	0.08	0.06	0.03
	YIC Yavatmal	0.00	0.00	0.00
Surplus	CADA Nagpur	0.62	0.73	0.75
Abundant	CADA Pune	0.36	0.36	0.34
	CIPC Chandrapur	0.00	0.00	0.00
	SIC Sangli	0.24	0.35	0.49
	TIC Thane	0.48	0.33	0.37

Indicator XI: Equity Performance:

Highly Deficit Plan Group:

CADA Solapur: In Bhima project the performance values of 2008-09 are as under; Head reach 0.54, Middle reach 0.44 & Tail reach 0.31.

Deficit Plan Group:

CADA Aurangabad: In Jayakwadi project (PLBC) the potential utilization is little more in the head reach.

CADA Beed: In Majalgaon project the equity performance at Head, Middle & Tail reaches with 0.46, 0.35 & 0.14 respectively. In Manjra project & Lower Terna the potential utilization is concentrated equally. In Jayakwadi (PRBC) the potential utilization is concentrated in Head & Middle and lesser on Tail reach.

NIC Nanded: In Purna & Vishnupuri the potential utilization is more or less equal on Head, Middle & Tail reaches. In Manar there is no utilization of water through canal for irrigation since lesser availability.

Normal Plan Group:

CADA Nagpur: This circle has some different case where utilization is concentrated in middle reach. Head reach ratio is 0.23, middle reach ratio is 0.45 and tail reach ratio is 0.30 which is nearer to head reach ratio.

CADA Pune: In Kukdi Project the ratio of potential utilizations is 38% at head middle and tail. In Ghod Project 96% & 97%, 57% area has been irrigated at Head and middle & tail reach.

NIC Nanded: In UPP project the potential utilization is slightly on higher side at the head reach.

PIC Pune: In Khadakwasla potential Utilization is same (0.30) in three reaches of command area. In NLBC the ratio comes to 1.06 in three reaches of command area. In NRBC Irrigation Potential are 1.51, 1.30 and 2.13 at head, middle and tail reach respectively. The ratio is increased due to inclusion of well irrigated area.

Surplus Plan Group:

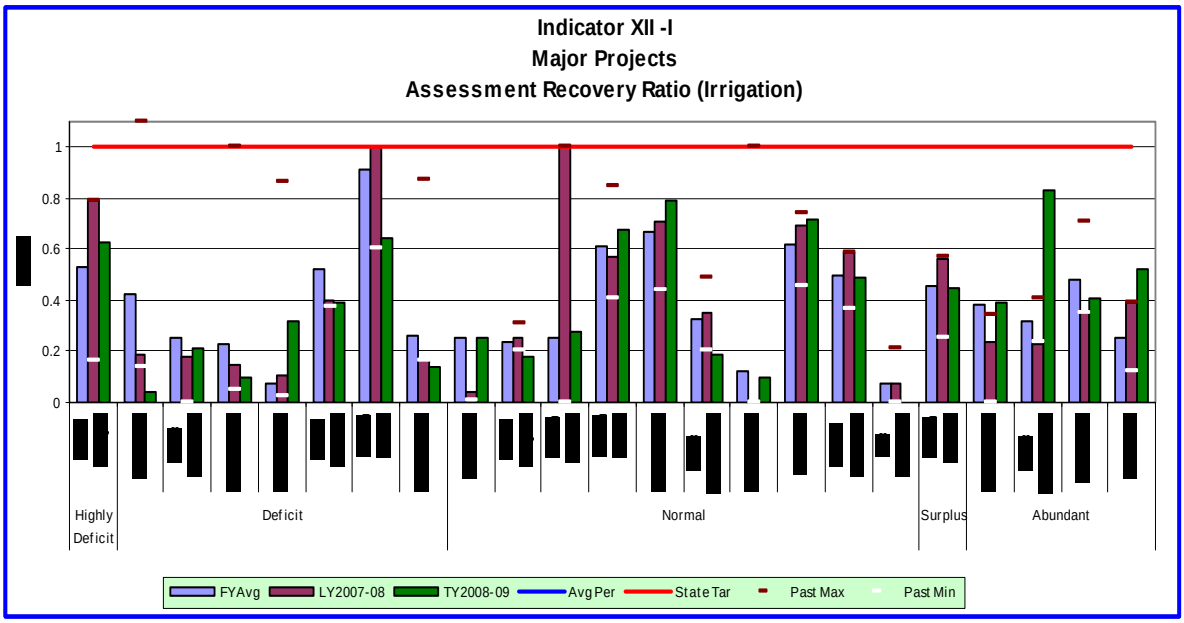
CADA Nagpur: 62%, 73% & 75% area has been irrigated at Head; middle & tail reach respectively in the projects under this circle.

Abundant Plan Group:

CADA Pune: In Krishna Project potential utilization comes to 0.36, 0.36, and 0.34 in head, middle and tail reach of command area.

TIC Thane: 48%, 33% & 37% area has been irrigated at Head and middle & tail reach respectively in the projects under this circle.

SIC Sangli: 24%, 35% & 49% area has been irrigated at Head and middle & tail reach respectively in the projects under this circle.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Tar
Highly Deficit	CADA Solapur	0.53	0.79	0.63	0.79	0.16	0.63	1
Deficit	AIC Akola	0.42	0.19	0.04	1.10	0.14		
	BIPC Buldhana	0.25	0.18	0.21	1.36	0.00		
	CADA Abad	0.23	0.15	0.10	1.00	0.05		
	CADA Beed	0.07	0.11	0.32	0.87	0.02	0.64	1
	CADA Jalgaon	0.52	0.40	0.39	3.61	0.38		
	CADA Nashik	0.91	1.00	0.64	1.15	0.60		
	NIC Nanded	0.26	0.16	0.14	0.87	0.16		
Normal	AIC Akola	0.25	0.04	0.25	1.17	0.01		
	CADA Jalgaon	0.24	0.25	0.18	0.31	0.20		
	CADA Nagpur	0.25	1.00	0.28	1.00	0.00		
	CADA Nashik	0.61	0.57	0.68	0.84	0.41		
	CADA Pune	0.67	0.71	0.79	1.22	0.44	0.73	1
	CIPC Chandrapur	0.33	0.35	0.19	0.49	0.20		
	NIC Nanded	0.12	0.00	0.10	1.00	0.00		
	PIC Pune	0.62	0.69	0.72	0.74	0.45		
	UWPC Amravati	0.50	0.59	0.49	0.59	0.36		
	YIC Yavatmal	0.07	0.07	0.00	0.21	0.00		
Surplus	CADA Nagpur	0.46	0.56	0.45	0.57	0.25	0.45	1
Abundant	CADA Pune	0.38	0.24	0.39	0.34	0.00		
	CIPC Chandrapur	0.32	0.23	0.83	0.41	0.23		
	SIC Sangli	0.48	0.35	0.41	0.71	0.35	0.68	1
	TIC Thane	0.25	0.39	0.52	0.39	0.12		

Indicator XII_I: Assessment Recovery Ratio (Irrigation)

Highly Deficit Plan Group:

CADA Solapur: In Bhima (Ujjani) project the ratio is 0.63, it is reduced than the last year & is below the state norm.

Deficit Plan Group:

BIPC Buldhana & AIC Akola: Percentage of irrigation recovery compared to assessment on Wan, Katepurna, and Nalganga under AIC Akola and in BIPC Buldhana, varied from 0 to20%.

CADA Aurangabad: In Jayakwadi project (PLBC) the ratio has decreased from 0.15 to 0.1 as compared to last year. This year the recovery is very less against assessment.

CADA Beed: In Majalgaon project the ratio has increased from 0.15 to 0.69 as compared to last year, which is slightly below the State norms, In Manjra project the ratio has decreased from 0.20 to 0.1 as compared to last year, in Lower Terna the ratio has increased from 0.05 to 0.65 as compared to last year. In Jayakwadi project (PRBC) the ratio has increased from 0.05 to 0.18 though it is very below the state norms. Project authorities are required to give proper attention to recover 100% current assessment from the farmers & WUA.

CADA Jalgaon: In Girna project, the ratio is just lowered from 0.40 (2007-08) to 0.39 (2008-09).

CADA Nashik: In Chankapur project, the ratio is lowered from 1.00 (2007-08) to 0.64 (2008-09).

NIC Nanded: In the projects viz. Manar & Vishnupuri the ratio has decreased from 0.21 to 0.04, 0.27 to 0.18 & in Purna project the ratio has slightly increased from 0.12 to 0.17. Lesser recovery has affected the indicator value to fall down. Project authorities are required to achieve 100% recovery with hard efforts.

Normal Plan Group:

AIC Akola: On Pus Project the ratio is improved from 0.04 (2007-08) to 0.25(2008-09).

CADA Jalgaon: In Hatnur project the ratio is lowered from 0.25 (2007-08) to 0.18 (2008-09) which is much below the state norm.

CADA Nagpur: The assessment recovery ratio this year had reduced to 0.28 from 1.00 that of last year.

CADA Nashik: In all the projects except Bhandardara about 63 to 98 % water charges has been recovered.

CADA Pune: In Kukdi Project the ratio is reduced from 1.00 of last year to 0.95 this year. In Ghod Project ratio has been increased from 0.44 of last year to 0.51 this year.

CIPC Chandrapur: Ratio is 0.19 which is substantially decreased than the last year value 0.35.

NIC Nanded: In UPP the ratio has increased from 0.00 to 0.10 still it is below the target.

PIC Pune: In Khadakwasla the ratio increases from 0.80 last year to 0.99 this year. It is due to increase in recovery of irrigation water charges this year.

In N.L.B.C. Project the ratio increases from 0.76 last year to 1.00 this year because of better recovery of water charges assessment.

In N.R.B.C. ratio comes to 0.50 this year as compared to 0.61 last year. The decrease in performance is due to less recovery of irrigation water

charges. In Pawna Project the ratio increases from 0.98 last year to 1.00 this year. The increase in performance is due to more revenue recovery this year.

UWPC Amravati: On Upper Wardha project the revenue recovery against assessment was0.49.

YIC Yeotmal: There was no irrigation during the year

Surplus Plan Group:

CADA Nagpur: Recovery rate against assessment on Itiadoh & Bagh project under this circle is appreciable but less as compared to last years performance.

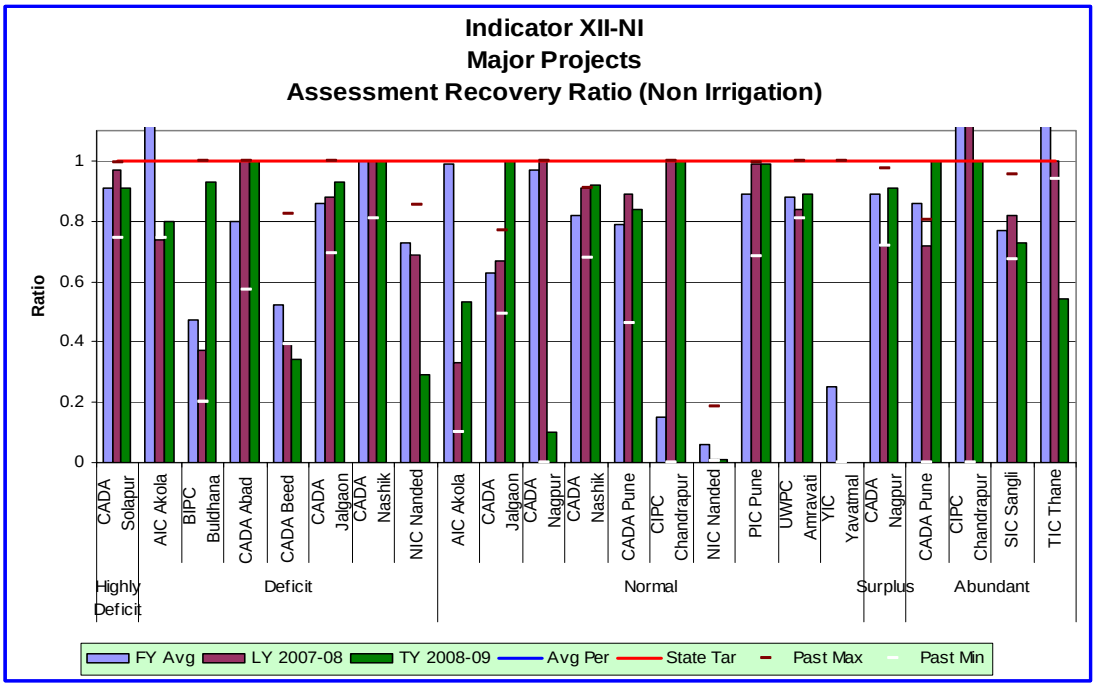
Abundant Plan Group:

CADA Pune: In Krishna Project the ratio decreases to 0.39 as compared to 0.24 of last year. The increase is due to more recovery. The performance is below state target. More efforts are required to enhance the performance up to state norms.

CIPC Chandrapur: Ratio is 0.83 it is substantially increased than the last year value 0.23.

SIC Sangli: The average Assessment recovery ratio is 0.41.

TIC Thane: The average Assessment recovery ratio is 0.52.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Solapur	0.91	0.97	0.91	1.00	0.74	0.91	1.00
Deficit	AIC Akola	1.16	0.74	0.80	1.28	0.74		
	BIPC Buldhana	0.47	0.37	0.93	1.00	0.20		
	CADA Abad	0.80	1.00	1.00	1.00	0.57		
	CADA Beed	0.52	0.39	0.34	0.82	0.39	0.83	1.00
	CADA Jalgaon	0.86	0.88	0.93	1.00	0.69		
	CADA Nashik	1.00	1.00	1.00	1.39	0.81		
	NIC Nanded	0.73	0.69	0.29	0.85	0.69		
Normal	AIC Akola	0.99	0.33	0.53	2.93	0.10		
	CADA Jalgaon	0.63	0.67	1.00	0.77	0.49		
	CADA Nagpur	0.97	1.00	0.10	1.00	0.00		
	CADA Nashik	0.82	0.91	0.92	0.91	0.68		
	CADA Pune	0.79	0.89	0.84	1.22	0.46	0.88	1.00
	CIPC Chandrapur	0.15	1.00	1.00	1.00	0.00		
	NIC Nanded	0.06	0.01	0.01	0.19	0.00		
	PIC Pune	0.89	0.99	0.99	0.99	0.68		
	UWPC Amravati	0.88	0.84	0.89	1.00	0.81		
	YIC Yavatmal	0.25	0.00	0.00	1.00	0.00		
Surplus	CADA Nagpur	0.89	0.72	0.91	0.98	0.72	0.91	1.00
Abundant	CADA Pune	0.86	0.72	1.00	0.81	0.00		
	CIPC Chandrapur	1.14	1.53	1.00	1.53	0.00		
	SIC Sangli	0.77	0.82	0.73	0.95	0.67	0.82	1.00
	TIC Thane	1.12	1.00	0.54	1.55	0.94		

Indicator XII: Assessment Recovery Ratio (Non Irrigation)

Highly Deficit Plan Group:

CADA Solapur: In Bhima (Ujjani) project the ratio is 0.91 which is below the state norm.

Deficit Plan Group:

AIC Akola: Revenue recovery against assessment on Katepurna was more (80%) as compared to state target. On Nalganga project recovery is 100%.

BIPC Buldhana: On Wan project recovery was (93%) which is close to state norm.

CADA Aurangabad: In Jayakwadi Project (PLBC) 100 % recovery against assessed amount of Rs.4858 lakh. Resulting in retaining the ratio 1.0 as per last year.

CADA Beed: In Majalgaon project the ratio has slightly decreased from 0.71 to 0.70 this year. In Manjra project the ratio has decreased from 0.40 to 0.36 as compared to last year. In Lower Terna the ratio has increased from 0.35 to 1.00 as compared to last year. In Jayakwadi Project (PRBC) the ratio has slightly increased from 0.17 to 0.22 as compared to last year and is far below the State norms.

CADA Jalgaon: In Girna project, the ratio is improved from 0.88 (2007-08) to 0.93 (2008-09).

CADA Nashik: In Chankapur project, 100% water charges has been recovered.

NIC Nanded: In Manar project the ratio has increased from 0.83 to 1.0 this year. Where as in Vishnupuri slight decrease from last year value (1.0 to 0.96).

In Purna project the ratio has increased from 0.01 to 0.29. The recovery is Rs 61.45lakhs against assessment of Rs 212.5 lakh.

Normal Plan Group:

AIC Akola: On Pus project performance was increased from 0.33 to 0.53

CADA Jalgaon: In Hatnur project, 100% water charges have been recovered.

CADA Nagpur: The 10 % recovery has been achieved.

CADA Nashik: In Gangapur, Palkhed, Waghad, Kadwa & Ozarkhed projects, the field authorities have achieved the state target. However, in Bhandardara, Darna & Mula Projects about 31 to 92% water charges has been recovered.

CADA Pune: In Kukdi Project the performance reduces from 1.00 of last year to 0.73 this year. In Ghod the performance increases from 0.87 of last year to 0.90 this year due to more recovery of N.I. use.

CIPC Chandrapur: The 100% recovery has been achieved.

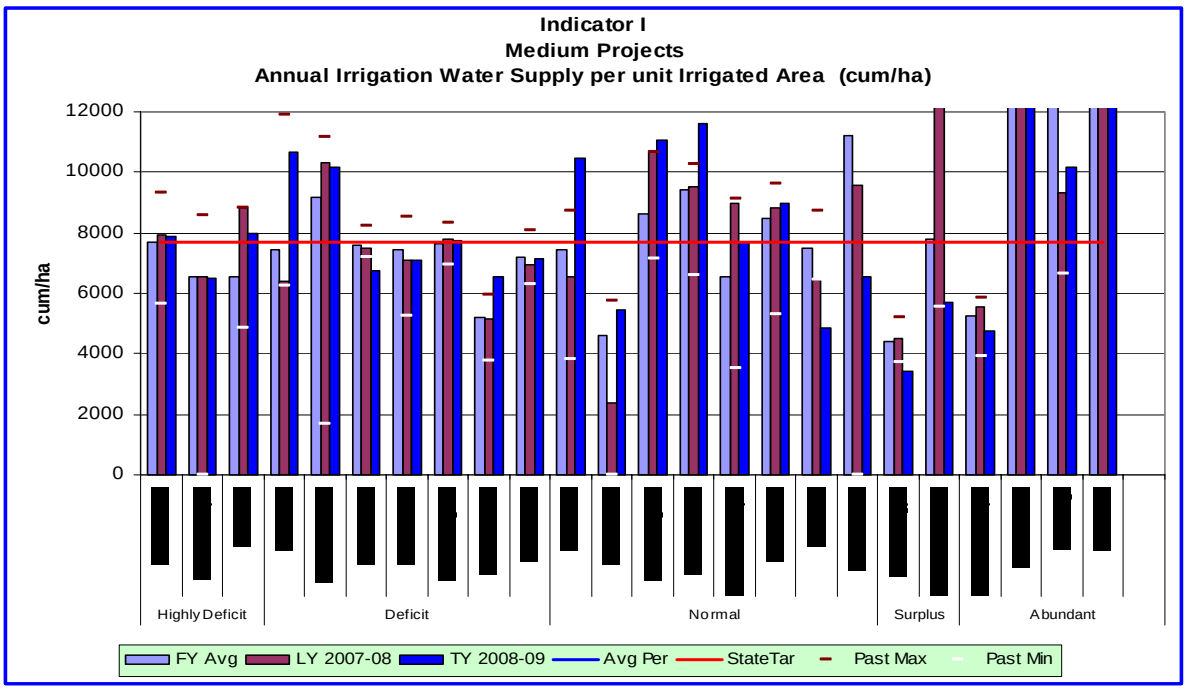
NIC Nanded: In Upper Penganga Project recovery is very poor. Only Rs.3.45 lakh is recovered against assessment of Rs.654.52 lakh. This shows that Project authorities are not paying proper attention to recover the Government revenue.

PIC Pune: In Khadakwasla 100% recovery achieved this year. In N.L.B.C. the 96% recovery achieved this year. In N.R.B.C. the ratio comes to 0.95. In Pawna Project the ratio decreases from 1.00 of last year to 0.98 this year because of reduction of recovery of N.I. Water Charges.

UWPC Amrawati: On Upper Wardha project assessment recovery ratio is 0. 89 which is close to state norm.

YIC Yeotmal: There is no non- irrigation use during this year.

Surplus Plan Group:
CADA Nagpur: 91 % recovery has been achieved as compared to last year's performance (72%).
Abundant Plan Group:
CADA Pune: In Krishna Project the ratio increases from 0.72 of last year to 1.00 this year due to increase of Non Irrigation recovery.
CIPC Chandrapur: 100% recovery has been achieved.
SIC Sangli: The average Assessment recovery ratio is 0.73
TIC Thane: The average Assessment recovery ratio is 0.54.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Beed	7691	7910	7876	9328	5630	7450	7692
	CADA Solapur	6544	6528	6499	8577	0		
	PIC Pune	6561	8843	7974	8843	4845		
Deficit	AIC Akola	7430	6385	10645	11901	6267		
	BIPC Buldhana	9162	10319	10156	11181	1667		
	CADA Abad	7565	7477	6730	8253	7199		
	CADA Beed	7427	7082	7108	8533	5257	8003	7692
	CADA Jalgaon	7619	7784	7716	8347	6935		
	CADA Nashik	5187	5137	6538	5943	3792		
	NIC Nanded	7173	6956	7127	8080	6285		
Normal	AIC Akola	7441	6555	11483	8740	3812	8339	7692
	CADA Abad	4598	2393	5472	5741	0		
	CADA Jalgaon	8614	10651	11062	10651	7119		
	CADA Nashik	9416	9526	11621	10245	6619		
	CIPC Chandrapur	6547	8997	7673	9131	3517		
	NIC Nanded	8480	8813	8989	9614	5313		
	PIC Pune	7486	6461	4856	8707	6461		
	YIC Yavatmal	11211	9554	6553	19042	0		
Surplus	CADA Nagpur	4424	4510	3425	5223	3739	4558	7692
	CIPC Chandrapur	7785	12538	5690	12538	5553		
Abundant	CIPC Chandrapur	5246	5577	4744	5829	3915	7467	7692
	KIC Ratnagiri	119832	199136	304659	199136	21429		
	SIC Sangli	27298	9341	10190	97537	6620		
	TIC Thane	17996	16871	19192	21513	14988		

Observations of Medium projects

Indicator I: Annual Irrigation Water Supply per Unit Area (cum/ha)

Highly Deficit Plan Group:

CADA Beed: Average annual water supplied per unit irrigated area of medium projects under this circle has decreased from 7910 to 7876 cum/ha, this year. It has decreased slightly over last year. In Kadi project the water used is maximum i.e. 12996 cum/ha. In Khandala project the water use is minimum i.e. 1469 cum/ha.

CADA Solapur: Average annual water supplied per unit irrigated area of five Medium Projects in this Circle is 6499 cum/ha. It is reduced than the last year performance.

PIC Pune: Average Annual water supplied Per Unit Irrigated Area for Sina, Khairy, Nher, Ranand, Tisangi & Mhaswad projects under this circle is 7974 cum/ha. this year. Shows improvement in performance still the performance is below as compared to state target.

Deficit Plan Group:

AIC Akola: Irrigation water use per unit area irrigated on projects under this circle is high 10645 cum/ha. as compared to state target and as well as last years performance 6385cum/ha.

BIPC Buldhana: Average water use on projects under this circle was10156 cum/ha. It was so as irrigation water use on both the projects Mun (10804cum/ha) and Torna (8560 cum/ha) under this circle was excessively high. Reasons for the same needs to be sorted out.

CADA Aurangabad: Average annual water supplied per unit irrigated area of medium projects under this circle has decreased from 7477 to 6730 cum/ha.

In Galhati project the water use is maximum i.e. 14428 cum/ha and in Lahuki the water use is minimum i.e. 2601 cum/ha. This is due to area irrigated is maximum in Rabi season with less rotations. (The ISP is 359 ha/Mcum.)

CADA Beed: Average annual water supplied per unit irrigated area of medium projects under this circle has slightly increased from 7082 (2007-08) to 7108 cum/ha this year. Tawarja project has maximum utilization i.e. 13160cum/ha, Wan project has 12342cum/ha. In Rui project the water use is minimum 2592 cum/ha. Most of projects have utilization through reservoir lift.

CADA Jalgaon: Though the water use per ha is just reduced (1%) as compared to last year, the indicator value (7716 cum/ha) has been exceeded the state norm. The field officers are required to improve the performance in case of Bhokarbari (10667cum/ha), Manyad (10183) and Bori (9074 cum/ha) projects.

CADA Nashik: The water use is well within the state norm since last three years.

NIC Nanded: The average performance of the projects under this circle has slightly increased from 6956 to 7127cum/ha as compared to last year.

Normal Plan Group:

AIC Akola: Average rate of water use on group of projects under the circle has value 11483 m3/ha which was very high to state norm. More water use on Lowerpus & Saikheda projects.

CADA Aurangabad: The average water use has increased from 2393 to 5472 cum/ha. Kolhi project has maximum annual water use of 10946cum/ha. Dheku and Ambadi have water use well below State norms.

CADA Jalgaon: The water use per ha of irrigation is increased by 4% as compared to last year and exceeded the state norm. Specifically in Aner, Abhora & Suki projects, the water use per ha is 1.2 to 4.9 times more than the state norm. Necessary steps should be taken by field officers to improve the performance.

CADA Nashik: The water use per ha is on higher side of the state norm since last two years. It is very much essential to use the water for irrigation more precisely specifically in Adhala (13683 cum/ha), Bhojapur (16958 cum/ha) and Mandohol (13200 cum/ha) projects to achieve the state target.

CIPC Chandrapur: The water use is 7673 cum/ha which has improved than the last years figure 8997 cum/ha.

NIC Nanded: Nagzari project has the maximum water use 10402 cum/ha. Loni has water use of 9768 cum/ha.

PIC Pune: Annual water supplied to Wadiwale project is 4856 cum/ha. this year. The performance is good as compare to last year and state norms.

YIC Yeotmal: Average water use of Adan & Navargaon projects per unit area irrigated is 6553 cum per ha which is low compared to the last year.

Surplus Plan Group:

CADA Nagpur: Overall performance of the projects under this circle is 3425 cum/ha compared with last year it is decreased & much below the state norm value (7692).

CIPC Chandrapur: Overall performance of the projects under this circle is 5690 cum/ha compared with last year it is decreased marginally & overall it is less than the state norm value.

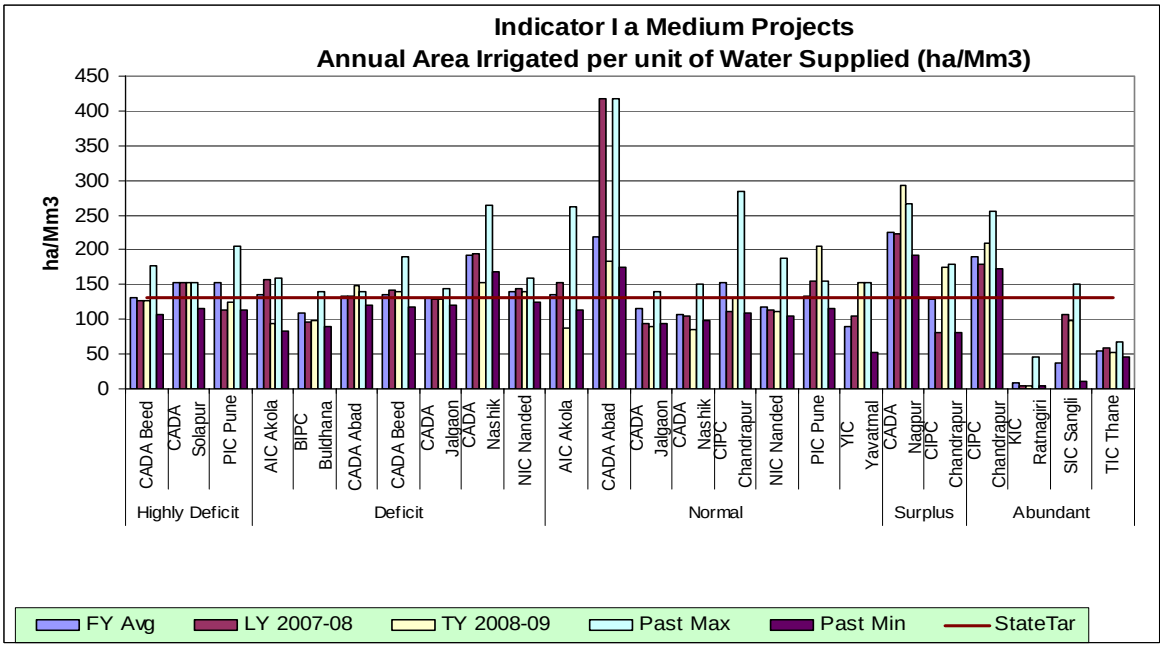
Abundant Plan Group:

CIPC Chandrapur: Overall performance of the projects is 4744 cum/ha compared with last year it is decreased to some extent & much below the state norm value.

KIC Ratnagiri: In Natuwadi project annual water supply per unit area is alarmingly increased to 304659 cum/ha. It is due to heavy leakages through the canal system. Project authorities are required to take preventive measures to stop leakages through canal system.

SIC Sangli: - Average annual water supplied per unit irrigated area of 6 Medium Projects in this Circle is 10190 cum/ha. It is increased 9% than the last year value.

TIC Thane: The water use in Rajanalla Complex & Wandri in this Circle is 19192 cum/ha. It is more by 14% than last year value. It is higher than the five years average value; Water use is more than the state norm due to paddy crops and hilly region Command Area in Konkan.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Tar
Highly Deficit	CADA Beed	130	126	127	178	107	135	130
	CADA Solapur	153	153	154	154	117		
	PIC Pune	152	113	125	206	113		
Deficit	AIC Akola	135	157	94	160	84		
	BIPC Buldhana	109	97	98	140	89		
	CADA Abad	132	134	149	139	121		
	CADA Beed	135	141	141	190	117	129	130
	CADA Jalgaon	131	128	130	144	120		
	CADA Nashik	193	195	153	264	168		
	NIC Nanded	139	144	140	159	124		
Normal	AIC Akola	134	153	87	262	114	131	130
	CADA Abad	217	418	183	418	174		
	CADA Jalgaon	116	94	90	140	94		
	CADA Nashik	106	105	86	151	98		
	CIPC Chandrapur	153	111	130	284	110		
	NIC Nanded	118	113	111	188	104		
	PIC Pune	134	155	206	155	115		
	YIC Yavatmal	89	105	153	153	53		
Surplus	CADA Nagpur	226	222	292	267	191	234	130
	CIPC Chandrapur	128	80	176	180	80		
Abundant	CIPC Chandrapur	191	179	211	255	172	154	130
	KIC Ratnagiri	8	5	3	47	5		
	SIC Sangli	37	107	98	151	10		
	TIC Thane	56	59	52	67	46		

Indicator I a: Annual Area irrigated per unit of water supplied (ha//Mm3)

Highly Deficit Plan Group:

CADA Beed: The overall area irrigated per unit of water supply (127 ha/Mm3) on projects under this circle is achieved the state norms.

CADA Solapur: Overall area irrigated per unit of water supplied is 154 ha/Mm3 in this year. Compared with last year it is increased by 1% & it is 3% below the state target

PIC Pune: Overall area irrigated per unit of water supplied is 125 ha/Mm3 in this year. Compared with last year it is increased by 11% & it is 4% below the state target

Deficit Plan Group:

AIC Akola: The area irrigated per unit of water supplied is lower than State norm due to low area under irrigation & more water losses.

BIPC Buldhana: The area irrigated per unit of water supplied is lower than State norm under BIPC Buldhana due to more canal losses scattered area of irrigation.

CADA Aurangabad: The overall area irrigated per unit of water supply (149 ha/Mm3) on projects under this circle is crossed the state norms, this may be due to area irrigated on reservoir lift included in overall irrigated area.

CADA Beed: The overall area irrigated per unit of water supply (141 ha/Mm3) on projects under this circle is crossed the state norms, this may be due to area irrigated on reservoir lift included in overall irrigated area.

CADA Jalgaon: Due to lesser rotation in Rabi season, (2 to 3 Nos) the area irrigated per unit water supply seems to be satisfactory which is nearer to state norm.

CADA Nashik: The indicator value seems to be on higher side of state norm due to lesser number of rotations i.e. two rotations on Kelzer project in rabi season.

NIC Nanded: Area irrigated on reservoir lift helps in achieving state target.

Normal Plan Group:

AIC Akola: The area irrigated per unit of water supplied is lower than State norm due to low area under irrigation & more water losses.

CADA Aurangabad: The overall area irrigated per unit of water supply (183 ha/Mm3) on projects under this circle is crossed the state norms, this may be due to area irrigated on reservoir lift included in overall irrigated area.

CADA Jalgaon: The indicator value is state norm due to low performance in Aner, Sonwad & Aghora projects. The indicator value of Aghora project is low due to irrigation on scattered area.

CADA Nashik: The indicator value is low due to following reasons.

I) 80 to 85% canal losses in Mandohol project

II) Poor performance in Bhjapur project in Rabi season

CIPC Chandrapur: More area (130 ha/Mm3) is irrigated per unit of water supplied as compared to last year (111 ha/Mm3) under the projects of this circle.

NIC Nanded: The overall area irrigated per unit of water supply in the projects under this circle is 85% of state target and needs improvement.

PIC Pune: Overall area irrigated per unit of water supplied is 206 ha/Mm3 in this year. Compared with last year it is increased by 33% & it is 59% more than the state target

YIC Yeotmal: The area irrigated per unit of water supplied of Adan & Nawargaon project under this circle is satisfactory during this year.

Surplus Plan Group:

CADA Nagpur: More area (292 ha/Mm3) is irrigated per unit of water supplied as compared to last year. (222 ha/Mm3) under the projects of this circle

CIPC Chandrapur: More area (176 ha/Mm3) is irrigated per unit of water supplied as compared to last year. (80 ha/Mm3) under the projects of this circle

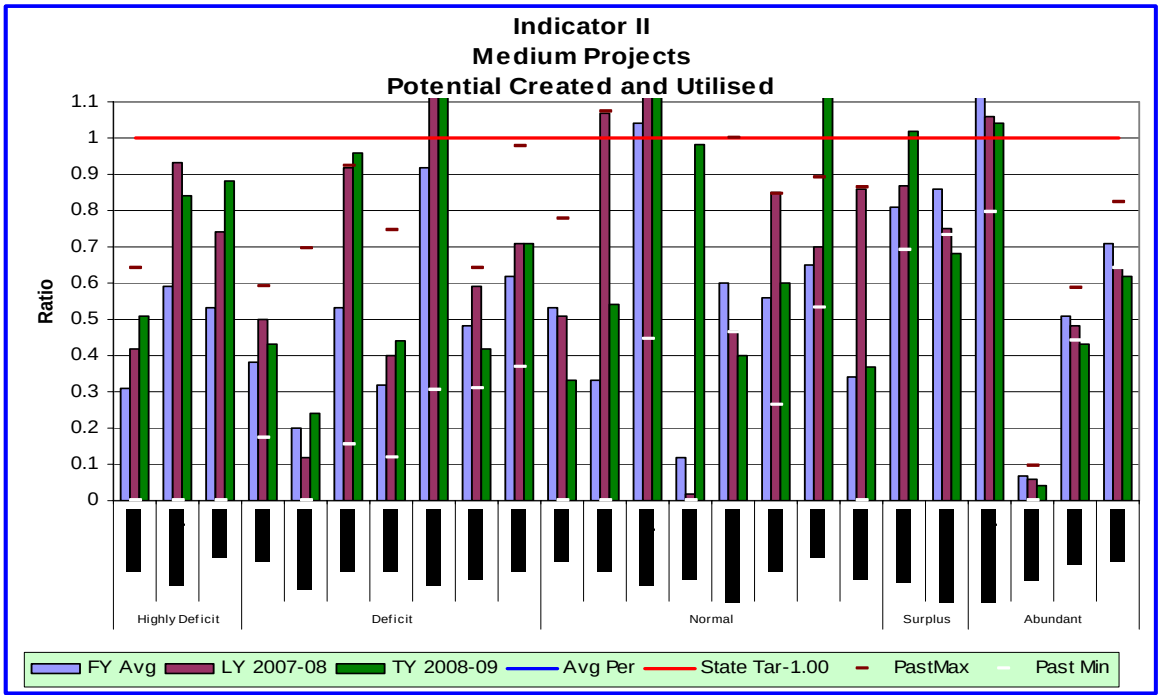
Abundant Plan Group:

CIPC Chandrapur: More area (211 ha/Mm3) is irrigated per unit of water supplied as compared to last year. (179 ha/Mm3) under the projects of this circle

KIC Ratnagiri: Overall area irrigated per unit of water supplied is 3 ha/Mm3 in this year. Compared with last year it is decreased by 40% & it is 98% below the state target

SIC Sangli: Overall area irrigated per unit of water supplied is 98 ha/Mm3 in this year. Compared with last year it is decreased by 9% & it is 25% less the state target

TIC Thane: Overall area irrigated per unit of water supplied is 52 ha/Mm3 in this year. Compared with last year it is decreased by 12% & it is 60% below the state target



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Beed	0.31	0.42	0.51	0.64	0.00		
	CADA Solapur	0.59	0.93	0.84	2.13	0.00	0.86	1
	PIC Pune	0.53	0.74	0.88	1.17	0.00		
Deficit	AIC Akola	0.38	0.50	0.43	0.59	0.17		
	BIPC Buldhana	0.20	0.12	0.24	0.70	0.00		
	CADA Abad	0.53	0.92	0.96	0.92	0.15		
	CADA Beed	0.32	0.40	0.44	0.74	0.12		
	CADA Jalgaon	0.92	1.39	1.29	1.39	0.30	1.00	1
	CADA Nashik	0.48	0.59	0.42	0.64	0.31		
	NIC Nanded	0.62	0.71	0.71	0.98	0.37		
Normal	AIC Akola	0.53	0.51	0.33	0.78	0.00		
	CADA Abad	0.33	1.07	0.54	1.07	0.00		
	CADA Jalgaon	1.04	1.55	1.36	1.55	0.44		
	CADA Nashik	0.12	0.02	0.98	1.14	0.00	0.73	1
	CIPC Chandrapur	0.60	0.47	0.40	1.00	0.46		
	NIC Nanded	0.56	0.85	0.60	0.85	0.26		
	PIC Pune	0.65	0.70	1.27	0.89	0.53		
	YIC Yavatmal	0.34	0.86	0.37	0.86	0.00		
Surplus	CADA Nagpur	0.81	0.87	1.02	1.22	0.69	0.85	1
	CIPC Chandrapur	0.86	0.75	0.68	1.45	0.73		
Abundant	CIPC Chandrapur	1.14	1.06	1.04	2.18	0.80		
	KIC Ratnagiri	0.07	0.06	0.04	0.10	0.00		
	SIC Sangli	0.51	0.48	0.43	0.59	0.44	0.83	1
	TIC Thane	0.71	0.64	0.62	0.82	0.64		

Indicator II: Potential Utilized and created

Highly Deficit Plan Group:

CADA Beed: Average ratio of projects under this circle has increased from 0.42 to 0.51 this year. Sakat has maximum value of 2.5. Kadi, Turori, Khasapur and Khandeshwar have values 0.71, 0.77, 0.78 & 0.92 respectively.

CADA Solapur: -The Average value of, Irrigation Potential created & utilised of five Medium Projects in this Circle is 0.84 compared to last year it is decreased to some extent.

PIC Pune: Average irrigation potential utilisation of six projects is 0.88. It is increased from 0.74 of last year but below state norms.

Deficit Plan Group:

AIC Akola: Potential utilisation on the projects is low (0.43) as compared to created potential.

BIPC Buldhana: Actual potential utilisation on Mun & Torna projects was just 24% of the effective created irrigation potential.

CADA Aurangabad: The average performance of projects under this circle has increased from 0.92 to 0.96. Lahuki has potential utilized ratio of 4.1, Sukhana project has ratio of 3.0, Khelna project has ratio of 2.7, and Girija project has 1.3 ratio. This shows that the irrigation on well & nallas in command area of the projects is more than that of irrigation through canal flow & Reservoir lift. Other projects have average ratio from 0.8 to 0.2.

CADA Beed: Average ratio of project under this circle has slightly increased from 0.40 to 0.44 as compared to last year, in the projects Deverjan, Tiru, & Terna the value of the indicators are 0.84, 0.78, & 0.63 respectively.

CADA Jalgaon: In all the projects except Bhokarbari (66%) and Bori (75%) the potential is fully utilised since last four years.

CADA Nashik: The ratio is reduced from 0.59 (2007-08) to 0.42 (2008-09) and the performance is below state target since last year. There is much scope to improve the performance in Haranbari (32%) & Kelzar (52%) Projects.

NIC Nanded: The average ratio of performance has retained last years value i.e. 0.71. Only Kundrala project has crossed the ratio of 1 to 1.07 this year. The rest of the projects have average ratio in between 0.52 to 0.92.

Normal Plan Group:

AIC Akola: Potential utilization on the projects under the circle was 33 % which was low than last year performance of 51%.

CADA Aurangabad: The average performance of projects under this circle has decreased from 1.07 to 0.54. Kolhi project has the ratio of 1.7, Ambadi has 0.3 and Dheku project has 0.6.

CADA Jalgaon: The potential is fully utilised in all the projects.

CADA Nashik: 100% potential is utilised in all the projects except Bhojapur (59%) and Mandohol (42%).

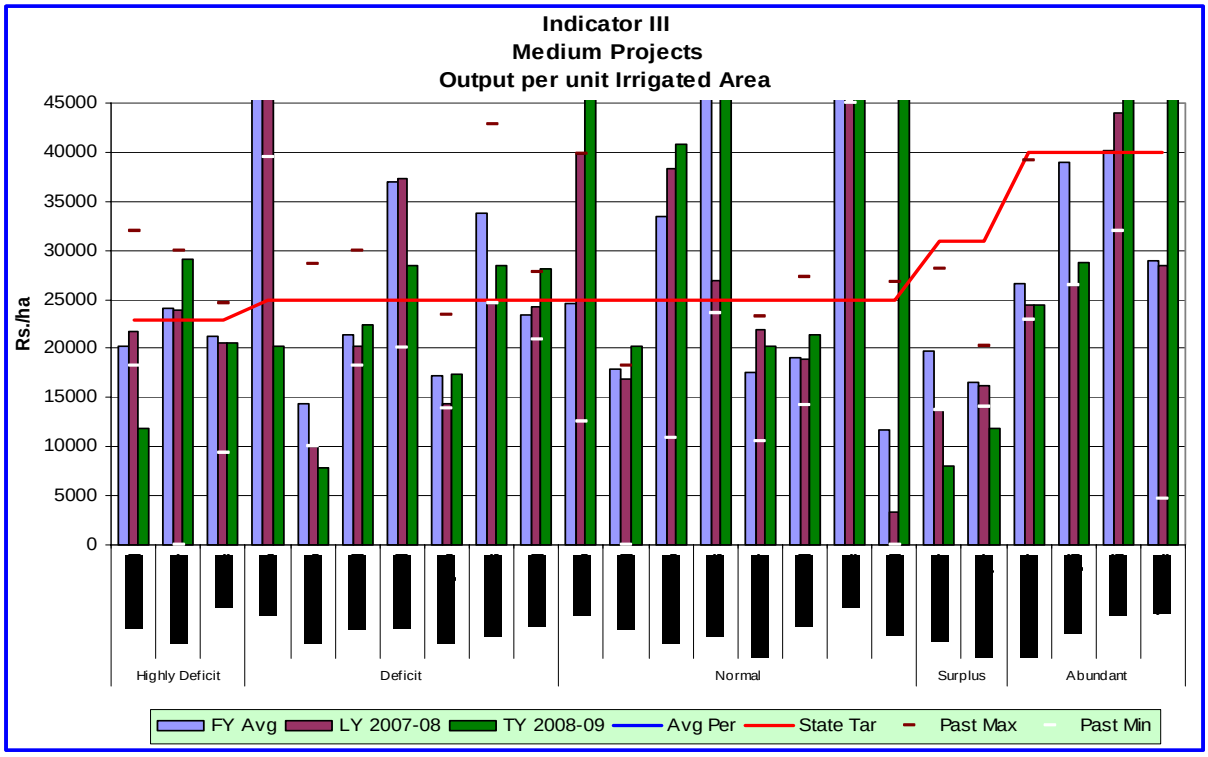
CIPC Chandrapur: The value of this indicator is 0.40.

NIC Nanded: The average performance under this project has declined from 0.85 to 0.60. Nagzari has ratio of 0.92, Dongargaon has ratio of 0.77, and Loni has 0.38.

PIC Pune: Irrigation potential utilisation of Wadiwale Project under this circle is 1.00 of this year. It is as per the state target.

YIC Yeotmal: Potential utilisation compared to created potential on both the projects Adan & Navargaon was less (37%).

Surplus Plan Group:
CADA Nagpur: The value of this indicator is 1.02.
CIPC Chandrapur: The value of this indicator is 0.68.
Abundant Plan Group:
CIPC Chandrapur: Potential utilisation on both Ghorazari & Naleshwar was as per state norm & last year performance. Potential utilisation of projects combined together was 104 % of potential created.
KIC Ratnagiri: Utilisation of potential in Natuwadi project is decreased from 0.06 to 0.04 this year. But it is very low than the state norms. It is due to very less irrigation area and heavy leakages in the canal system.
SIC Sangli: The Average value, of Irrigation Potential created & utilised of six Medium Projects in this Circle is 0.43 % compared to last year it is decreased to some extent.
TIC Thane: The Average value of Irrigation Potential created & utilized under this circle is 0.62. It is decreased to some extent than the last year.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Beed	20192	21689	11907	32000	18155		
	CADA Solapur	24084	23954	29103	29928	0	20538	23000
	PIC Pune	21306	20645	20605	24667	9396		
Deficit	AIC Akola	62427	79188	20302	80568	39525		
	BIPC Buldhana	14457	10006	7785	28611	10006		
	CADA Abad	21423	20247	22342	29914	18303		
	CADA Beed	36903	37336	28452	48491	20093	24936	25000
	CADA Jalgaon	17255	14359	17373	23452	13885		
	CADA Nashik	33735	24669	28459	42867	24669		
	NIC Nanded	23367	24280	28054	27704	20840		
Normal	AIC Akola	24646	39806	51533	39806	12544		
	CADA Abad	17883	16893	20207	18304	0		
	CADA Jalgaon	33401	38285	40754	59500	10923		
	CADA Nashik	84572	26897	54692	211074	23604	25649	25000
	CIPC Chandrapur	17639	21831	20199	23292	10510		
	NIC Nanded	19018	18922	21436	27244	14251		
	PIC Pune	56921	44978	52192	75847	44978		
	YIC Yavatmal	11694	3343	48325	26784	0		
Surplus	CADA Nagpur	19686	13705	7999	28122	13705		31000
	CIPC Chandrapur	16586	16197	11949	20221	14128		
Abundant	CIPC Chandrapur	26566	24500	24500	39158	22842		
	KIC Ratnagiri	38966	26368	28771	98571	26368		
	SIC Sangli	40164	44006	53874	47023	32024	26636	40000
	TIC Thane	28913	28500	54111	54420	4684		

Indicator III: Output per Unit Irrigated Area (Rs. /ha)

Highly Deficit Plan Group:

CADA Beed: Average out put per unit irrigated area of project under this circle has decreased from Rs 21689/ha. to Rs11907/ha. this year, which is very less than the state norms.

Sakat project has out put per unit irrigated area of Rs 23726/ha where as in Turori it is Rs. 19036/ha.

CADA Solapur: Average output per unit irrigated area of five medium projects in this Circle is Rs. 29103/-. It is increased than last year value to some extent.

PIC Pune: Average output per unit irrigated area of six medium Projects is Rs. 20606 ha. this year.

Deficit Plan group:

AIC Akola: Average output per unit area irrigated on projects under this circle was Rs. 20302/ha which is very low as compared to last years performance (Rs79188/ha).

BIPC Buldhana: Output on Mun & Torna project was very less (Rs.7785 /ha).

CADA Aurangabad: The average performance of the projects under this circle has increased marginally from Rs 20247/ha to Rs22342/ha. Gadadgad project has output Rs.39609/ha, Pir kalyan has Rs 29795/ha. Rest of the projects ranging in between Rs 24006/ha to Rs11392/ha.

CADA Beed: Average out put per unit irrigated area in projects under this circle has decreased from Rs 37336/ha to Rs 28452/ha. Whati project under this Plan group has highest output of Rs 36048/ha, which is due to 52% perennials crops irrigated.

CADA Jalgaon: Though the output/ha is increased from Rs. 14359/ha (2007-08) to Rs. 17373/ha (2008-09) still it is below state norm. Field officers are required to improve the performance in case of Bhokarbari, Bori, Burai & Kanoli projects as the performance of these projects is about 50% of the state norm only.

CADA Nashik: The output/ha is with the state norm since last two years except Ghatshill paragon (Rs.15202/ha).

NIC Nanded: The average performance of the projects under this circle has increased from Rs 24280/ha to Rs 28054/ha. Kudala has output Rs 40032/ha. Karadkhed has Rs 29633/ha. Rest of the projects have output in between Rs 16894/ha to Rs19112/ha.

Normal Plan Group:

AIC Akola: Output per unit area irrigated was good (Rs.51533/ha) on projects taken together under AIC Akola.

CADA Aurangabad: The Average output of projects under this circle has increased from Rs.16893/ha to Rs20207/ha this year. Dheku project has the maximum output Rs.20832/ha.

CADA Jalgaon: The output/ha in Karwand, Malangaon & Panzara projects is below state target. Field officers are required to improve the performance.

CADA Nashik: The output/ha has exceeded the state target in all the projects except Adhala (Rs. 17472/ha), Mandohol (Rs. 19697/ha).

CIPC Chandrapur: Average output per unit irrigated area for projects under this circle is Rs.20199/ha.

NIC Nanded: Average output of projects under this circle has increased from Rs.18922/ha to Rs21436/ha. as compared to last year.

Nagzari project has the highest output in this plan group i.e., Rs. 27593/ha which has crossed the State norms.

PIC Pune: In Wadiwale Project the output is Rs. 52192/ha. It is above the state target. The improvement is due to increase in irrigable area under cash crops.

YIC Yeotmal: Output per unit irrigated area was observed on projects under YIC Yeotmal Rs48325/ha.

Surplus Plan Group:

CADA Nagpur & CIPC Chandrapur: Output on projects under this circle is Rs. 7999 /ha and Rs.11949 /ha, respectively which is low as compared to the state norm (Rs.31000/ha.).

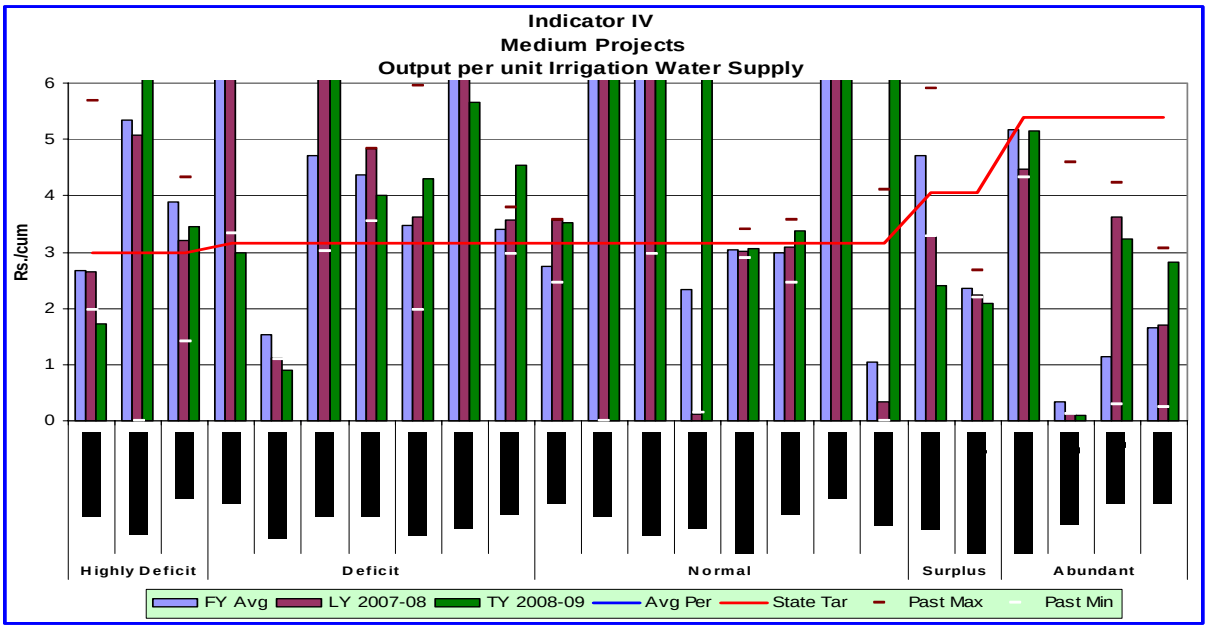
Abundant Plan Group:

CIPC Chandrapur: Ghorazari & Naleshwar are the paddy growing projects. Naturally the output is Rs. 24500/ha which is low as compared to state norm of Rs. 40,000/ha.

KIC Ratnagiri: In Natuwadi Project the annual output is slightly increased from Rs. 26368/cum to Rs. 28771/ha. this year. The increase in performance is due to increase in yield of cash crops.

SIC Sangli: Average output per unit irrigated area of six medium projects in this Circle is Rs. 53874/ha.

TIC Thane: On Rajnalla Complex Project & Wandri Project output per unit irrigated area in this Circle is Rs. 54111/ha which is more than the last year.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Beed	2.66	2.65	1.73	5.68	1.98	3.95	2.99
	CADA Solapur	5.35	5.07	6.68	9.44	0.00		
	PIC Pune	3.88	3.21	3.45	4.33	1.42		
Deficit	AIC Akola	6.23	6.77	3.00	6.77	3.32	4.15	3.15
	BIPC Buldhana	1.54	1.12	0.90	17.17	1.10		
	CADA Abad	4.72	6.22	6.63	6.22	3.02		
	CADA Beed	4.37	4.83	4.02	4.83	3.55		
	CADA Jalgaon	3.48	3.63	4.31	5.94	1.97		
	CADA Nashik	7.52	6.14	5.65	11.31	6.14		
	NIC Nanded	3.40	3.56	4.55	3.78	2.95		
Normal	AIC Akola	2.75	3.57	3.53	3.57	2.44	7.22	3.15
	CADA Abad	9.79	15.52	6.11	15.53	0.00		
	CADA Jalgaon	7.68	11.60	10.42	15.85	2.97		
	CADA Nashik	2.32	0.13	12.10	43.53	0.13		
	CIPC Chandrapur	3.04	3.02	3.06	3.41	2.90		
	NIC Nanded	3.00	3.09	3.38	3.58	2.45		
	PIC Pune	7.35	6.96	10.75	10.49	6.14		
	YIC Yavatmal	1.04	0.35	8.42	4.10	0.00		
Surplus	CADA Nagpur	4.72	3.28	2.41	5.90	3.28	2.26	4.05
	CIPC Chandrapur	2.36	2.23	2.10	2.67	2.18		
Abundant	CIPC Chandrapur	5.17	4.47	5.16	6.72	4.33	2.83	5.4
	KIC Ratnagiri	0.33	0.13	0.09	4.60	0.13		
	SIC Sangli	1.14	3.62	3.24	4.23	0.29		
	TIC Thane	1.64	1.69	2.82	3.06	0.24		

Indicator IV: Output per Unit Irrigation Water Supply Rs. /cum

Highly Deficit Plan Group:

CADA Beed: Average output/cum of water supply in projects under this circle has decreased from to Rs. 2.65/cum (2007-08) to Rs1.73/cum (2008-09), which is below the State norms. Khandala project has the highest output Rs10.97/cum being 11% perennial crops.

CADA Solapur: The average output per unit of water supplied of five medium projects in this circle is Rs 6.68/cum. It is more than the last year.

PIC Pune: Average output per unit irrigation water supply for Six Projects under this circle is Rs. 3.45/cum this year. It is above state norms. The increase in performance is due to less water use.

Deficit Plan Group:

AIC Akola: Output (Rs.3.00/m3) is improved than last year.

BIPC Buldhana: Output (Rs.0.90/m3)is lower than the last year

CADA Aurangabad: The Average output/cum in projects under this circle has increased from Rs 6.22/cum to Rs. 6.63/cum which is more than state norms. Ajantha Andhari project has the max. output of Rs.23.82/cum. Lahuki has output of Rs16.22/cum. Masoli has the lowest output i.e. 3.12/cum though it has attained state norms.

CADA Beed: The Average output/cum of water supply in projects under this circle has decreased from Rs. 4.83/cum to Rs. 4.02/cum which is still more than state norms. Rui and Raigavan have maximum output / cum i.e. Rs7.52/cum & Rs. 6.96/cum respectively.

CADA Jalgaon: Output per unit irrigation water supply is above state target since last year except Manyad (Rs.2.68/Cum).

CADA Nashik: The performance of all projects is above state target since last two years except Ghatshil Pargaon (Rs2.95/cum).

NIC Nanded: The Average output/cum in projects under this circle has increased from Rs.3.56/cum to Rs. 4.55/cum which is more than state norms. Pethwadaj project has the maximum output of Rs8.30/cum. Kardkhed has output of Rs. 5.08/ha.Kudala has output of Rs 4.58/cum.

Normal Plan Group:

AIC Akola: Output is improved (Rs.3.53/m3) than last year.

CADA Aurangabad: The Average output/cum in projects under this circle has decreased from Rs. 15.52/cum to Rs. 6.11/cum which is still very well above state norms. Dheku has highest output of Rs 10.16/cum.

CADA Jalgaon: The overall performance is just lowered from Rs11.60/Cum (2007-08) to Rs10.42 /Cum (2008-09) as compared to last year.

CADA Nashik: All the project expect Mandohol project (Rs.1.97/cum) and Adhala (Rs2.58/Cum) have achieved the state target. Over all output is Rs. 12.10/cum.

CIPC Chandrapur: Average output/cum of medium projects under this circle is Rs. 3.06 /cum which is less than state norms.

NIC Nanded: The Average output/cum in projects under this circle has increased from Rs.3.09/cum to Rs. 3.38/cum. Nagzari project has the maximum output of Rs.4.69/cum.

PIC Pune: In Wadiwale Project output is Rs. 10.75/cum this year and it is above last year and state target. The improvement in performance is due to reduction in water use and increased in yield of cash crops.

YIC Yeotmal: Output was very high (Rs8.42 /m3.) as compared to last year.

Surplus Plan Group:

CADA Nagpur : Due to low water utilisation output per unit irrigation water supply on projects under CADA Nagpur (Rs.2.41 /m3) is less than the state norm (Rs.5.4 /m3), as well as last year performance. (Rs.5.90 /cum)

CIPC Chandrapur: Output per unit water supply under this circle is low (Rs.2.10/cum) as compared to last year performance (Rs.2.23 /cum)

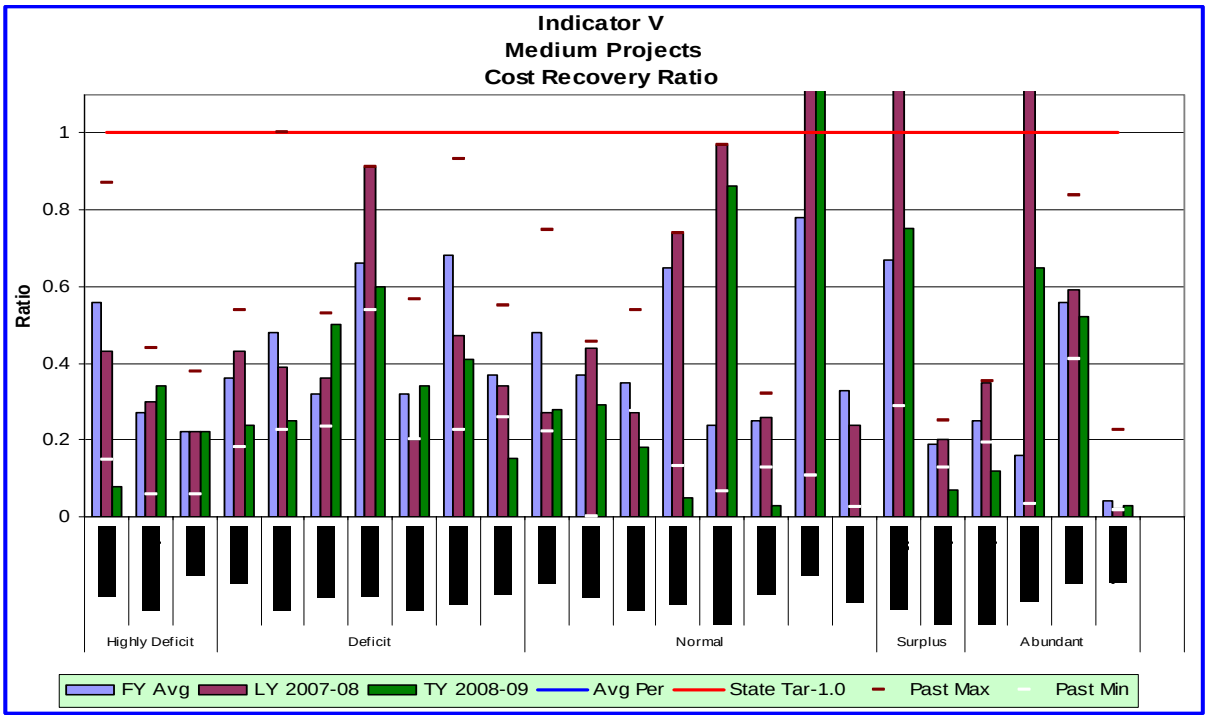
Abundant Plan Group:

CIPC Chandrapur : Output per unit water supply on Ghorazari & Naleshwar projects under this circle combined together has low value (Rs 5.16/cum) as compared to state norm & last year performance.

KIC Ratnagiri: In Natuwadi Project this year the output per unit water supply is very low i.e. Rs. 0.09/cum as compared to state norms. It is due to excess quantity of water use and leakage through canal system.

SIC Sangli: -The average output per unit irrigation water supplied of six medium projects in this Circle is Rs.3.24/Cum. It is less than the last year& less than the state norm.

TIC Thane: - Output per unit irrigation water supplied in Rajnalla Complex & Wandri is Rs 2.82 cum. It is more than the last year value(Rs.1.69/cum).



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Beed	0.56	0.43	0.08	0.87	0.15		
	CADA Solapur	0.27	0.30	0.34	0.44	0.06	0.22	1
	PIC Pune	0.22	0.22	0.22	0.38	0.06		
Deficit	AIC Akola	0.36	0.43	0.24	0.54	0.18		
	BIPC Buldhana	0.48	0.39	0.25	1.00	0.23		
	CADA Abad	0.32	0.36	0.50	0.53	0.23		
	CADA Beed	0.66	0.91	0.60	0.91	0.54	0.39	1
	CADA Jalgaon	0.32	0.20	0.34	0.56	0.20		
	CADA Nashik	0.68	0.47	0.41	0.93	0.23		
	NIC Nanded	0.37	0.34	0.15	0.55	0.26		
Normal	AIC Akola	0.48	0.27	0.28	0.75	0.22		
	CADA Abad	0.37	0.44	0.29	0.46	0.00		
	CADA Jalgaon	0.35	0.27	0.18	0.54	0.27		
	CADA Nashik	0.65	0.74	0.05	0.74	0.13	0.86	1
	CIPC Chandrapur	0.24	0.97	0.86	0.97	0.07		
	NIC Nanded	0.25	0.26	0.03	0.32	0.13		
	PIC Pune	0.78	7.01	2.74	7.01	0.11		
	YIC Yavatmal	0.33	0.24	0.00	1.45	0.02		
Surplus	CADA Nagpur	0.67	1.45	0.75	1.45	0.29	0.75	1
	CIPC Chandrapur	0.19	0.20	0.07	0.25	0.13		
Abundant	CIPC Chandrapur	0.25	0.35	0.12	0.35	0.19		
	KIC Ratnagiri	0.16	1.51	0.65	1.51	0.03		
	SIC Sangli	0.56	0.59	0.52	0.84	0.41	0.59	1
	TIC Thane	0.04	0.02	0.03	0.23	0.02		

Indicator V: Cost Recovery Ratio

Highly Deficit Plan Group:

CADA Beed: The Average ratio of project under this circle has heavily declined from 0.43 to 0.08 compared to last year. The projects which have average performance are Kurnoor, Khandeshwar and Kadi having ratio 0.76, 0.57 & 0.53 respectively.

CADA Solapur: Cost recovery ratio is 0.34 this year compared to last year it is increased to some extent & it is below the state norm.

PIC Pune: Average cost recovery ratio of Six medium projects under this circle is 0.22 this year and below the state target due to reduction in recovery.

Deficit Plan Group:

AIC Akola: Cost Recovery Ratio has low value in case of projects under AIC Akola (0.24) which is also decreased than last year.

BIPC Buldhana: On both the projects under the circle ratio has low value (0.25) than last year .It indicates more O&M expenditure than revenue recovery.

CADA Aurangabad: The Average ratio of projects under this circle has increased from 0.36 to 0.50 as compared to last year. Ajantha Andhari & Khelna has the maximum ratio of 1.6 & 1.2 due to recovery of NI & Irrigation respectively.

CADA Beed: The Average ratio of project under this circle has decreased from 0.91 to 0.60, Terna project has maximum ratio of 5.74 due to Rs. 28.8 lakh NI recovery.

CADA Jalgaon: Though the cost recovery ratio is improved from 0.20 (2007-08) to 0.34 (2008-09) it is much below the state norm. More attention is required to be given by the field officers in case of all the projects to improve the performance.

CADA Nashik: The overall cost recovery ratio is lowered from 0.47 (2007-08) to 0.41 (2008-09). Specifically In Ghatshilpargaon & Nagyasakya projects, much improvement is required as the ratio is only 0.06 & 0.15 respectively.

NIC Nanded: The average ratio of projects under this circle has decreased from 0.34 to 0.15 compared to last year. Kudala project has the maximum ratio of 0.55.

Normal Plan Group:

AIC Akola: Cost recovery ratio on project under AIC Akola is nearly same to last year (0.28)

CADA Aurangabad: The average ratio of project under this circle has decreased from 0.44 to 0.29. Ambadi project having the maximum ratio of 0.8 in this plan group though it is still below the state target.

CADA Jalgaon: Overall performance is lowered from 0.27 (2007-08) to 0.18 (2008-09) which is much below the state target. Efforts are required to improve the performance in case of Abhora, Aner, Karwand, Malangaon & Suki projects.

CIPC Chandrapur: Cost recovery ratio on projects under this circle is quite good (i.e. 86%) this year.

CADA Nashik: The ratio is lowered from 0.18 (2007-08) to 0.05 (2008-09). There is much scope to improve the performance in all the projects. Project authorities are required to take necessary actions in this regard.

NIC Nanded: The average ratio of project under this circle has decreased drastically from 0.26 to 0.03. Nagzari project having the maximum ratio of 0.68 due to NI recovery of Rs. 6.69 lakh.

PIC Pune: In Wadiwale Project the cost recovery ratio this year is 2.74. The performance is decreased as compared to last year value of 7.01. Still the performance is good as compared to state norms.

YIC Yeotmal: On projects under YIC Yeotmal the information received from field officer seems to be insignificant.

Surplus Plan Group:

CADA Nagpur & CIPC Chandrapur: Cost recovery ratio on CADA Nagpur (0.75) was less than state target & as well as its last year performance (0.46). In case of projects under CIPC Chandrapur, there is reduction (.07) in cost recovery compared to last year performance i.e. (0.2).

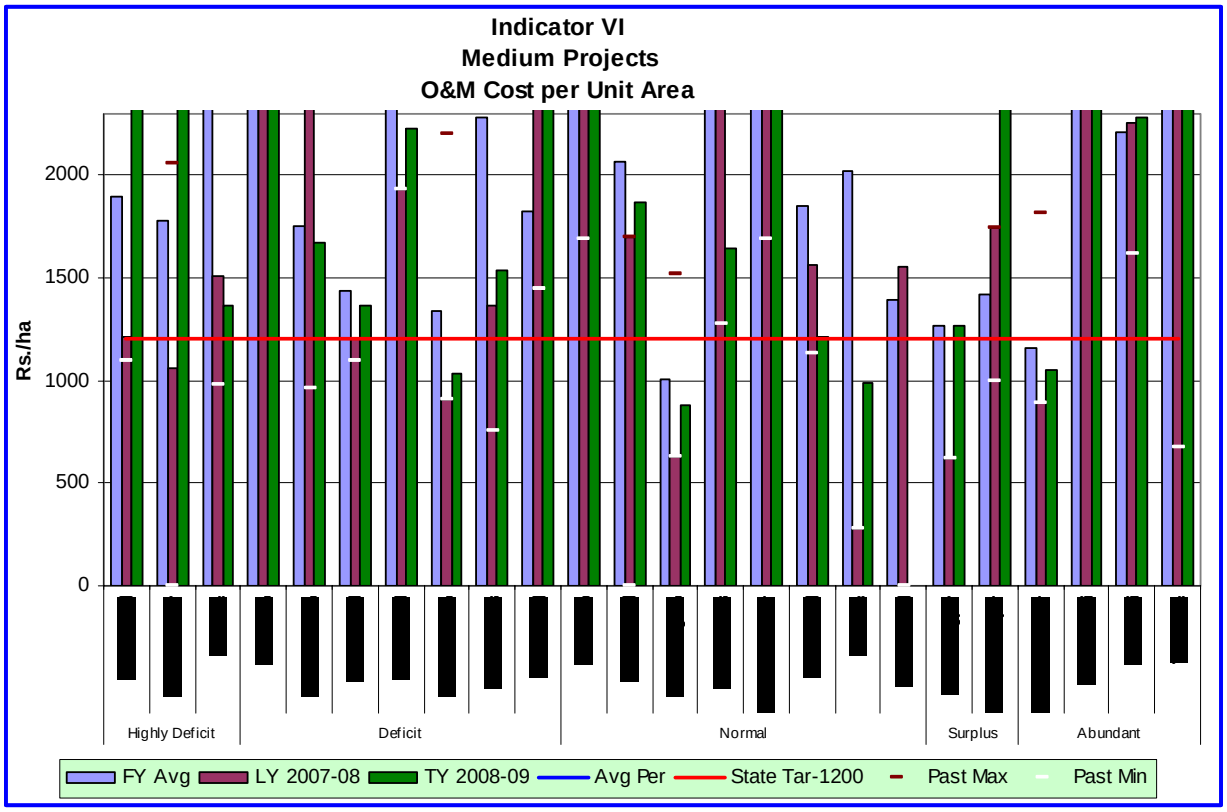
Abundant Plan Group:

CIPC Chandrapur: Cost recovery ratio on CIPC Chandrapur (0.12) was less than state target & as well as its last year performance (0.35).

KIC Ratnagiri: In Natuwadi Project cost recovery ratio is very low i.e. 0.65. The performance is increased as compared to last year i.e. 0.13

SIC Sangli: Cost recovery ratio is 0.52 compared with last year it is decreased to some extent.

TIC Thane: Cost recovery ratio is 0.03 compared with last year it is decreased to some extent.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Beed	1892	1209	3999	200667	1099		
	CADA Solapur	1775	1064	1074	2056	0	1220	1200
	PIC Pune	2619	1509	1367	44396	976		
Deficit	AIC Akola	5794	5893	8445	77730	3524		
	BIPC Buldhana	1755	2440	1675	15417	965		
	CADA Abad	1433	1207	1368	2400	1096		
	CADA Beed	2476	1933	2232	3679	1932	1569	1200
	CADA Jalgaon	1343	911	1031	2199	911		
	CADA Nashik	2285	1363	1537	7038	758		
	NIC Nanded	1828	2350	4152	2573	1448		
Normal	AIC Akola	2810	3176	5392	17070	1690		
	CADA Abad	2068	1700	1867	1700	0		
	CADA Jalgaon	1007	632	883	1519	632		
	CADA Nashik	9763	51224	1640	51224	1272	1344	1200
	CIPC Chandrapur	9461	2810	3826	38310	1687		
	NIC Nanded	1855	1562	1212	3970	1129		
	PIC Pune	2025	281	986	3615	281		
	YIC Yavatmal	1391	1555	0	3660	0		
Surplus	CADA Nagpur	1266	618	1265	2520	618	1943	1200
	CIPC Chandrapur	1418	1739	2621	1739	1000		
Abundant	CIPC Chandrapur	1155	888	1056	1818	888		
	KIC Ratnagiri	26649	3728	10829	198071	3728	1668	1200
	SIC Sangli	2214	2259	2281	2555	1616		
	TIC Thane	3774	5103	4190	6183	677		

Indicator VI: O & M Cost per Unit Area (Rs./ha)

Highly Deficit Plan Group:

CADA Beed: The average cost per unit irrigated area of projects under this circle has increased from Rs 1209/ha to Rs. 3999/ha. Indicator value in Kada project is Rs 11463/ha.due to O & M cost for irrigation is Rs 27.43 lakh.

CADA Solapur: O & M cost per unit area for this year is Rs.1074/ha. compared with last year it is decreased & less than the state norm.

PIC Pune: Average O & M cost per unit area of Six medium projects of this circle is Rs. 1367/ha. It is above the state target. The reduction in performance is due to increase in expenditure on maintenance.

Deficit Plan Group:

AIC Akola: O & M cost per unit area irrigated on projects under this circle was (Rs.8445/ha), higher than last year value (Rs 5893/ha).

BIPC Buldhana: O & M cost per unit area irrigated on projects under this circle was Rs.1675/ha which is improved as compared to last year.

CADA Aurangabad: The average O & M cost per unit irrigated area of projects under this circle has increased from Rs.1207/ha to Rs. 1368/ha. compared to last year, which gone over state norms.

Ajantha Andhari has the maximum O &M cost of Rs 12034/ha & Jui has Rs 10953/ha. Low ratios of Sukhana (Rs 566/ha) & Girija (RS 474/ha) are affected for overall reduction of the indicator.

CADA Beed: The average cost per unit irrigated area of projects under this circle has increased from Rs. 1933/ha to Rs. 2232/ha.compared to last year. Masalga has highest O & M cost of Rs17026/ha since utilized potential is only 76 ha. & O&M cost is Rs.19.14 lakh.

CADA Jalgaon: The overall O&M cost per unit irrigated area is Rs 1031/ha. In Agnawati, Bhokarbari, Bori,& Tondapur projects, O & M cost is on higher side of the state norms. Which should be minimised in future.

CADA Nashik: The O&M cost per unit irrigated area is increased from Rs. 1363/ha.to Rs. 1537/ha which is 1.30 times more than the state norm. Specifically in Ghatshilpargaon project (Rs. 2820/ha), the O & M cost should be minimised in future.

NIC Nanded: The average O & M cost per unit irrigated area of projects under this circle has increased from Rs. 2350/ha to Rs. 4152/ha. compared to last year and overcomes State norms. Pethwadaj has the maximum O&M cost of Rs6070/ha for this Plan group in the circle.

Normal Plan group:

AIC Akola: Low potential projects with more O&M expenditure under AIC Akola has resulted more ratio (5392 Rs/Ha) than last year.

CADA Aurangabad: The average O & M cost per unit irrigated area of projects under this circle has increased from Rs. 1700/ha to Rs. 1867/ha.compared to last year which is above State norms. Kolhi has the maximum O & M cost of Rs 3142/ha.

CADA Jalgaon: Overall performance is well within the state norm except Karwand (Rs. 2643/ha).

CADA Nashik: Overall performance is lowered as compared to last year as the O & M cost per ha. is increased from Rs. 1096/ha (2007-08) to Rs. 1640/ha (2008-09).

CIPC Chandrapur: Performance (Rs. 3826/ha) is decreased compared to last year performance (Rs. 2810/ha).

NIC Nanded: The average O & M cost per unit irrigated area of projects under this circle has decreased from Rs. 1562/ha to Rs. 1212 /ha. nearly achieved State norms. Loni has maximum O&M cost of Rs.1803/ha.where as in Nagzari it is minimum i.e. Rs104/ha.

PIC Pune: In Wadiwale project the O & M cost per unit area comes to Rs.986 /ha. The performance is good as compared to state norms.

YIC Yeotmal: The information received from field officer seems to be insignificant.

Surplus Plan Group:

CADA Nagpur: O & M cost per unit area irrigated on projects under CADA Nagpur is Rs. 1265/ha. compared to last year it increased marginally.

CIPC Chandrapur : O & M cost works out to Rs. 2621 /ha which is more than state norm and more than as compared to last years performance Rs.1739 /ha.

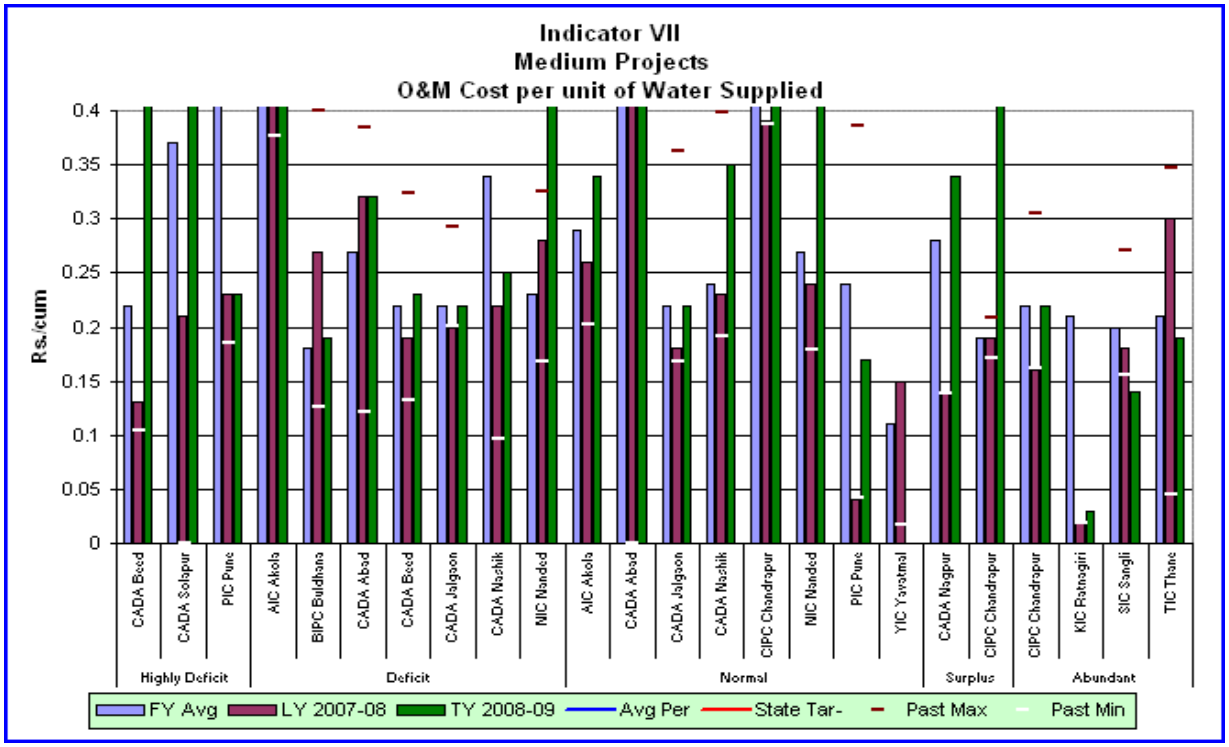
Abundant Plan Group:

CIPC Chandrapur : O & M cost works out to Rs. 1056 /ha which is less than state norm and more than as compared to last years performance Rs.888 /ha.

KIC Ratnagiri: In Natuwadi Project the O & M Cost per unit area enhances to Rs. 10829/ha. But the value is more than state norms. The Field Officers are required to take efforts for improvement in performance.

SIC Sangli: O & M cost per unit area for this year is Rs.2281/ha.compared with last year it is increased & more than the state norm.

TIC Thane: O & M cost per unit area for this year is Rs. 4190/ha.compared with last year it is increased & more than the state norm.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Beed	0.22	0.13	0.43	1.41	0.11		
	CADA Solapur	0.37	0.21	0.22	0.65	0.00	0.23	0.16
	PIC Pune	0.44	0.23	0.23	6.71	0.19		
Deficit	AIC Akola	0.49	0.44	0.82	1.71	0.38		
	BIPC Buldhana	0.18	0.27	0.19	0.40	0.13		
	CADA Abad	0.27	0.32	0.32	0.38	0.12		
	CADA Beed	0.22	0.19	0.23	0.32	0.13	0.21	0.16
	CADA Jalgaon	0.22	0.20	0.22	0.29	0.20		
	CADA Nashik	0.34	0.22	0.25	0.85	0.10		
	NIC Nanded	0.23	0.28	0.46	0.33	0.17		
Normal	AIC Akola	0.29	0.26	0.34	0.71	0.20		
	CADA Abad	0.69	0.83	0.42	1.79	0.00		
	CADA Jalgaon	0.22	0.18	0.22	0.36	0.17		
	CADA Nashik	0.24	0.23	0.35	0.40	0.19		
	CIPC Chandrapur	1.56	0.39	0.58	5.16	0.39	0.33	0.16
	NIC Nanded	0.27	0.24	1.81	0.60	0.18		
	PIC Pune	0.24	0.04	0.17	0.39	0.04		
	YIC Yavatmal	0.11	0.15	0.00	0.56	0.02		
Surplus	CADA Nagpur	0.28	0.14	0.34	0.52	0.14		0.16
	CIPC Chandrapur	0.19	0.19	0.46	0.21	0.17		
Abundant	CIPC Chandrapur	0.22	0.16	0.22	0.31	0.16		
	KIC Ratnagiri	0.21	0.02	0.03	1.02	0.02		
	SIC Sangli	0.20	0.18	0.14	0.27	0.16	0.15	0.16
	TIC Thane	0.21	0.30	0.19	0.35	0.05		

Indicator VII: O & M Cost Per Unit of Water Supply (Rs./cum)

Highly Deficit Plan Group:

CADA Beed: The average value of this indicator for projects under this circle has increased from Rs 0.13/cum to Rs. 0.43/cum. compared to last year which is above the State norms, except Kadi & Khandeshwar rest of the projects have O&M cost more than state norms.

CADA Solapur: O & M cost for water supply is Rs. 0.22/m^3 compared with last year it is slightly increased & more than state target value.

PIC Pune: Average O & M Cost per unit of water supply in six medium projects comes to Rs. 0.23/cum this year. But it is more than the state target. Project authorities are advised to take efforts to improve the performance.

Deficit Plan Group:

AIC Akola: O & M cost per unit water supply on projects under AIC Akola was more (Rs.0.82/cum) than last year.

BIPC Buldhana: O & M cost per unit water supply on projects under this circle was (Rs.0.19/cum) improved than last year.

CADA Aurangabad: The average value of this indicator for projects under this circle has retained its last year's value Rs 0.32 /cum, still it is above the State norms. Dhamna project has the ratio of 2.31

CADA Beed: The average value of this indicator for projects under this circle has increased over last years value from Rs 0.19 to 0.23/cum which is above the state norms. Masalga project has indicator value of 1.72.

CADA Jalgaon: O & M cost per unit water supplied is on higher side of the state norm since last three years. More attention is required in case of Agnawati, Bhokarbari, Bori, Hiwara, & Tondapur projects to improve the performance.

CADA Nashik: O & M cost per unit water supplied is on higher side of the state norm since last three years. Field authorities are required to take necessary steps to improve the performance of all the projects.

NIC Nanded: The average value of this indicator for projects under this circle increased from Rs 0.28/cum to Rs. 0.46/cum over last year. Pethwadaj has indicator value Rs.1.06/cum.

Normal Plan Group:

AIC Akola: O & M cost per unit water supply on projects under AIC Akola was more as (Rs. 0.34/cum).

CADA Aurangabad:

The average value of this indicator for projects under this circle has decreased from Rs. 0.83/cum to Rs. 0.42 /cum. which have decreased by 50% over last year. In Dheku project O & M cost per unit water supply is Rs. 0.52/cum.

CADA Jalgaon: O & M cost per unit water supplied is increased from Rs. 0.18/cum (2007-08) to Rs. 0.22/cum (2008-09) which is on higher side of the state norms. The performance in Aner & Panzara projects is better as the indicator value in these projects is close to state norm. However, improvement is required in case of Abhora, Malangaon & Karwand projects.

CADA Nashik: In all the projects except Bhojapur, the O&M cost per unit water supplied is on higher side. Remedial measures should be taken to improve the performance in Alandi, Adhala, & Mandohol projects.

CIPC Chandrapur: O & M cost /unit water supplied is increased from Rs. 0.39/cum to Rs. 0.58 /cum.

NIC Nanded: The average value of this indicator for projects under this circle has increased from Rs 0.24/cum to Rs.1.81/cum it has increased by 7.5 times over last year. The indicator is above the State norms. Loni has indicator value of Rs. 5.98/cum.

PIC Pune: In Wadiwale Project O & M Cost per unit of water supply is increases this year to Rs. 0.17/cum from Rs.0.04 /cum of last year.

Surplus Plan Group:

CADA Nagpur & CIPC Chandrapur: O & M cost per unit water supplied observed on projects under CADA Nagpur(Rs. 0.34/cum) & CIPC Chandrapur (Rs. 0.46/cum) was slightly more than state norm as well as last years performance.

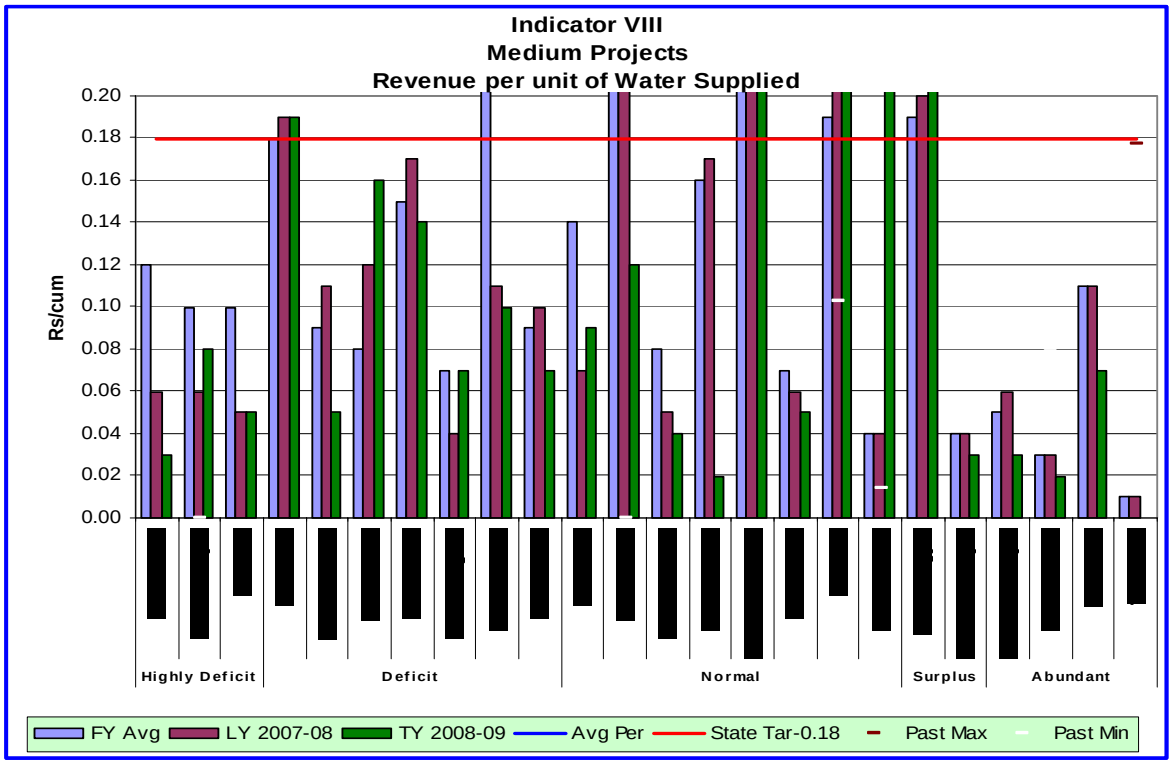
Abundant Plan Group:

CIPC Chandrapur: O & M Cost per unit of water supply is increased from Rs. 0.16 /cum of last year to Rs. 0.22/cum this year. It is more than the state target value.

KIC Ratnagiri: In Natuwadi Project O & M Cost per unit of water supply remains same to Rs. 0.03/cum of last year.

SIC Sangli: O & M cost for water supply is Rs. 0.14/m^3 compared with last year it is decreased.

TIC Thane: O & M cost for water supply is Rs. 0. 19/m^3 compared with last year it is increased & more than state target value.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Beed	0.12	0.06	0.03	3.52	0.29		
	CADA Solapur	0.1	0.06	0.08	1.36	0.00	0.05	0.18
	PIC Pune	0.1	0.05	0.05	3.82	0.24		
Deficit	AIC Akola	0.18	0.19	0.19	7.69	0.80		
	BIPC Buldhana	0.09	0.11	0.05	3.99	0.29		
	CADA Abad	0.08	0.12	0.16	1.22	0.47		
	CADA Beed	0.15	0.17	0.14	1.77	0.85	0.11	0.18
	CADA Jalgaon	0.07	0.04	0.07	1.28	0.41		
	CADA Nashik	0.23	0.11	0.10	7.93	0.22		
	NIC Nanded	0.09	0.1	0.07	1.79	0.54		
Normal	AIC Akola	0.14	0.07	0.09	1.94	0.71		
	CADA Abad	0.25	0.37	0.12	8.19	0.00		
	CADA Jalgaon	0.08	0.05	0.04	1.20	0.47		
	CADA Nashik	0.16	0.17	0.02	1.67	0.51	0.19	0.18
	CIPC Chandrapur	0.37	0.38	0.50	7.22	2.90		
	NIC Nanded	0.07	0.06	0.05	1.50	0.41		
	PIC Pune	0.19	0.3	0.46	2.96	0.10		
	YIC Yavatmal	0.04	0.04	0.27	3.47	0.01		
Surplus	CADA Nagpur	0.19	0.2	0.26	3.17	0.60	0.03	0.18
	CIPC Chandrapur	0.04	0.04	0.03	0.45	0.26		
Abundant	CIPC Chandrapur	0.05	0.06	0.03	0.72	0.43		
	KIC Ratnagiri	0.03	0.03	0.02	4.60	0.08		
	SIC Sangli	0.11	0.11	0.07	1.51	0.64	0.03	0.18

	TIC Thane	0.01	0.01	0	0.18	0.06

Indicator VIII: Revenue Per Unit of Water Supplied Rs/cum

Highly Deficit Plan Group:

CADA Beed: The average value of this indicator for projects under this circle has decreased from Rs. 0.06/cum to Rs. 0.03 **/**cum compared to last year.

CADA Solapur: Revenue per unit water supply is Rs.0.08/cum compared with last year it is slightly lower down. It is too much below the state norm.

PIC Pune: Average revenue per unit of water supplied in Six medium projects under this circle remains same to Rs. 0.05/cum of last year. The reason for poor performance is due to reduction in revenue recovery.

Deficit Plan Group:

AIC Akola: Revenue recovery per unit water supplied on projects under AIC Akola is Rs. 0.19/cum.

BIPC Buldhana Revenue recovery per unit water supplied on projects under BIPC Buldhana was quite low (Rs. 0.05/cum) mainly due to low revenue realization.

CADA Aurangabad: The average value of this indicator for project under this circle had increased from Rs. 0.12/cum to Rs. 0.16 /cum. It has increased by 33%over last year. But it is still slightly below state norms, improvement in revenue collection is still needed. Khelna has maximum ratio of Rs1.0/cum.(NI recovery being Rs 19.57 lakh) Karpara, Dhamna, Galhati & Kalyan Girija projects under this plan group which have zero revenue.

CADA Beed: The average value of this indicator for the project under this circle has slightly decreased from Rs 0.17/cum to Rs. 0.14/cum. Terna has maximum revenue Rs 0.26/cum. Project authorities are required to take more efforts in recovering the revenue.

CADA Jalgaon: Though the revenue per unit water supplied is increased from Rs. 0.04/cum (2007-08) to 0.07/cum (2008-09) still it is below state norm. In case of Bhokarabari, Burai, Kanoli, Hiwara & Rangwali projects, performance is very low (ratio is 0.12 ,0.01, 0.03 ,0.07& 0.05 respectively). Improvement in these projects is necessary.

CADA Nashik: Revenue per unit water supplied is lowered from Rs. 0.11/cum (2007-08) to Rs. 0.10/cum (2008-09). Efforts are required to improve the performance in all the projects concerned.

NIC Nanded: The average value of this indicator for project under this circle has decreased from Rs 0.10/cum to Rs. 0.07/cum. It is below State norms. Project authorities are required to take hard efforts in recovering the revenue. Kudala & Karadkhed are the only projects which have achieved (0.17) nearly the state norms.

Normal Plan Group:

AIC Akola: The indicator value is (Rs 0.09/cum) higher than last years (Rs.0.07/cum).

CADA Aurangabad: The average value of this indicator for project under this circle has decreased from Rs 0.37/cum to Rs. 0.12 /cum. It has decreased by 67% over last year's performance and gone below the State norms. Ambadi project has the ratio of 0.30 which is more than the state norms.

CADA Jalgaon: The indicator value is lowered from 0.05 (2007-08) to Rs.0.04/cum (2008-09). The improvement in the performance is required in all the projects concerned.

CADA Nashik: The performance is lowered from Rs. 0.05/cum to Rs. 0.02/cum as compared to last year and which is far below the state norm.

CIPC Chandrapur: There is slight increase in revenue per unit water supplied (Rs. 0.38/cum to Rs. 0.50/cum) as compared to last year.

NIC Nanded: The average value of this indicator for projects under this circle has slightly decreased over last years value i.e. Rs.0.06/cum to Rs. 0.05/cum. It is very much below state norms. Loni is the only project which has achieved state norms. Revenue collection target should be strictly programmed & followed by the Project authorities so as to achieve indicator target.

PIC Pune: In Wadiwale Project the ratio is 0.46 which shows good performance than state target due to increase in revenue recovery.

YIC Yeotmal: The indicator value is Rs.0.27/cum, which is greater than last year.

Surplus Plan Group:

CADA Nagpur: Revenue recovery per unit water supplied on projects under this circle (0.26) was more than the state norm as water was used for protective irrigation in Kharif only.

CIPC Chandrapur: Revenue recovery per unit water supplied on projects under this circle (0.03) was less than the state norm as water was used for protective irrigation in Kharif only.

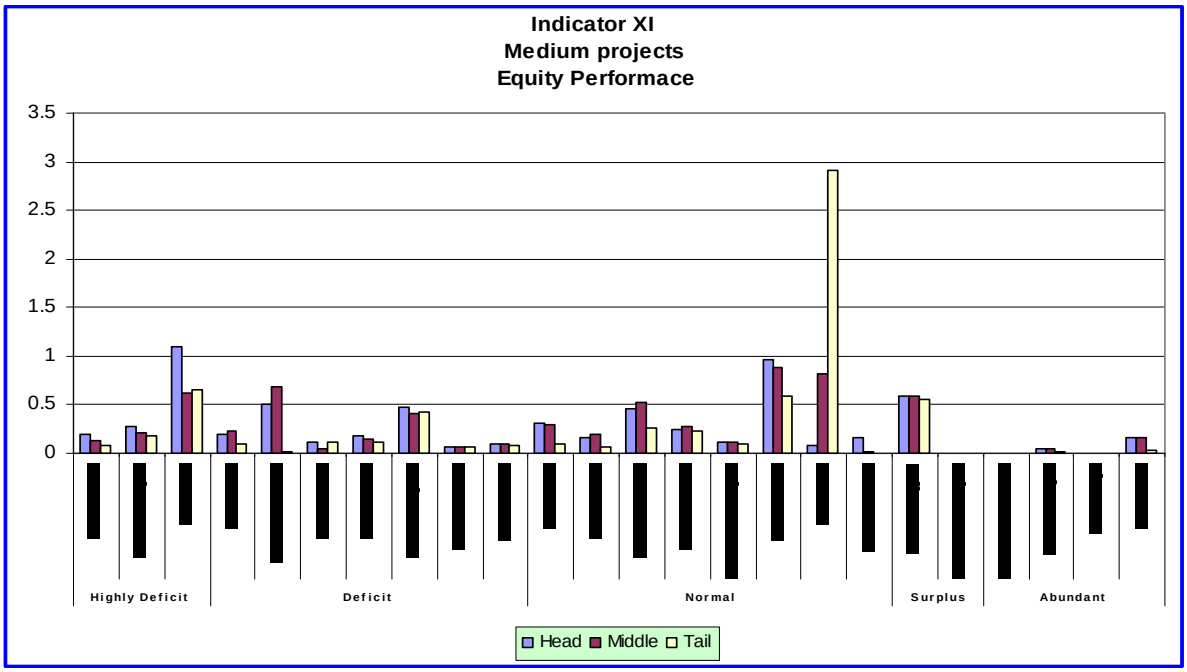
Abundant Plan Group:

CIPC Chandrapur: Revenue recovery per unit water supplied on projects under this circle (0.03) was less than the state norm.

KIC Ratnagiri: In Natuwadi Project the ratio comes to (0.02) due to less amount of revenue recovery and excess water use.

SIC Sangli: Revenue per unit water supply is Rs.0.07/ m^3 compared with last year it is increased & below the state norm.

TIC Thane: Revenue per unit water supply is NIL



Plan group	Circle	2008-09		
		Head	Middle	Tail
Highly Deficit	CADA Beed	0.20	0.13	0.09
	CADA Solapur	0.28	0.22	0.19
	PIC Pune	1.09	0.63	0.65
Deficit	AIC Akola	0.20	0.22	0.09
	BIPC Buldhana	0.51	0.69	0.02
	CADA Abad	0.11	0.05	0.11
	CADA Beed	0.18	0.15	0.12
	CADA Jalgaon	0.48	0.41	0.42
	CADA Nashik	0.06	0.06	0.06
	NIC Nanded	0.09	0.09	0.08
Normal	AIC Akola	0.30	0.29	0.11
	CADA Abad	0.17	0.19	0.07
	CADA Jalgaon	0.46	0.52	0.26
	CADA Nashik	0.24	0.28	0.23
	CIPC Chandrapur	0.12	0.12	0.10
	NIC Nanded	0.97	0.89	0.59
	PIC Pune	0.08	0.82	2.92
	YIC Yavatmal	0.16	0.02	0.00
Surplus	CADA Nagpur	0.58	0.59	0.56
	CIPC Chandrapur	0.00	0.00	0.00
Abundant	CIPC Chandrapur	0.00	0.00	0.00
	KIC Ratnagiri	0.05	0.04	0.02
	SIC Sangli	0.00	0.00	0.00
	TIC Thane	0.17	0.17	0.04

Indicator XI: Equity Performance

Highly Deficit Plan Group:

PIC Pune: - Average potential utilisation in six medium projects is higher in Head reach and low in tail reach.

Normal Plan Group:

CIPC Chandrapur: Potential utilisation was more concentrated in head and middle reaches of projects under CIPC Chandrapur.

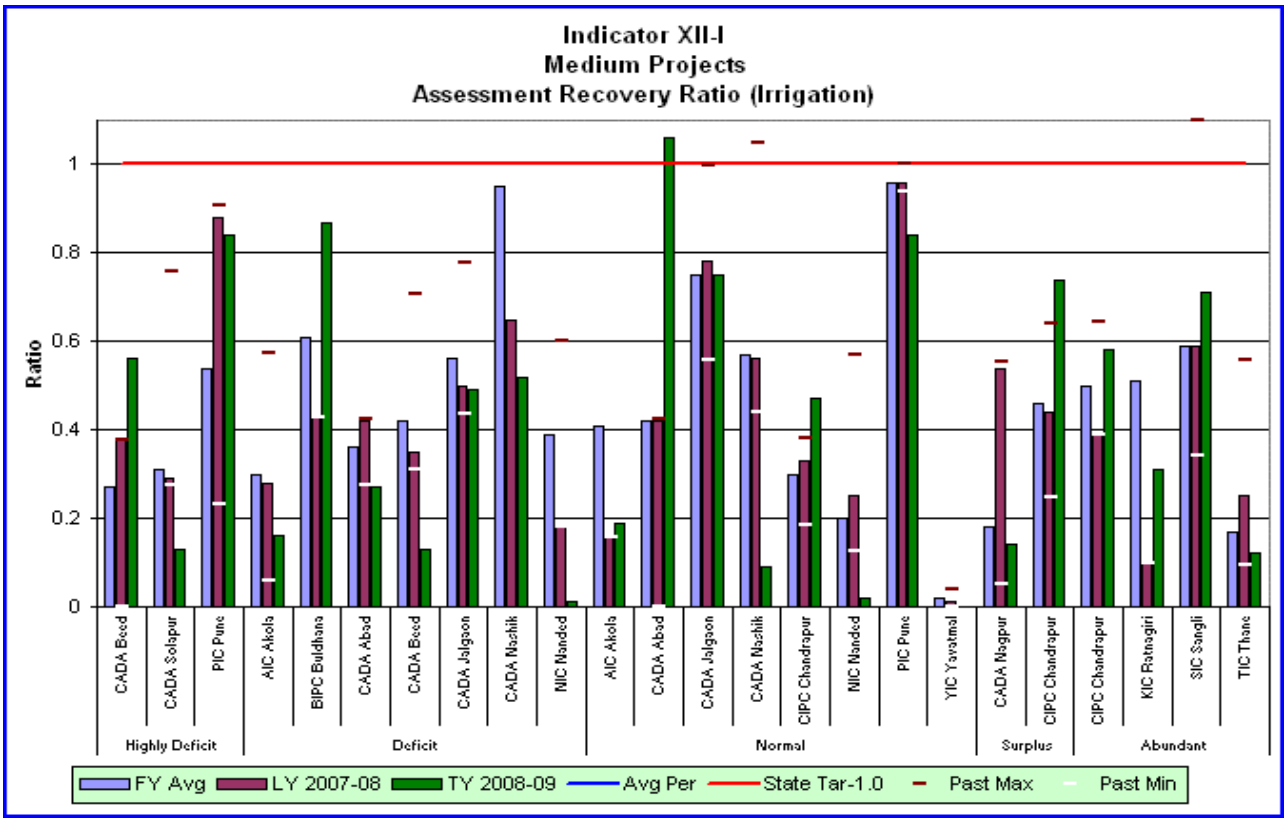
Surplus Plan Group:

CADA Nagpur and CIPC Chandrapur: Potential utilisation was more or less equal in all the reaches in projects under CADA Nagpur and CIPC Chandrapur.

Abundant Plan Group:

KIC Ratnagiri: - In Natuwadi project irrigation potential utilization ratio is 0.05, 0.03, and 0.02 at head; middle and tail reach of command area

CIPC Chandrapur: Potential utilisation was more or less equal in all the reaches in projects under this circle.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Target
Highly Deficit	CADA Beed	0.27	0.38	0.56	0.38	0.00		
	CADA Solapur	0.31	0.29	0.13	0.76	0.28	0.51	1
	PIC Pune	0.54	0.88	0.84	0.91	0.23		
Deficit	AIC Akola	0.30	0.28	0.16	0.57	0.06		
	BIPC Buldhana	0.61	0.43	0.87	6.25	0.43		
	CADA Abad	0.36	0.42	0.27	0.42	0.27		
	CADA Beed	0.42	0.35	0.13	0.71	0.31	0.63	1
	CADA Jalgaon	0.56	0.50	0.49	0.78	0.44		
	CADA Nashik	0.95	0.65	0.52	1.48	0.65		
	NIC Nanded	0.39	0.18	0.01	0.60	0.18		
Normal	AIC Akola	0.41	0.16	0.19	12.73	0.16		
	CADA Abad	0.42	0.42	1.06	0.42	0.00		
	CADA Jalgaon	0.75	0.78	0.75	1.00	0.56		
	CADA Nashik	0.57	0.56	0.09	1.05	0.44	0.69	1
	CIPC Chandrapur	0.30	0.33	0.47	0.38	0.18		
	NIC Nanded	0.20	0.25	0.02	0.57	0.13		
	PIC Pune	0.96	0.96	0.84	1.00	0.94		
	YIC Yavatmal	0.02	0.01	0.00	0.04	0.00		
Surplus	CADA Nagpur	0.18	0.54	0.14	0.55	0.05		
	CIPC Chandrapur	0.46	0.44	0.74	0.64	0.25	0.74	1
Abundant	CIPC Chandrapur	0.50	0.39	0.58	0.64	0.39		
	KIC Ratnagiri	0.51	0.10	0.31	2.32	0.10		
	SIC Sangli	0.59	0.59	0.71	1.10	0.34	0.65	1
	TIC Thane	0.17	0.25	0.12	0.56	0.10		

Indicator XII: Assessment recovery ratio (I)

Highly deficit plan group:

CADA Beed: The average value of this indicator for projects under this circle has increased from 0.38 to 0.56. Khandeshwar is the only project to have attained the state norms. Turori have zero recoveries where as information for Jakapur project has been not submitted by the Project authorities' in spite of several reminders.

CADA Solapur: The ratio is lower from 0.29 (2007-08) to 0.13 (2008-09) which is far below the state norm

PIC Pune: Average assessment recovery ratio in six medium projects under this circle comes to 0.84 this year it is below state target.

Deficit Plan group:

AIC Akola & BIPC Buldhana: Recovery against assessment sanctioned during the year 2008-09 on group of projects under AIC Akola was low than last year & twice on projects under BIPC Buldhana.

CADA Aurangabad: The average value of this indicator for projects under this circle has decreased from 0.42 to 0.27.

CADA Beed: The average value of this indicator for projects under this circle has decreased from 0.35 to 0.13. Raigavan project has ratio 1.1, Tiru, Sakol, Masalga & Whati have recovery ratio of 1.0. & Deverjan project has the least ratio of 0.01which affected overall performance of the circle.

CADA Jalgaon: The ratio is just lowered from 0.50 (2007-08) to 0.49 (2008-09). More attention is required by field officers to improve the performance in all the projects except Burai.

CADA Nashik: The ratio is lowered from 0.65 (2007-08) to 0.52 (2008-09). There is much scope in all the projects to improve the performance.

NIC Nanded: The average value of this indicator for project under this circle has decreased from 0.18 to 0.01, Karadkhed project has the maximum ratio of 0.07.

Normal Plan group:

AIC Akola: In the Projects under AIC Akola, assessment recovery ratio is 0.19.

CADA Aurangabad: The average value of this indicator for projects under this circle has increased from 0.42 to 1.06. Dheku & Kolhi project achieved ratio of 1.0 as per state norms where as in Ambadi it is 0.60.

CADA Jalgaon: The ratio is lowered from 0.78 (2007-08) to 0.75 (2008-09) and it is below state norm. As such improvement is necessary.

CADA Nashik: The ratio is lowered from 0.56 (2007-08) to 0.10 (2008-09). Field officers are required to take necessary steps to improve the performance.

CIPC Chandrapur: Recovery against assessment on group of projects under this circle is 0.47 which is more than the last year performance (0.33).

NIC Nanded: The average value of this indicator for projects under this circle has decreased from 0.25 to 0.02. All the three projects namely Nagzari, Dongargaon & Loni have very low recovery against assessment.

PIC Pune: In Wadiwale Project the ratio is 0.84 which shows better recovery.

Surplus Plan Group:

CADA Nagpur: The ratio is reduced from 0.54 to 0.14 It is 86% lagging to the state norms value.

CIPC Chandrapur: Recovery against assessment on group of projects under CIPC Chandrapur is 0.74. It is more than the last year performance (0.44).

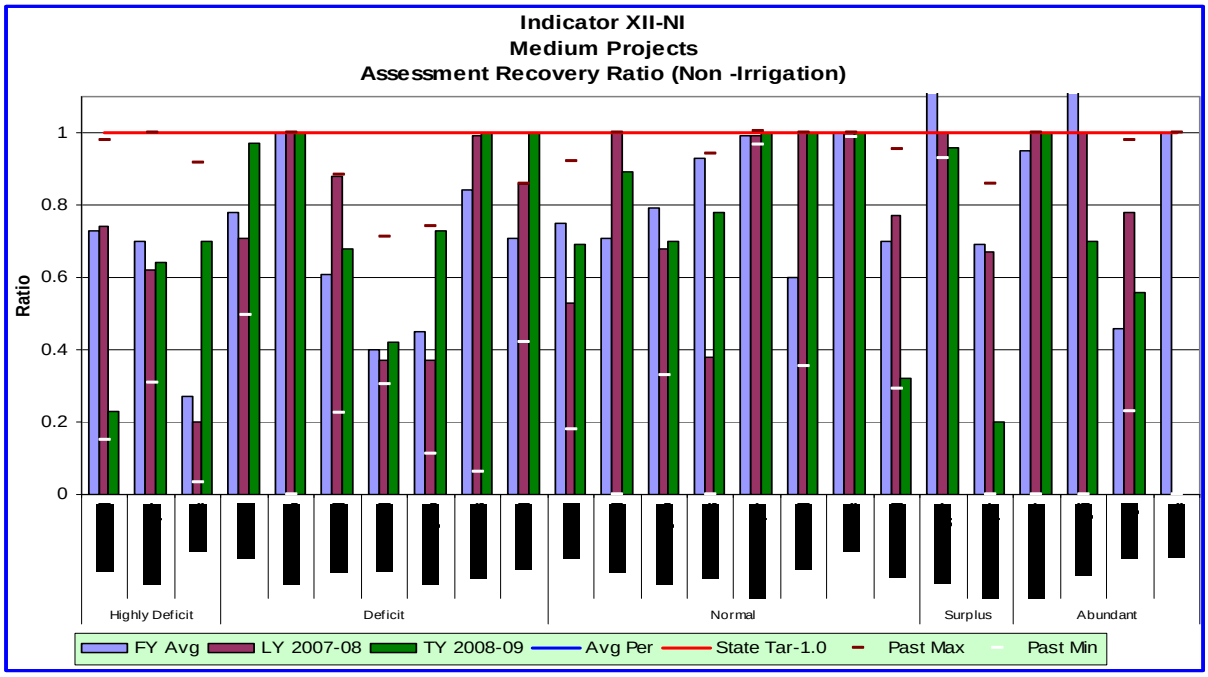
Abundant Plan Group:

CIPC Chandrapur: Recovery against assessment on group of projects under this circle is 0.58. It is more than the last year performance and state norms.

KIC Ratnagiri: In Natuwadi Project the ratio increases to 0.31 from 0.10 of last year due to increase recovery.

SIC Sangli: The recovery is increased from 59% to 71% as compared to last year.

TIC Thane: The recovery is reduced from 25% to 12% as compared to last year.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	AVG Per	State Ta
Highly Deficit	CADA Beed	0.73	0.74	0.23	0.98	0.15		
	CADA Solapur	0.70	0.62	0.64	1.00	0.31	0.67	1
	PIC Pune	0.27	0.20	0.70	0.92	0.03		
Deficit	AIC Akola	0.78	0.71	0.97	1.38	0.49		
	BIPC Buldhana	1.00	1.00	1.00	1.00	0.00		
	CADA Abad	0.61	0.88	0.68	0.88	0.22		
	CADA Beed	0.40	0.37	0.42	0.71	0.30	0.88	1
	CADA Jalgaon	0.45	0.37	0.73	0.74	0.11		
	CADA Nashik	0.84	0.99	1.00	5.65	0.06		
	NIC Nanded	0.71	0.86	1.00	0.86	0.42		
Normal	AIC Akola	0.75	0.53	0.69	0.92	0.18		
	CADA Abad	0.71	1.00	0.89	1.00	0.00		
	CADA Jalgaon	0.79	0.68	0.70	1.38	0.33		
	CADA Nashik	0.93	0.38	0.78	0.94	0.00		
	CIPC Chandrapur	0.99	0.99	1.00	1.00	0.96	0.80	1
	NIC Nanded	0.60	1.00	1.00	1.00	0.35		
	PIC Pune	1.00	1.00	1.00	1.00	0.99		
	YIC Yavatmal	0.70	0.77	0.32	0.95	0.29		
Surplus	CADA Nagpur	1.76	1.00	0.96	6.34	0.93	0.96	1
	CIPC Chandrapur	0.69	0.67	0.20	0.86	0.00		
Abundant	CIPC Chandrapur	0.95	1.00	1.00	1.00	0.00		
	KIC Ratnagiri	1.16	1.00	0.70	4.25	0.00		
	SIC Sangli	0.46	0.78	0.56	0.98	0.23	0.57	1
	TIC Thane	1.00	0.00	0.00	1.00	0.00		

Indicator XII: Assessment recover ratio (NI)

Highly deficit plan group:

CADA Beed: The average value of this indicator for projects under this circle has slightly decreased from 0.74 to 0.23. Kada is the only project to have attained required ratio of 1.00, Kurnoor has ratio of 0.19 and rest of the projects has ratio zero as there is no NI use in the projects.

CADA Solapur: It is increased from 62% to 64% compared to last year

PIC Pune: Average assessment ratio (NI) of six medium projects is 0.70. It increases from last year ratio of 0.20 due to increase in recovery of water charges of Non Irrigation use.

Deficit plan group:

AIC Akola & BIPC Buldhana: Recovery against assessment during the year 2008-09 on group of projects under AIC Akola Deficit was 97%, & it was up to the state target in BIPC Buldhana.

CADA Aurangabad: The average value of this indicator for projects under this circle has decreased from 0.88 to 0.68. Sukhana, Khelna, & Lahuki have attained the state norms i.e.1.00, where as in Galhati, Girija & Jui has no NI use which affect overall performance of the circle to fall down.

CADA Beed: The average value of this indicator for projects under this circle has increased from 0.37 to 0.42, Tawarja, Whati, Wan & Rui have attained the state norms. Many of the projects have no NI use resulting nil value of indicator.

CADA Jalgaon: The overall ratio is on lower side (73%).Improvement is necessary in case of Kanoli project.

CADA Nashik: The target is achieved in Haranbari & Kelzar projects. However improvement is required in Ghatshil Pargaon project.

NIC Nanded: The average value of this indicator for projects under this circle has increased from 0.86 to 1.00.

Normal Plan group:

YIC Yeotmal & AIC Akola: Assessment Recovery ratio on projects under these circles is 0.32 & 0.69 respectively.

CADA Aurangabad: The average value of this indicator for projects under this circle has decreased over its last year's value from 1.00 to 0.89. Ambadi has attained state norms, where as in Dheku it is zero.

CADA Jalgaon: The ratio is improved from 0.68 (2007-08) to 0.70 (2008-09).

CADA Nashik: The ratio has been improved from 0.38 (2007-08) to 0.78 (2008-09).

CIPC Chandrapur: 100% recovery has been achieved.

NIC Nanded: The average value of this indicator of the projects for this circle has retained its last year's value 1.00. Nagzari & Loni project has attained the state norms, where as in Dongargaon there is no NI use.

PIC Pune: In Wadiwale Project 100 % recovery has been achieved as that of last year.

Surplus Plan Group:

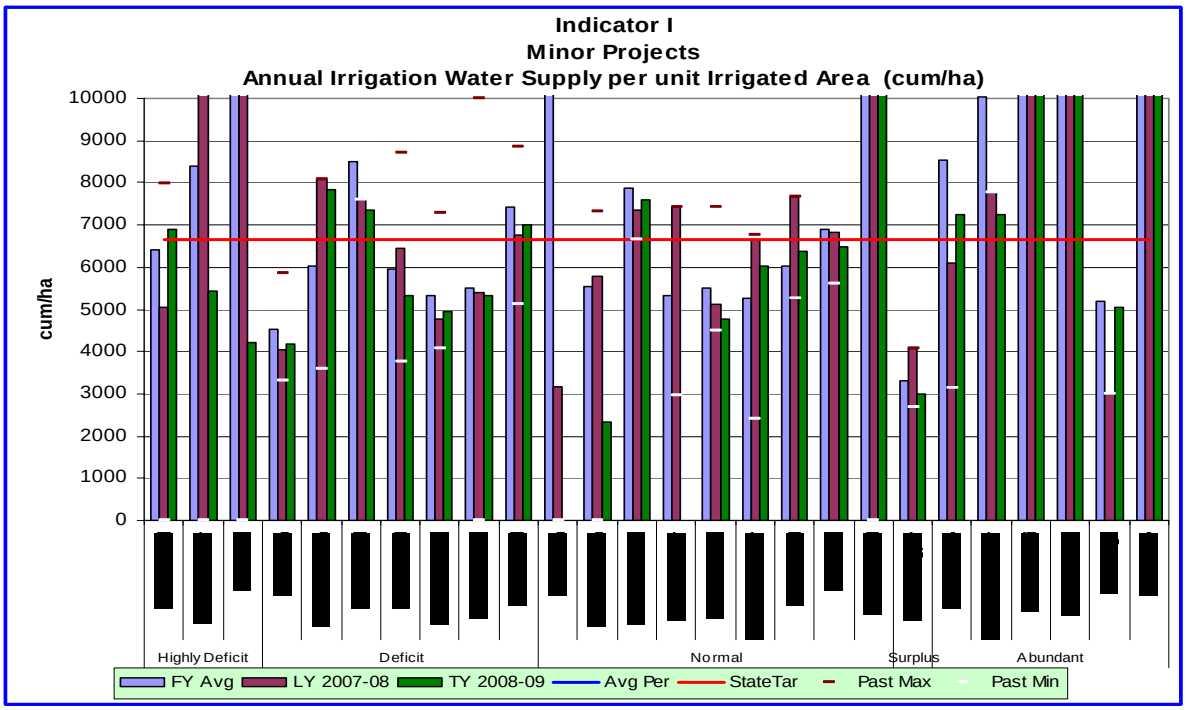
CADA Nagpur: 96 % recovery has been achieved as compared to last year's performance (100%)

CIPC Chandrapur: 20% recovery has been achieved as that of last year (67 %).

Abundant Plan Group:

CIPC Chandrapur: 100% recovery has been achieved.

KIC Ratnagiri: In Natuwadi Project 70% recovery has been achieved this year.
SIC Sangli: The ratio is decreased from 78% to 56%.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	StateTar
Highly Deficit	CADA Beed	6403	5045	6889	7974	0		
	CADA Solapur	8406	11631	5432	11631	0	5509	6667
	PIC Pune	10107	12105	4208	18293	0		
Deficit	AIC Akola	4531	4040	4189	5854	3296		
	BIPC Buldhana	6037	8089	7834	8089	3589		
	CADA Abad	8485	7610	7354	10130	7582		
	CADA Beed	5948	6452	5335	8694	3751	6000	6667
	CADA Jalgaon	5336	4774	4954	7292	4074		
	CADA Nashik	5504	5385	5321	10000	0		
	NIC Nanded	7407	6750	7015	8837	5116		
Normal	AIC Akola	306223	3169	0	1737052	0		
	BIPC Buldhana	5547	5798	2342	7316	0		
	CADA Jalgaon	7864	7362	7607	10367	6667		
	CADA Nagpur	5326	7436	0	7436	2968	6250	6667
	CADA Nashik	5500	5115	4768	7429	4497		
	CIPC Chandrapur	5260	6652	6034	6748	2403		
	NIC Nanded	6042	7680	6377	7680	5271		
	PIC Pune	6910	6821	6464	10534	5600		
	YIC Yavatmal	10709	12169	13725	14713	0		
Surplus	CADA Nagpur	3297	4093	2990	4093	2690		6667
Abundant	CADA Pune	8520	6094	7263	19180	3125		
	CIPC Chandrapur	10039	7786	7237	12259	7786		
	KIC Ratnagiri	22703	25000	25000	25000	18172	6517	6667
	NKIPC Thane	36261	45284	39470	45284	29688		
	SIC Sangli	5180	3001	5050	19476	3001		
	TIC Thane	20992	18092	19478	24866	18092		

Observations of Minor Projects

Indicator I: Annual Irrigation Water Supply per Unit Irrigated Area.

Highly deficit Plan Group:

CADA Beed: The water use per unit irrigated area has increased from 5045cum/ha (2007-08) to 6889 cum/ha (2008-09), the ratio is above the State norms. Kinhi has value of 7840 cum/ha which is maximum and Bagalwadi has minimum value of 6369 cum/ha.

CADA Solapur: The average performance of this year is 5432 cum/ha, which is less than state norms. The water use is decreased by 55% compared to last year.

PIC Pune: Average Annual Irrigation Water Supply of Chinchodi Patil MI Tank is 4208 cum/ha. Shows improvement in performance as compared to last year and state norms.

Deficit Plan group:

AIC Akola: Annual irrigation water use on all grouped projects under AIC Akola was 4189 cum/Ha. Individually for vyaghra it was close to the state norm.

BIPC Buldhana: Water use on all projects under the circle taken together was less than last year. However Water use on Vidrupa, sawkhed bhoi & viswamitri was more but less on Masrul & Brahmanwada.

CADA Aurangabad: The performance has improved over last year by 3%. The average value of this indicator for the year decreased from 7610 cum/ha to 7354 cum/ha, though it is above State norms. Tandulwadi is the only project in this plan group.

CADA Beed: The performance has improved over last year. The water use has decreased from 6452 cum/ha to 5335 cum/ha. compared to last year. The average value of this indicator for this circle has decreased by 17% over last year; the indicator is well below the State norms. Bhutekarwadi project has maximum water use i.e. 5949cum/ha, Dhanori has 5804 cum/ha and Hiwarsinga has least value of 1594 cum/ha. Project authorities are advised to be more watchful in measurements of water utilized either by canal flow or Reservoir lift.

CADA Jalgaon: Though the water use is increased from 4774cum/ha to 4954cum/ha as compared to last year, it is below the state norms.

CADA Nashik: The water use is less than state norms since last three years.

NIC Nanded: The average value of this indicator has increased from 6750 cum/ha to 7015 cum/ha. compared to last year.

Normal Plan group:

AIC Akola: As no irrigation was on Singdoh due to non availability of water.

BIPC Buldhana: Water use on Adol project is 2342 cum/ha.

CADA Jalgaon: The water use is increased from 7362cum/ha to 7607cum/ha as compared to last year and it is above state norms.

CADA Nashik: The water use is less than the state norms (72%).

CIPC Chandrapur: The average value of this indicator for the year is 6034 cum/ha.

NIC Nanded: There is improvement in performance. The average value of this indicator for this year has decreased from 7680 cum/ha to 6377 cum/ha, Nichpur has the maximum water use of 6689 cum/ha.

PIC Pune: Average annual irrigation water supply of two Minor Projects comes to 6464 cum/ha. this year. It is slightly below than last year value of 6821 cum/ha.

YIC Yeotmal: Water use on Manjra project is 13725 cum/ha.

Surplus Plan Group:

CADA Nagpur: Annual water use on projects under CADA Nagpur is 2990 cum/ha which is less than state norm due to low water intensive crops grown in the command, compared to last year, it is decreased.

Abundant Plan Group:

CADA Pune: In Thoseghar MI project annual irrigation water supply comes to 7263 cum/ha. It increases from last year performance.

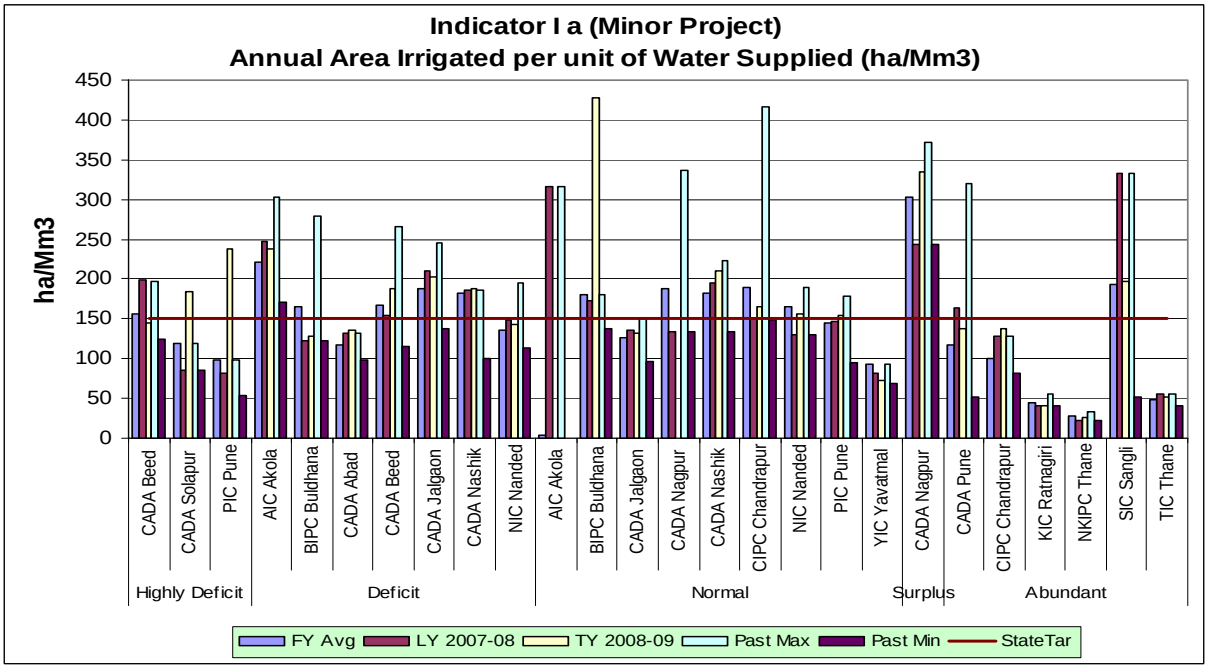
CIPC Chandrapur: Annual water use on Lagam project is 7237 cum/ha. As compared to last year is decreased and less than the state target.

KIC Ratnagiri: In Shirval M.I. Project annual irrigation water supply comes to 25000 cum/ha. which is above the state target.

NKIPC Thane: In Dhasai M.I. Project of this circle annual irrigation water supply comes to 39470 cum/ha. which is better than last year but six time above the state target.

SIC Sangli: Annual water use on minor project under this circle is 5050 cum/ha which is less than state norms and increased than last year to some extent.

TIC Thane: The average water use is 19478 cum/ha. Which is nearly double than the state norms. and more than the last year use to some extent.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	State Tar
Highly Deficit	CADA Beed	156	198	145	198	125	189	150
	CADA Solapur	119	86	184	119	86		
	PIC Pune	99	83	238	99	55		
Deficit	AIC Akola	221	248	239	303	171	175	150
	BIPC Buldhana	166	124	128	279	124		
	CADA Abad	118	131	136	132	99		
	CADA Beed	168	155	187	267	115		
	CADA Jalgaon	187	209	202	245	137		
	CADA Nashik	182	186	188	186	100		
	NIC Nanded	135	148	143	195	113		
Normal	AIC Akola	3	316	NA	316	1	164	150
	BIPC Buldhana	180	172	427	180	137		
	CADA Jalgaon	127	136	131	150	96		
	CADA Nagpur	188	134	NA	337	134		
	CADA Nashik	182	196	210	222	135		
	CIPC Chandrapur	190	150	166	416	148		
	NIC Nanded	166	130	157	190	130		
	PIC Pune	145	147	155	179	95		
	YIC Yavatmal	93	82	73	93	68		
Surplus	CADA Nagpur	303	244	334	372	244	334	150
Abundant	CADA Pune	117	164	138	320	52	158	150
	CIPC Chandrapur	100	128	138	128	82		
	KIC Ratnagiri	44	40	40	55	40		
	NKIPC Thane	28	22	25	34	22		
	SIC Sangli	193	333	198	333	51		
	TIC Thane	48	55	51	55	40		

NA: Not available

Indicator I a: Annual Area irrigated per unit of water supplied (ha//Mm3).
Highly deficit Plan Group:
CADA Beed: The overall area irrigated per unit of water supply (145 ha/Mm3) in the projects under this circle is nearly achieved state target.
CADA Solapur: Overall area irrigated per unit of water supplied is 184 ha/M3 in this year. Compared with last year it is increased by 114% & it is 23% more than the state target
PIC Pune: Overall area irrigated per unit of water supplied is 238 ha/Mm3 in this year. Compared with last year it is increased by 187% & it is 59 % more than the state target
Deficit Plan group:
AIC Akola: The area irrigated per unit of water supplied for minor project during this year is observed higher than State norm.
BIPC Buldhana: The area irrigated per unit of water supplied under BIPC Buldhana of minor project during this year is 128 Mm3 it fairly near to state norm of 150 ha/Mm3
CADA Aurangabad: The overall area irrigated per unit of water supply (136 ha/Mm3) in the projects under this circle is nearly achieved state target.
CADA Beed: The overall area irrigated per unit of water supply (187 ha/Mm3) in the projects under this circle is over takes state target, this may due to area irrigated on reservoir lift.
CADA Jalgaon: Due to less no o rotations the area irrigated per unit of water supplied is on higher side i.e. 202 ha/Mm3.
CADA Nashik: There is slight improvement as compared to last year (186 ha/Mm3) performance for this indicator (188 ha/Mm3) this is higher than the state norm due to this no of rotations.
NIC Nanded: The overall area irrigated per unit of water supply (143 ha/Mm3) in the projects under this circle is nearly achieved state target.
Normal Plan group:
AIC Akola: Singdoh Minor project is a due to non availability of water for irrigation
BIPC Buldhana: The area irrigated per unit of water supplied under BIPC Buldhana of minor projects is excessively high 427 ha./Mm3 due to less availability of water for irrigation.
CADA Jalgaon: The area irrigated per unit of water supplied is 131 ha/Mm3 which is less than state norm.
CADA Nashik: The overall area irrigated per unit of water supplied is improved from 196 ha/Mm3 to 210 ha/Mm3.
CIPC Chandrapur: Average166 ha/Mm3 area was irrigated per unit of water supplied for the projects under this circle.
NIC Nanded: The overall area irrigated per unit of water supply (157 ha/Mm3) in the projects under this circle is achieved state target and improved compared to last year.
PIC Pune: Over all area irrigated per unit of water supplied is 155 ha/Mm3) in this year. Compared with last year it is increased by 6%& it is 8% less than the state target
YIC Yeotmal: The area irrigated per unit of water supplied under YIC Yavatmal of Mozari minor project is only 73% less than state norm.

Surplus Plan Group:

CADA Nagpur: Average 334 ha/Mm3 area was irrigated per unit of water supplied for the projects under this circle. The value is on higher side due to Kharif utilization.

Abundant Plan Group:

CADA Pune: Over all area irrigated per unit of water supplied is 138 ha/Mm3 in this year. Compared with last year it is decreased by 16% & it is 8% less than.

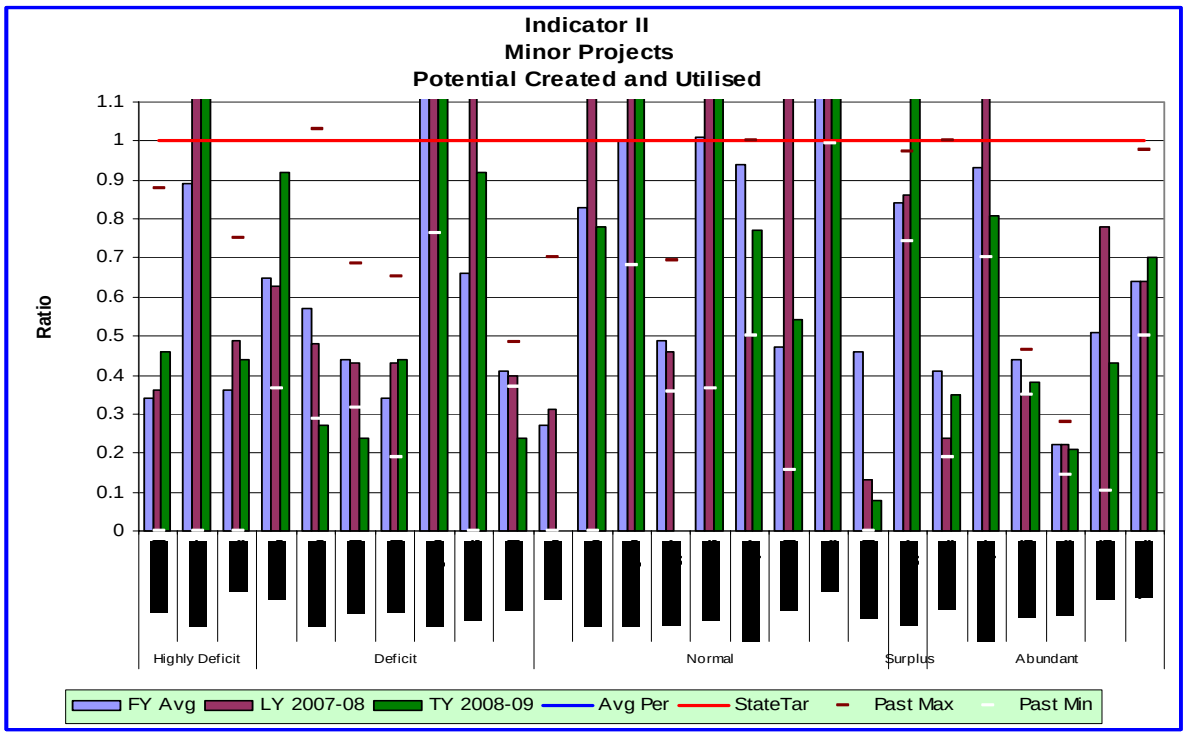
CIPC Chandrapur: Average138 ha/Mm3 area was irrigated per unit of water supplied for the projects under this circle.

KIC Ratanagiri: Over all area irrigated per unit of water supplied is 40 ha/Mm3 in this year. Compared with last year it is same as last year & it is 74% less than the state target.

NKIPC Thane: Overall area irrigated per unit of water supplied is 25 ha/Mcum compared with last year, it is increased by 14% it is 84 % less than the state target

SIC Sangli: Over all area irrigated per unit of water supplied is 198 ha/Mm3 in this year. Compared with last year it is decreased by 41% & it is 32% more than the state target

TIC Thane: Over all area irrigated per unit of water supplied is 151 ha/Mm3 in this year. Compared with last year it is decreased by 8% & it is 66% less than the state target



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	State Tar
Highly Deficit	CADA Beed	0.34	0.36	0.46	0.88	0		
	CADA Solapur	0.89	1.41	1.46	1.69	0.00	`	1.0
	PIC Pune	0.36	0.49	0.44	0.75	0.00		
Deficit	AIC Akola	0.65	0.63	0.92	1.30	0.36		
	BIPC Buldhana	0.57	0.48	0.27	1.03	0.29		
	CADA Abad	0.44	0.43	0.24	0.68	0.31	1.2	1.0
	CADA Beed	0.34	0.43	0.44	0.65	0.19		
	CADA Jalgaon	1.18	1.28	1.39	2.61	0.76		
	CADA Nashik	0.66	1.17	0.92	1.17	0.00		
	NIC Nanded	0.41	0.40	0.24	0.48	0.37		
Normal	AIC Akola	0.27	0.31	0.00	0.70	0.00		
	BIPC Buldhana	0.83	1.77	0.78	1.77	0.00		
	CADA Jalgaon	1.00	1.51	1.50	1.51	0.68		
	CADA Nagpur	0.49	0.46	0.00	0.70	0.36	0.7	1.0
	CADA Nashik	1.01	1.36	1.31	1.36	0.36		
	CIPC Chandrapur	0.94	0.50	0.77	1.00	0.50		
	NIC Nanded	0.47	1.74	0.54	1.74	0.16		
	PIC Pune	1.57	1.12	1.20	14.54	0.99		
	YIC Yavatmal	0.46	0.13	0.08	18.13	0.00		
Surplus	CADA Nagpur	0.84	0.86	1.34	0.97	0.74		1.0
Abundant	CADA Pune	0.41	0.24	0.35	1.00	0.19		
	CIPC Chandrapur	0.93	1.15	0.81	1.15	0.70		
	KIC Ratnagiri	0.44	0.35	0.38	0.47	0.35		
	NKIPC Thane	0.22	0.22	0.21	0.28	0.14	0.8	1.0
	SIC Sangli	0.51	0.78	0.43	1.86	0.10		
	TIC Thane	0.64	0.64	0.70	0.98	0.50		

Indicator II: Potential Utilised and created

Highly deficit Plan Group:

CADA Beed: The performance of this indicator has improved over the last year by 27%. The average ratio of this indicator has increased from 0.36 to 0.46 for this year 2008-09. But it is still below State norms. Tintraj has the maximum value of 0.58

CADA Solapur: The ratio for this indicator is 1.46 it is more than last year and as well as state norms.

PIC Pune: The potential utilization of Chichondi Patil M.I. Tank is 0.44 which is less than state norms.

Deficit Plan group:

AIC Akola: The ratio for potential utilized & created for projects was 0.92

BIPC Buldhana The ratio for potential utilized & created for project under this circle was 0.27 low than last year.

CADA Aurangabad: The performance of this indicator has decreased over last year by 44%. The average ratio of this indicator for this year has decreased from 0.43 to 0.24. Project authorities should take efforts to attain State norms.

CADA Beed: The average ratio of the indicator for this year 2008-09 has increased slightly from 0.43 to 0.44 and is below State norms. Dhanori has maximum potential utilized i.e. 1.49.

CADA Jalgaon: The ratio is one for last three years, which is up to the State target.

CADA Nashik: The performance is lowered as compared to last year (92%).

NIC Nanded: It has decreased over last year by 40%. The average ratio of this indicator has decreased from 0.40 to 0.24 and is below State norms. Wasur project has maximum ratio i.e. 0.52

Normal plan group:

BIPC Buldhana: Actual potential utilisation compared to created potential on Adol project under BIPC Buldhana was 78%.

CADA Jalgaon: The ratio is with the state norms.

CADA Nashik: The ratio is one for last three years which is up to the State target.

CIPC Chandrapur: The ratio of actual potential utilization compared to created for projects under CIPC is 0.77.

NIC Nanded: There is a decrease in the performance over last year by 68%. The average ratio of this indicator has decreased from 1.74 to 0.54 which is below State norms.

PIC Pune: Average utilised potential of Two Minor Projects comes to 1.00 this year. It is same as last year.

YIC Yeotmal: Actual potential utilisation compared to created potential on projects under YIC Yeotmal is 8%.

Surplus Plan Group:

CADA Nagpur: Potential utilisation is more (1.34) than the state target.

Abundant Plan Group:

CADA Pune: In Thoseghar M.I, project potential utilization ratio comes to 0.35. It increases from last year value of 0.24.

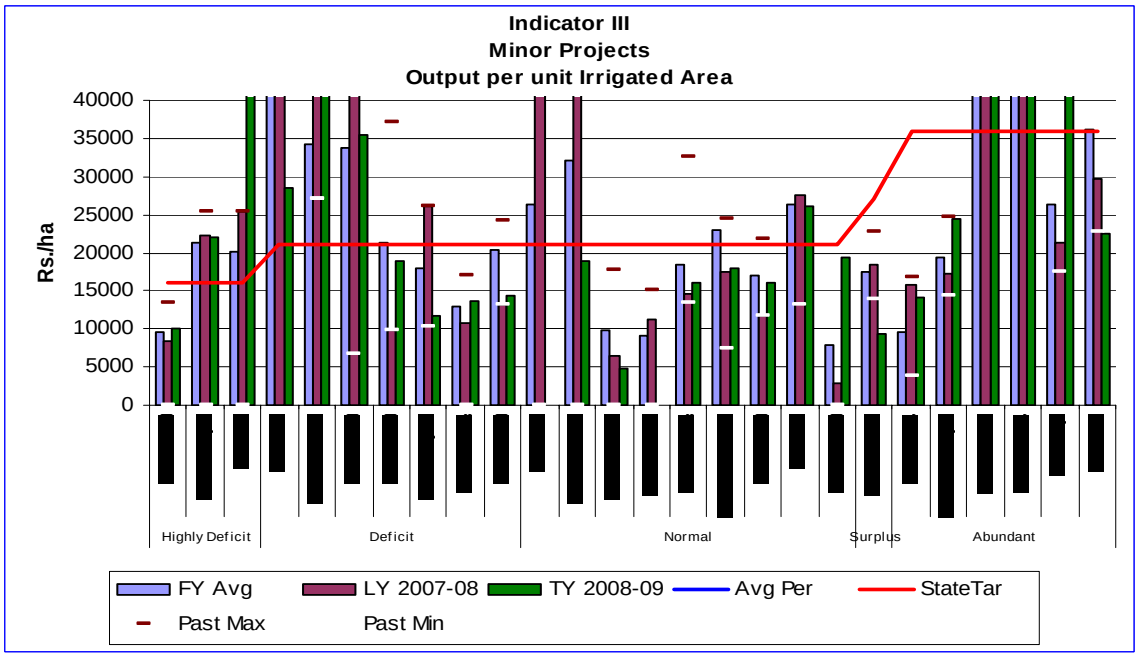
CIPC Chandrapur: Potential utilisation is 81% on an average on projects under this circle.

KIC Ratnagiri: In Shirval MI Project annual utilised potential ratio comes to 0.38 which is below state target.

NKIPC Thane: Average potential utilization of Two M.I. Projects of this circle comes to 0.21 which is below than last year and the state target.

SIC Sangli: The ratio for this indicator is 0.43 it is more than last year less than the state norm.

TIC Thane: The ratio is 0.70 which is more than last year & less than the state norm.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	State Target
Highly Deficit	CADA Beed	9495	8401	10166	13518	0	0	16000
	CADA Solapur	21366	22296	22018	25446	0		
	PIC Pune	20082	25391	55693	25391	0		
Deficit	AIC Akola	79922	144382	28616	271023	101094	20472	21000
	BIPC Buldhana	34157	45568	40967	48695	27155		
	CADA Abad	33888	53659	35398	55310	6667		
	CADA Beed	21357	9769	18857	37216	9769		
	CADA Jalgaon	17935	26017	11792	26017	10220		
	CADA Nashik	12896	10855	13761	17111	0		
	NIC Nanded	20392	13097	14409	24140	13097		
Normal	AIC Akola	26447	45333	0	45333	0	13251	21000
	BIPC Buldhana	32168	42105	19000	42105	0		
	CADA Jalgaon	9819	6368	4705	17715	0		
	CADA Nagpur	8996	11169	0	15167	0		
	CADA Nashik	18528	14723	15991	32586	13358		
	CIPC Chandrapur	23059	17586	17948	24417	7390		
	NIC Nanded	17089	11680	16110	21756	11680		
	PIC Pune	26286	27526	26092	50141	13117		
	YIC Yavatmal	7795	2831	19412	100000	0		
Surplus	CADA Nagpur	17479	18406	9251	22728	13891	9251	27000
Abundant	CADA Pune	9529	15906	14137	16875	3770	20396	36000
	CIPC Chandrapur	19403	17299	24498	24700	14458		
	KIC Ratnagiri	13169	151029	149040	151029	102312		
	NKIPC Thane	98726	148038	49575	153113	57604		
	SIC Sangli	26425	21343	60976	51844	17525		
	TIC Thane	36130	29814	22554	59317	22849		

Indicator III: Output Per Unit Irrigated Area (Rs./ha)

Highly deficit Plan Group:

CADA Beed: The average performance of this circle has improved slightly over past year. The average value of this indicator has increased from Rs.8401/ha to Rs 10166 /ha which is still below State norms of Rs 16000/ha. Bagalwadi project has maximum output of Rs12375/ha.

CADA Solapur: Output is Rs. 22018/ha.It is less than the last year & more than the state norm.

PIC Pune: In Chichondi Patil M.I. Tank output comes to Rs.55693/ha. The performance is better as compared to state target & last year.

Deficit Plan Group:

AIC Akola: Output per unit irrigated area on projects under this circle was high (Rs.28616/ha).

BIPC Buldhana: Out put per unit irrigated area was high. It was Rs. 40967/ha.

CADA Aurangabad: The average value of this indicator though decreased from Rs. 53659/ha to Rs.35398/ha compared to last year it is still more than state norms.

CADA Beed: There is an increase of 180% over last year. The average value of this indicator has increased from Rs. 9769/ha to Rs.18857./ha. Bhutekarwadi has the average of Rs 30408/ha. The average value of the circle under this Plan group is 11% below State norms i.e. Rs. 21,000 /ha.

CADA Jalgaon: The overall out put is lowered from Rs26017/ha to Rs11792/ha as compared to last year and it is below state norms.

CADA Nashik: The out put is increased from Rs10855/ha to Rs13761/ha as compared to last year and which is 66% of the State target.

NIC Nanded: The average performance of this circle though increased from Rs. 13097/ha to Rs. 14409/ha. compared to last year, It is still below state norms.

Normal Plan Group:

BIPC Buldhana: Out put per unit irrigated area was Rs. 19000/ha on Adol project close compared to state target.

CADA Jalgaon: The out put is 22% to the state norms only.

CADA Nashik: The out put is 76% of the state norms.

CIPC Chandrapur: Out put on projects under the circle were low (Rs. 17948 /ha) than state target & better than last years performance (Rs.17586 /ha).

NIC Nanded: There is improvement in performance over last year. But still it is below State norms. The average value of indicator has increased from Rs 11680/ha to Rs.16110 /ha for this year 2008-09. Amthana has maximum output of Rs27692/ha.

PIC Pune: Average output in two Minor Projects of this circle comes to Rs. 26092/ha. This is below than last year but above state target.

YIC Yeotmal: Output per unit irrigated area on Manjra project under this circle was Rs 19412/ha.

Surplus Plan Group:

CADA Nagpur: Out put on projects under the circle were lowered (Rs.9251/ha) in comparison with state target as well as last year out put (Rs.18406 /ha).

Abundant Plan Group:

CADA Pune: Annual output in Thoseghar M.I. Project comes to Rs. 14137/ha this year, decrease from Rs. 15906/ha of last year.

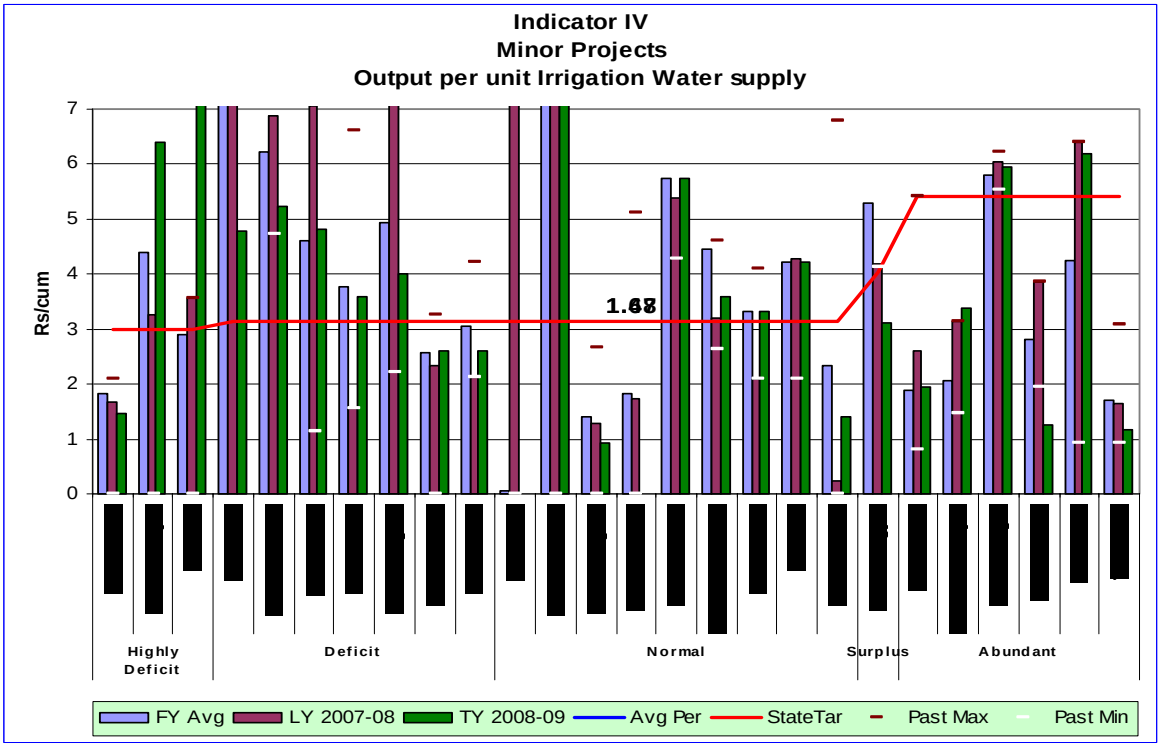
CIPC Chandrapur: Out put on projects under the circle is Rs. 24498 /ha in comparison with state target It is to much less & improved compared with last year performance.

KIC Ratnagiri: In Shirval M.I. Project agricultural output comes to Rs. 1,49,040/ha which is decreased from last year.

NKIPC Thane: Average Agricultural output of Two Minor Projects is Rs. 49575/ha which decreased from Rs. 148038/ha of last year.

SIC Sangli: Out put Rs. 60976/- It is more than last year & state norm

TIC Thane: Out put Rs. 22554/- It is less than last year & state norm.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	State Target
Highly Deficit	CADA Beed	1.82	1.67	1.48	2.09	0		
	CADA Solapur	4.41	3.25	6.41	7.06	0.00	3.95	2.4
	PIC Pune	2.90	3.55	13.24	3.55	0.00		
Deficit	AIC Akola	165.50	29.18	4.79	520.33	23.72		
	BIPC Buldhana	6.22	6.88	5.23	13.57	4.73		
	CADA Abad	4.61	7.05	4.81	9.06	1.14		
	CADA Beed	3.77	1.56	3.59	6.60	1.56	3.9	3.15
	CADA Jalgaon	4.95	9.93	4.00	9.93	2.22		
	CADA Nashik	2.56	2.32	2.59	3.27	0.00		
	NIC Nanded	3.04	2.13	2.60	4.20	2.13		
Normal	AIC Akola	0.06	7.56	0.00	7.56	0.00		
	BIPC Buldhana	7.26	9.10	8.11	9.10	0.00		
	CADA Jalgaon	1.41	1.29	0.92	2.66	0.00		
	CADA Nagpur	1.81	1.75	0.00	5.11	0.00		
	CADA Nashik	5.73	5.38	5.73	8.00	4.27	2.7	3.15
	CIPC Chandrapur	4.45	3.19	3.58	4.61	2.63		
	NIC Nanded	3.33	2.09	3.33	4.09	2.09		
	PIC Pune	4.22	4.27	4.21	8.64	2.08		
	YIC Yavatmal	2.32	0.23	1.41	6.80	0.00		
Surplus	CADA Nagpur	5.29	4.18	3.12	7.68	4.12	3.1	4.05
Abundant	CADA Pune	1.88	2.61	1.95	5.40	0.82		
	CIPC Chandrapur	2.07	3.15	3.38	3.15	1.48		
	KIC Ratnagiri	5.80	6.04	5.96	6.23	5.55		
	NKIPC Thane	2.80	3.85	1.26	3.85	1.94	3.3	5.40
	SIC Sangli	4.26	6.39	6.19	6.39	0.92		
	TIC Thane	1.72	1.65	1.16	3.08	0.92		

Indicator IV: Output per Unit Irrigation Water Supply Rs./cum

Highly Deficit Plan Group:

CADA Beed: The average value of this indicator has decreased from Rs.1.67/cum (2007-08) to 1.48 for 2008-09. Bagalwadi has the maximum ratio i.e. Rs. 1.94/cum.

CADA Solapur: Output per unit water supply comes to Rs.6.41/cum

PIC Pune: In Chichondi Patil MI Tank the output per unit water supply comes to Rs. 13.24/cum. It is above the state norms.

Deficit Plan Group:

AIC Akola: Output per unit water supply observed on projects under this circle was high i.e. Rs.4.79/cum.

BIPC Buldhana: Output per unit water supply observed on project was Rs 5.23/ cum which was very high to state target.

CADA Aurangabad: The performance has decreased from Rs 7.05/cum to Rs.4.81/cum compared to last year, there is a decline of 32% though it is above state norms.

CADA Beed: It has improved over last year performance and gone above state norms, the average ratio of 2008-09 is increased from 1.56 to 3.59, Bhutekarwadi project has the maximum output i.e. Rs 5.24 /cum.

CADA Jalgaon: The out put per cum is more than state norms.

CADA Nashik: The out put per cum is 82% of the state norms.

NIC Nanded: The performance has increased over last year by 22% though it is below state norms. The average value of indicator has increased from 2.13 to 2.60. Panshewadi has the maximum output i.e. Rs 4.70/ha.

Normal Plan Group:

BIPC Buldhana: Output under this circle was high due to low water use per unit irrigated area i.e. 8.11.

CADA Jalgaon: The out put is well below (29%) the state norms

CADA Nashik: The out put per cum is 1.8 times the state norms.

CIPC Chandrapur: The performance for this indicator is Rs. 3.58/cum compared to last year performance (Rs.3.19/cum); It is increased to some extent.

NIC Nanded: There is improvement over last year's performance 2.09 to 3.33 in this year achieving state norms. Nichpur has the maximum output i.e. Rs 4.12/cum

PIC Pune: Average output per unit water supply in two Minor Projects comes to Rs. 4.21/cum increased from Rs. 4.00/cum of last year.

YIC Yeotmal: Output per unit irrigation water supply was observed very less on projects under this circle (1.41).

Surplus Plan Group:

CADA Nagpur: Output per unit water supply observed on projects under this circle in group was Rs 3.12/cum as compared to last year performance (Rs. 4.18/cum) It is decreased to some extent.

Abundant Plan Group:

CADA Pune: In Thoseghar M.I. Project the output per unit irrigated water decreased from Rs.2.61/cum of last year to Rs. 1.95/cum this year.

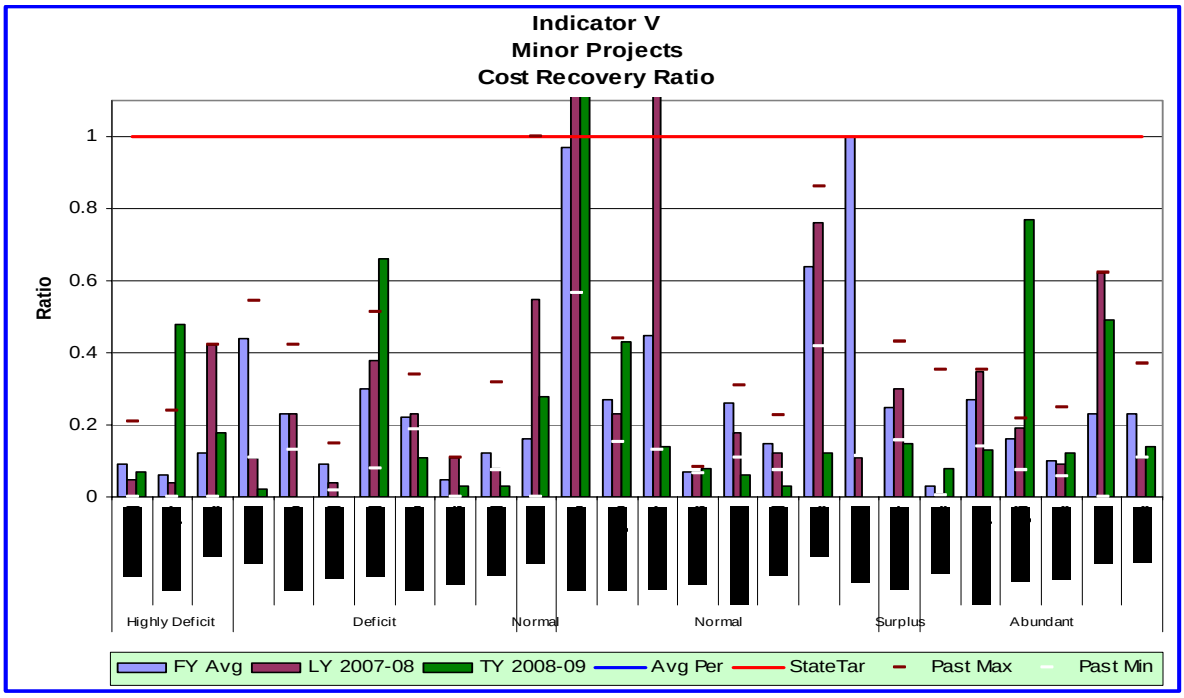
CIPC Chandrapur: Output on projects under the circle was (Rs. 3.38/cum). As compared to last year performance (Rs.3.15/cum), it is increased to some extent.

KIC Ratnagiri: In Shirval Project the output decreases from Rs. 6.00/cum of last year to Rs. 5.96/cum this year and it is above state target.

NKIPC Thane: Average agricultural output of two MI Projects decreases from Rs. 3.85/cum of last year to Rs. 1.26/Cum this year. It is below the state target.

SIC Sangli: Output per unit water supply is reduced from Rs. 6.39/cum (2007-08) to Rs. 6.19/cum in this year.

TIC Thane: Output per unit water supply is reduced from Rs. 1.65/cum (2007-08) to Rs. 1.16/cum in this year.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	State Target
Highly Deficit	CADA Beed	0.09	0.05	0.07	0.21	0.00		
	CADA Solapur	0.06	0.04	0.48	0.24	0.00		1.0
	PIC Pune	0.12	0.42	0.18	0.42	0.00		
Deficit	AIC Akola	0.44	0.11	0.02	0.54	0.11		
	BIPC Buldhana	0.23	0.23	0.00	0.42	0.13		
	CADA Abad	0.09	0.04	0.00	0.15	0.02	0.7	1.0
	CADA Beed	0.30	0.38	0.66	0.51	0.08		
	CADA Jalgaon	0.22	0.23	0.11	0.34	0.19		
	CADA Nashik	0.05	0.11	0.03	0.11	0.00		
	NIC Nanded	0.12	0.08	0.03	0.32	0.08		
Normal	AIC Akola	0.16	0.55	0.28	1.00	0.00	0.3	1.0
	BIPC Buldhana	0.97	1.8	1.44	1.8	0.6		
	CADA Jalgaon	0.27	0.23	0.43	0.44	0.15		
	CADA Nagpur	0.45	1.55	0.14	1.55	0.13		
	CADA Nashik	0.07	0.07	0.08	0.08	0.07	1.4	1.0
	CIPC Chandrapur	0.26	0.18	0.06	0.31	0.11		
	NIC Nanded	0.15	0.12	0.03	0.23	0.07		
	PIC Pune	0.64	0.76	0.12	0.86	0.42		
	YIC Yavatmal	1.00	0.11	0.00	18.00	0.11		
Surplus	CADA Nagpur	0.25	0.30	0.15	0.43	0.16		1.00
Abundant	CADA Pune	0.03	0.01	0.08	0.35	0.01		
	CIPC Chandrapur	0.27	0.35	0.13	0.35	0.14		
	KIC Ratnagiri	0.16	0.19	0.77	0.22	0.07		
	NKIPC Thane	0.10	0.09	0.12	0.25	0.06	0.8	1.0
	SIC Sangli	0.23	0.62	0.49	0.62	0.00		
	TIC Thane	0.23	0.11	0.14	0.37	0.11		

Indicator V: Cost Recovery Ratio

Highly Deficit Plan Group:

CADA Beed: The performance of this indicator has increased from 0.05 to 0.07in this year 2008-09.

CADA Solapur: The performance of this indicator has increased from 0.04 to 0.48 in this year 2008-09.

PIC Pune: The ratio for Chichondi Patil MI Tank comes to 0.18 this year. It is below the state norms.

Deficit Plan Group:

AIC Akola: Ratio was lower on projects under this circle (0.02).

CADA Aurangabad: Average performance has declined from 0.04 to 0.00.

CADA Beed: The performance has increased from 0.38 to 0.66 though it is 34% below State norms.

CADA Jalgaon: The ratio is only 0.11, which is far below the state norms.

CADA Nashik: The ratio is only 0.03, which is far below the state norms

NIC Nanded: There is drastic decline over past performance. The average value has decreased from 0.08 to 0.03 in this year which is far below the state norm.

Normal Plan Group:

AIC Akola, BIPC Buldhana: The ratio was found (0.28) exceptionally low on koradi projects of AIC Akola but above state target value on projects under BIPC Buldhana it was above 1.

CADA Jalgaon: The ratio is 0.43 which is far below the state norm.

CADA Nashik: The ratio is 0.08 since last two years which is below the state norms.

CIPC Chandrapur: Average cost recovery ratio of MI Projects under this circle has decreased from 0.18 of last year to 0.06 this year.

NIC Nanded: There is decline by 75% over past performance. The average value of this indicator has decreased from 0.12 to 0.03 in this year which is far below the state norm.

PIC Pune: Average cost recovery ratio of two MI Projects decreases from 0.76 of last year to 0.12 of this year.

Surplus Plan Group:

CADA Nagpur: Cost recovery ratio is low (0.15) as compared to last year performance (0.30).

Abundant Plan Group:

CADA Pune: In Thoseghar Project the cost recovery ratio comes to 0.08 this year.

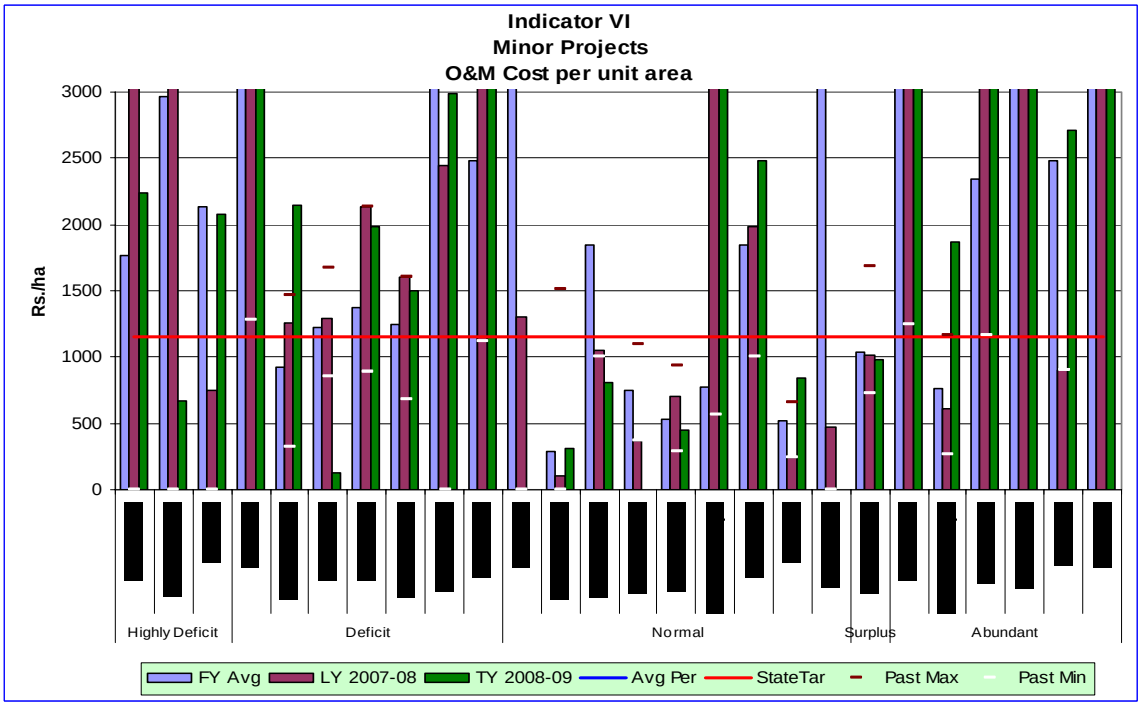
CIPC Chandrapur: Cost recovery ratio was low (0.13) compared to state norm and decreased than its last year value (0.35).

KIC Ratnagiri: In Shirval Project the cost recovery ratio increased from 0.19 last year to 0.77 this year. It is below state target.

NKIPC Thane: Average cost recovery ratio of two M.I. Project comes to 0.12 this year is very much low as compared to state target.

SIC Sangli: The performance of this indicator has decreased from 0.62 to 0.49 in this year 2008-09.

TIC Thane: The performance of this indicator has increased from 0.11 to 0.14 in this year 2008-09.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	State Target
Highly Deficit	CADA Beed	1762	3031	2236	3031	0		
	CADA Solapur	2969	4659	664	4659	0	664	1150
	PIC Pune	2137	756	2079	5958	0		
Deficit	AIC Akola	4458	3647	20194	11088	1285		
	BIPC Buldhana	921	1261	2149	1469	320		
	CADA Abad	1221	1298	127	1675	852		
	CADA Beed	1377	2133	1981	2133	887	816	1150
	CADA Jalgaon	1247	1608	1505	1608	679		
	CADA Nashik	3162	2442	2991	4787	0		
	NIC Nanded	2486	4143	12630	4143	1114		
Normal	AIC Akola	3132	1307	0	4938	0		
	BIPC Buldhana	288	110	309	1512	0		
	CADA Jalgaon	1841	1050	804	4310	1005		
	CADA Nagpur	752	367	0	1092	367		
	CADA Nashik	535	704	450	933	286	926	1150
	CIPC Chandrapur	774	3318	3449	4238	567		
	NIC Nanded	1847	1987	2482	3104	998		
	PIC Pune	516	244	844	654	244		
	YIC Yavatmal	72729	476	0	1462956	0		
Surplus	CADA Nagpur	1036	1015	976	1686	726	976	1150
Abundant	CADA Pune	8859	9359	3032	9359	1250		
	CIPC Chandrapur	766	607	1869	1166	260		
	KIC Ratnagiri	2346	3686	3680	3686	1161		1150
	NKIPC Thane	8462	11835	11426	14210	3485		
	SIC Sangli	2481	896	2715	15571	896		
	TIC Thane	5118	9824	12902	9824	3182		

Indicator VI: O & M Cost per Unit Area (Rs./ha)

Highly Deficit Plan Group:

CADA Beed: The O & M cost per unit area for this year has decreased from Rs 3031/ha to Rs. 2236 /ha though it is above State norms of Rs.1150 /ha. Kinhi project has the maximum of Rs.6099/ha. where as in Incharna project it has minimum of Rs.1339/ha.

CADA Solapur: The average value of the indicator has decreased from Rs. 4659/ha to Rs 664/ha.

PIC Pune: The O & M cost per unit irrigated area for Chichondi Patil M.I. Tank is Rs.2079/ha it is above the state target and more than last year performance.

Deficit Plan group:

AIC Akola: The O & M cost per unit area irrigated on projects under AIC Akola was 20194/Ha.

BIPC Buldhana The O & M cost per unit area irrigated on projects under BIPC Buldhana was Rs. 2149/Ha.

CADA Aurangabad: The average value of the indicator has decreased from Rs. 1298/ha to Rs. 127/ha. which is below the state norms. Tandulwadi is the only representing project in this Plan group.

CADA Beed: The average value of the indicator has decreased for the year 2008-09 from Rs. 2133/ha to Rs. 1981/ha**.** It has decreased over last year by 7%. But it is still above the state norms. Hiwarsinga project has the maximum of Rs.10609 /ha.

CADA Jalgaon: The O & M cost per unit area is increased by 30% to state norms.

CADA Nashik: The O & M cost per unit area is 2.6 times more than the state norms.

NIC Nanded: There is increase in the average value of the indicator by 35%. The average value for the year 2008-09 has increased from Rs 4143/ha to Rs.12630/ha. The value is above 10 times the State norms. This due to increase in O & M cost in Wasur, Koshtewadi & Panshewadi projects compared to last year.

Normal Plan Group:

BIPC Buldhana: The O & M cost per unit area irrigated on projects under BIPC Buldhana was Rs.309/Ha

CADA Jalgaon: The O & M cost per unit area is lowered from Rs1050/ha to Rs804/ha, which is below the state norms.

CADA Nashik: The O & M cost per unit area is well below the state norms from last two years.

CIPC Chandrapur: The ratio is Rs 3449 /ha on projects under the circle as compared to last y ears (Rs.3318 /ha), It is increased to some extent.

NIC Nanded: The average value of O & M cost has increased from Rs1987/ha (2007-08) to Rs.2482/ha (2008-09) which is above the State norms. Nichpur has the maximum value for this indicator i.e. Rs 4049/ha.

PIC Pune: Average O & M cost per unit irrigated area of Rahu MI Project is decreased to Rs. 214/ha, from Rs. 244/ha, of last year and in Tambve MI Project increased to Rs. 3178/ha.from Rs. 734/ha, of last year.

Surplus Plan Group:

CADA Nagpur: The value is Rs.976 /ha on projects under the circle as compared to last year Rs. 1015 /ha. It is decreased to some extent.

Abundant Plan Group:

CADA Pune: In Thoseghar MI Project the O & M Cost ratio decreases from Rs.9359/ha to Rs. 3032/ha. Still the performance is very poor as compared to state norms and last year.

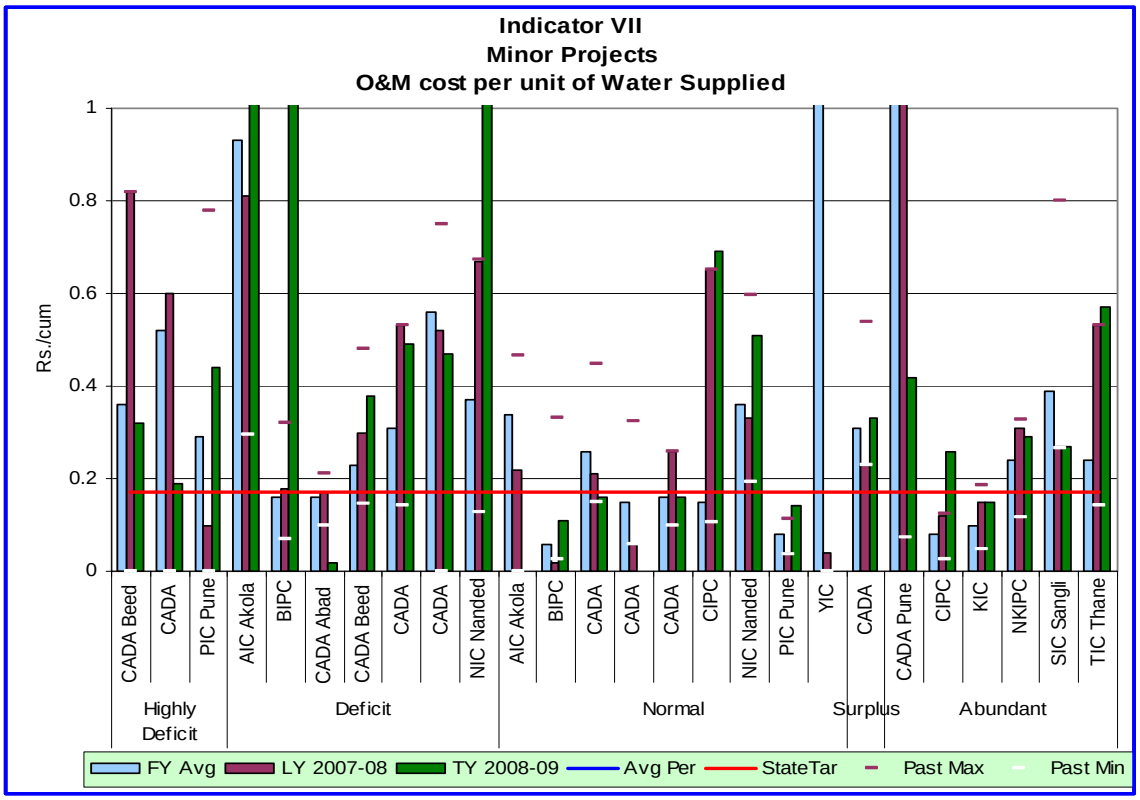
CIPC Chandrapur: The ratio was well within state norm on projects (Rs.1869/ha) & in comparison with last years performance (Rs.607/ha) under the circle, It is increased marginally.

KIC Ratnagiri: In Shirval Project the O & M Cost per unit area comes to Rs. 3680/ha this year. The performance is poor as compared to state target.

NKIPC Thane: Average O & M Cost of two MI Projects decreases from Rs. 11835/ha of last year to Rs. 11426/ha this year. Still the performance is poor as compared to state norms.

SIC Sangli: The average value of the indicator has increased from Rs. 896/ha to Rs 2715 per ha.

TIC Thane: The average value of the indicator has increased from Rs. 9824/ha to Rs 12902 per ha.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	State Target
Highly Deficit	CADA Beed	0.36	0.82	0.32	0.82	0		
	CADA Solapur	0.52	0.60	0.19	32.13	0.00	0.19	0.17
	PIC Pune	0.29	0.10	0.44	0.78	0.00		
Deficit	AIC Akola	0.93	0.81	2.78	2.04	0.29		
	BIPC Buldhana	0.16	0.18	44.80	0.32	0.07		
	CADA Abad	0.16	0.17	0.02	0.21	0.10		
	CADA Beed	0.23	0.30	0.38	0.48	0.14	0.25	0.17
	CADA Jalgaon	0.31	0.53	0.49	0.53	0.14		
	CADA Nashik	0.56	0.52	0.47	0.75	0.00		
	NIC Nanded	0.37	0.67	2.21	0.67	0.13		
Normal	AIC Akola	0.34	0.22	0.00	0.46	0.00		
	BIPC Buldhana	0.06	0.02	0.11	0.33	0.02		
	CADA Jalgaon	0.26	0.21	0.16	0.45	0.15		
	CADA Nagpur	0.15	0.06	0.00	0.32	0.06	0.10	0.17
	CADA Nashik	0.16	0.26	0.16	0.26	0.10		
	CIPC Chandrapur	0.15	0.65	0.69	0.65	0.11		
	NIC Nanded	0.36	0.33	0.51	0.60	0.19		
	PIC Pune	0.08	0.04	0.14	0.11	0.04		
	YIC Yavatmal	21.66	0.04	0.00	99.44	0.00		
Surplus	CADA Nagpur	0.31	0.23	0.33	0.54	0.23	0.23	0.17
Abundant	CADA Pune	1.74	1.54	0.42	1.74	0.07		
	CIPC Chandrapur	0.08	0.12	0.26	0.12	0.03		
	KIC Ratnagiri	0.10	0.15	0.15	0.18	0.05	0.24	0.17
	NKIPC Thane	0.24	0.31	0.29	0.33	0.12		
	SIC Sangli	0.39	0.27	0.27	0.80	0.27		
	TIC Thane	0.24	0.53	0.57	0.53	0.14		

Indicator VII: O & M Cost Per Unit of Water Supply (Rs/cum)

Highly Deficit Plan Group:

CADA Beed: The average performance of this indicator has decreased from Rs.0.82/cum to Rs. 0.32/cum compared to last year.

CADA Solapur: The average performance of this indicator has decreased from Rs.0.60/cum to Rs.0.19/cum.

PIC Pune: In Chichondi Patil MI Tank the O. & M. cost per unit water supply is Rs. 0.44/ha, which is above the state norms.

Deficit Plan group:

AIC Akola & BIPC Buldhana: Due to moderate O & M expenditure and economic water use, the ratio has very high value compared to state norm on projects under AIC Akola. It was exceptionally high with state norm on projects under BIPC Buldhana.

CADA Aurangabad: The average value of the indicator has decreased from Rs 0.17/cum to Rs.0.02/cum.The performance has improved over last year by 82% and has achieved the State norms. Tandulwadi is the only representing project under this Plan group.

CADA Beed: The average value of the indicator has increased from Rs 0.30/cum to Rs.0.38**/**cum. Hiwarsinga has the maximum value of Rs 6.65/cum. Bhutekarwadi has the least value of Rs 0.17/cum.

CADA Jalgaon: The O & M cost per unit of water supplied is nearly 3 times more than the state norms. The cost is increasing for last four years.

CADA Nashik: The O & M cost per unit of water supplied is 2.75 times more than state norms. The cost is increasing for last four years.

NIC Nanded: The average value of the indicator has increased from Rs 0.67/cum to Rs. 2.21/cum this year. Wasur has the maximum value of Rs9.2/cum. Purjal has the least value of Rs. 0.08/cum.

Normal Plan Group:

BIPC Buldhana: On Adol project under BIPC Buldhana the indicator value is Rs. 0.11 /cum which is below the state norm of Rs 0.17/cum.

CADA Jalgaon: The O & M cost per unit of water supplied is nearer to the state norms.

CADA Nashik: The O & M cost per unit of water supplied is nearer to the state norms.

CIPC Chandrapur: O & M Cost per unit water supplied is Rs. 0.69 /cum as compared to Rs. 0.65 /cum during last year.

NIC Nanded: The performance indicator has increased from Rs 0.33/cum to Rs. 0.51/cum. In Nichpur project has the maximum value i.e. 0.80.

PIC Pune: Average O & M Cost per unit of water supply of Two MI Project increases to Rs. 0.14/cum this year from Rs. 0.04/cum last year but it is below the state target.

Surplus Plan Group:

CADA Nagpur: O&M cost per unit area irrigated on projects under the circle has more value (Rs 0.33/ha) It is more than the state target.

Abundant Plan Group:

CADA Pune : In Thoseghar MI Project the O & M Cost per unit water supply decreased to Rs. 0.42/ cum this year from Rs. 1.25/cum of last year. But it is above the state target. Field Officers are required to do needful action for reducing expenditure on maintenance.

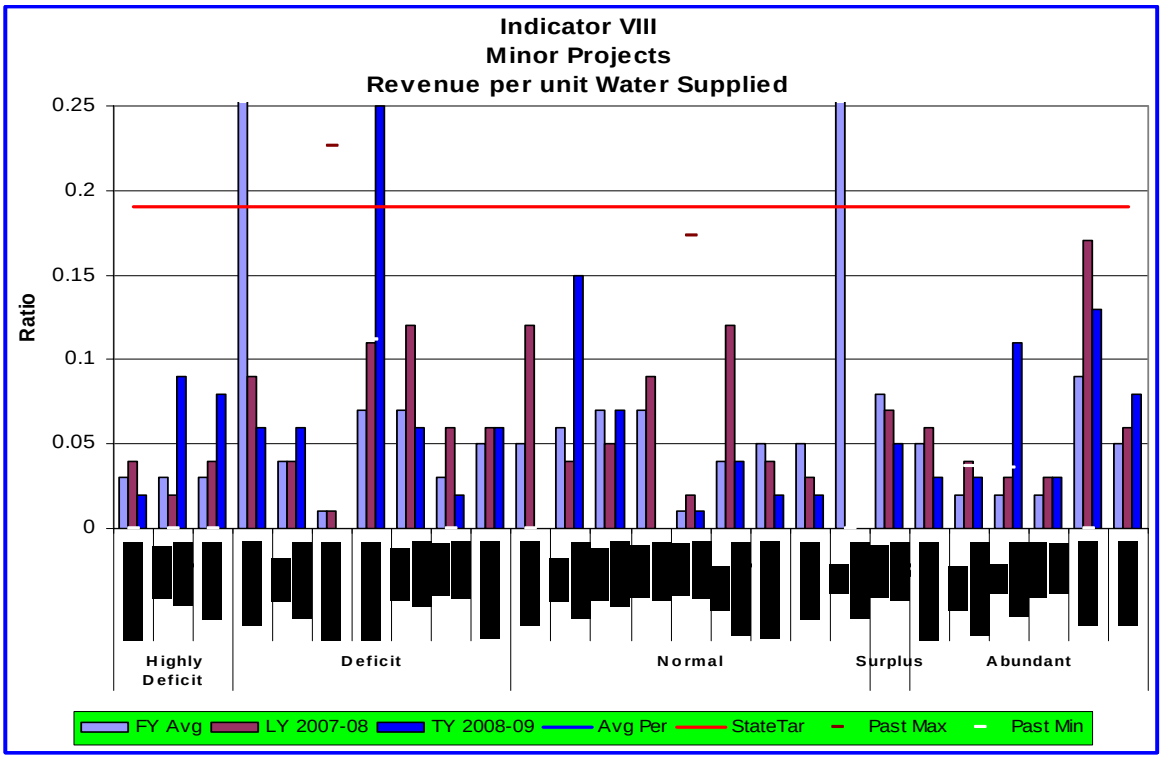
CIPC Chandrapur: O & M Cost per unit water supplied is Rs. 0.26 /cum as compared to Rs. 0.12 /cum during last year.

KIC Ratnagiri: In Shirval MI Project the O & M Cost per unit water supply comes to Rs. 0.15/cum this year. This is within the state norms.

NKIPC Thane : Average O & M Cost per unit water supply of two Minor Projects decreases from Rs. 0.31/cum to Rs. 0.29 this year.

SIC Sangli: The average performance of this indicator has same value as per last year i.e. Rs 0.27/cum.

TIC Thane: The average performance of this indicator has increased slightly from Rs.0.53/cum to Rs. 0.57 per cum.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	State Target
Highly Deficit	CADA Beed	0.03	0.04	0.02	0.50	0		0.19
	CADA Solapur	0.03	0.02	0.09	0.38	0.00		
	PIC Pune	0.03	0.04	0.08	0.42	0.00		
Deficit	AIC Akola	0.40	0.09	0.06	11.08	0.81		
	BIPC Buldhana	0.04	0.04	0.06	1.05	0.24		
	CADA Abad	0.01	0.01	0.00	0.23	0.03		
	CADA Beed	0.07	0.11	0.25	1.14	0.11	0.3	0.19
	CADA Jalgaon	0.07	0.12	0.06	1.21	0.46		
	CADA Nashik	0.03	0.06	0.02	0.57	0.00		
	NIC Nanded	0.05	0.06	0.06	0.59	0.32		
Normal	AIC Akola	0.05	0.12	0.00	1.20	0.00		
	BIPC Buldhana	0.06	0.04	0.15	2.20	0.43		
	CADA Jalgaon	0.07	0.05	0.07	1.96	0.42		
	CADA Nagpur	0.07	0.09	0.00	1.01	0.22		
	CADA Nashik	0.01	0.02	0.01	0.17	0.07	0.0	0.19
	CIPC Chandrapur	0.04	0.12	0.04	1.20	0.33		
	NIC Nanded	0.05	0.04	0.02	0.67	0.40		
	PIC Pune	0.05	0.03	0.02	0.73	0.29		
	YIC Yavatmal	21.62	0.00	0.00	994.34	0.00		
Surplus	CADA Nagpur	0.08	0.07	0.05	1.17	0.57		0.19
Abundant	CADA Pune	0.05	0.06	0.03	1.00	0.21		
	CIPC Chandrapur	0.02	0.04	0.03	0.43	0.04		
	KIC Ratnagiri	0.02	0.03	0.11	0.31	0.04		
	NKIPC Thane	0.02	0.03	0.03	0.29	0.17	0.1	0.19
	SIC Sangli	0.09	0.17	0.13	1.65	0.00		
	TIC Thane	0.05	0.06	0.08	0.76	0.43		

Indicator VIII: Revenue Per Unit of Water Supplied Rs./cum

Highly Deficit Plan Group:

CADA Beed: The average value of this indicator for minor project under this circle has decreased from Rs 0.04/cum to Rs.0.02/cum. Tintraj has the maximum value for the indicator Rs0.03/cum. Most of the projects have low value of the indicator.

CADA Solapur: Revenue per unit water supply is increased from Rs. 0.02/cum (2007-08) to Rs.0.09/cum in 2008-09.

PIC Pune: In Chichondi Patil MI Tank the revenue per unit water supply is Rs.0.08/cum which is below the state norms.

Deficit Plan Group:

AIC Akola, BIPC Buldhana: Revenue collected per unit water supplied on all projects under this plan group was less than Rs. 0.10/cum against state norm of Rs. 0.19 /cum. This indicates low revenue recovery.

CADA Aurangabad: The average value of this indicator for minor projects under this circle has decreased from 0.01 to zero. It has again declined over last years performance. Field officers has to take efforts in revenue collection to achieve state target.

CADA Beed: The average value of this indicator for minor project under this circle has increased over last years value from Rs0.11/cum to Rs. 0.25/cum. Hiwarsinga has the maximum value of Rs 5.52/cum.For the rest of the projects the field officers have to take efforts for revenue collection.

CADA Jalgaon: There is 32% recovery in this year (08-09) as compared to state norms.

CADA Nashik: The value is 0.02. This shows that there is only 11% recovery with compared to state target.

NIC Nanded: The average value of this indicator for minor projects under this circle has retained last years value 0.06. It is below 1/3rd ratio state target. Daryapur has the maximum value for the indicator i.e. 0.08

Normal Plan Group:

BIPC Buldhana: The ratio was 0.15 on Adol project of BIPC Buldhana.

CADA Jalgaon: The indicator value is 0.07, which is far below the state norms. This shows that very less (37%) recovery is achieved with compared to state target.

CADA Nashik: The indicator value is 0.01 which is far below the state norms.

CIPC Chandrapur: The average value of this indicator for minor projects under the circle is 0.04. But it is still below state norms and decreased in comparison with last year's performance 0.12.

NIC Nanded: The average value of this indicator for projects under this circle has reduced from 0.04 to 0.02.

PIC Pune: Average revenue per unit water supplied of two MI Projects is decrease to Rs. 0.02/cum this year it is below the state norms.

Surplus Plan Group:

CADA Nagpur: The average value of this indicator for minor projects under the circle is 0.05. But it is still below state norms and nearly same as last year's performance 0.07.

Abundant Plan Group:

CADA Pune: In Thoseghar MI Project the revenue per unit water supply increased from Rs. 0.06/cum to Rs. 0.03/cum this year. It is also below state norms.

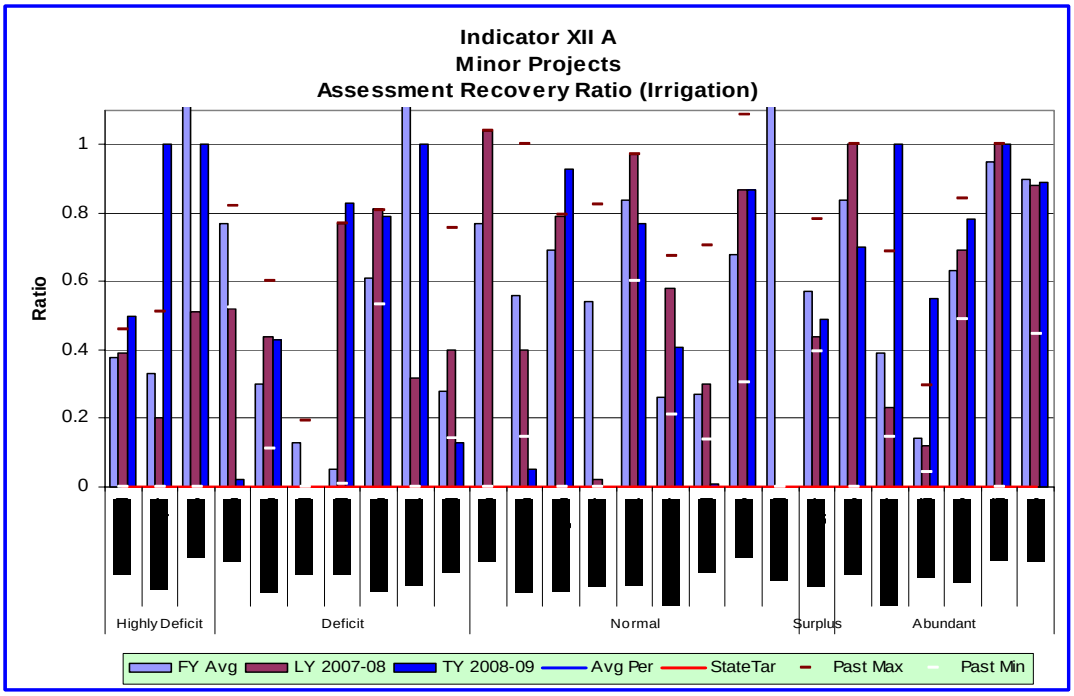
CIPC Chandrapur: The average value of this indicator for minor projects under the circle is 0.03. But it is still below state norms and decreased in comparison with last years performance 0.04.

KIC Ratnagiri: In Shirval MI Tank revenue per unit of water supply is Rs. 0.11 /cum which increases from Rs. 0.03/cum of last year. But it is below as compared to state norms.

NKIPC Thane: Average revenue per unit water supplied of Two Minor Projects is same as Rs. 0.03/cum last year. It is also below state norms.

SIC Sangli: Revenue per unit water supply is decreased from Rs. 0.17/cum (2007-08) to 0.13 in 2008-09.

TIC Thane: Revenue per unit water supply is increased from Rs. 0.06/cum (2007-08) to Rs. 0.08/cum in 2008-09.



Plan group	Circle	FY Avg	LY 2007-08	TY 2008-09	Past Max	Past Min	Avg Per	State Target
Highly Deficit	CADA Beed	0.38	0.39	0.5	0.459	0		
	CADA Solapur	0.33	0.20	1.00	0.51	0.00	0.83	1.00
	PIC Pune	1.19	0.51	1.00	10.00	0.00		
Deficit	AIC Akola	0.77	0.52	0.02	0.82	0.52		
	BIPC Buldhana	0.30	0.44	0.43	0.60	0.11		
	CADA Abad	0.13	0.00	0.00	0.19	0.00		
	CADA Beed	0.05	0.77	0.83	0.77	0.01	0.9	1.0
	CADA Jalgaon	0.61	0.81	0.79	0.81	0.53		
	CADA Nashik	8.17	0.32	1.00	30.77	0.00		
	NIC Nanded	0.28	0.40	0.13	0.75	0.14		
Normal	AIC Akola	0.77	1.04	0.00	1.04	0.00		
	BIPC Buldhana	0.56	0.40	0.05	1.00	0.15		
	CADA Jalgaon	0.69	0.79	0.93	0.79	0.00		
	CADA Nagpur	0.54	0.02	0.00	0.83	0.00		
	CADA Nashik	0.84	0.97	0.77	0.97	0.60	0.6	1.0
	CIPC Chandrapur	0.26	0.58	0.41	0.67	0.21		
	NIC Nanded	0.27	0.30	0.01	0.70	0.14		
	PIC Pune	0.68	0.87	0.87	1.09	0.30		
	YIC Yavatmal	1.84	0.00	0.00	1.90	0.00		
Surplus	CADA Nagpur	0.57	0.44	0.49	0.78	0.39	0.5	1.0
Abundant	CADA Pune	0.84	1.00	0.70	1.00	0.00		
	CIPC Chandrapur	0.39	0.23	1.00	0.69	0.15		
	KIC Ratnagiri	0.14	0.12	0.55	0.30	0.04		
	NKIPC Thane	0.63	0.69	0.78	0.84	0.49	0.8	1.0
	SIC Sangli	0.95	1.00	1.00	1.00	0.00		
	TIC Thane	0.90	0.88	0.89	3.03	0.45		

Indicator XII (I): Assessment Recovery Ratio (Irrigation)

Highly Deficit Plan Group:

CADA Beed: The average value of the indicator under this circle has increased from 0.39 to 0.50 Tintraj project has the lowest recovery ratio that is 0.12 & Incharna has the highest assessment recovery ratio that is 0.91.

CADA Solapur: Ratio is increased from 0.20 (2007-08) to 1.00 (2008-09).

PIC Pune: In Chichondi Patil MI Tank the assessment recovery ratio comes to 1.00.

Deficit Plan Group:

AIC Akola & BIPC Buldhana: Recovery of irrigation revenue against assessment on projects under AIC Akola was 0.02 very low to the state target and than last year revenue recovery. But it was 0.43 with projects under BIPC Buldhana.

CADA Aurangabad: The average value of the indicator under this circle has retained last years value nil recovery. Tandulwadi is the only project under this plan group & which has no recovery.

CADA Beed: The average value of the indicator under this circle has increased from 0.77 to 0.83. Hiwarsinga has the highest recovery ratio that is 2.0. Dhanori has no recovery.

CADA Jalgaon: The ratio is 0.79 which is nearer to state norms.

CADA Nashik: The ratio is 1.00 which is as per the state norms.

NIC Nanded: The average value of the indicator under this circle has decreased from 0.40 to 0.13. Kosthewadi has the maximum recovery of 1.00. Daryapur has no recovery.

Normal Plan Group:

BIPC Buldhana: Recovery of irrigation revenue against assessment on Adol project was .0.05.

CADA Jalgaon: The ratio is 0.93, which is nearer to state norms.

CADA Nashik: The ratio is lowered from 0.97(2007-08) to 0.77(2008-09).

CIPC Chandrapur: Assessment recovery ratio is 0.41 compared with last year it decreased by 17%, below the state norm value.

NIC Nanded: Ratio is reduced from 0.30 (2007-08) to 0 .01(2008-09).

PIC Pune: Average assessment recovery ratio of M.I. Projects retains last year's value (0.87).

Surplus Plan Group:

CADA Nagpur: Revenue recovery under this circle is less during this year (0.49) but more as compared to last years performance (0.44).

Abundant Plan Group:

CADA Pune: In Thoseghar MI tank ratio decreases from 1.00 of last year to 0.70 this year.

CIPC Chandrapur: Revenue recovery on projects under CIPC Chandrapur is 100%. It is as per state target, & increased marginally than the last year value.

KIC Ratnagiri: In Shirval Project the ratio increases to 0.55 this year from 0.12 of last year. But it is below the state norms.

NKIPC Thane: Average assessment recovery ratio of two MI Projects increased this year to 0.78 from 0.69 last year. But it is below state norms.

SIC Sangli: The average value of the indicator under this circle has retained last years value (1.00)

TIC Thane: The average value of the indicator under this circle has retained nearly last years value.

Chapter-V

Action Taken Report

Benchmarking process involves number of steps, right from Indicators selection to monitoring of results obtained through action taken on last years performance deficiencies. Where the Benchmarking of irrigation projects has been a routine process of performance evaluation, preparation of a comprehensive, problem specific action plan for every individual irrigation project based on the outcome of last year performance & its effective implementation plays an important role in securing the desired improvement.

Since last seven years, Water Resources Department is using Benchmarking as an effective tool to evaluate the performances of irrigation projects. Project wise, Indicator wise results along with probable causes for low performances compared to past achievement as well as state targets were made available to field officers with the intention and directives to prepare and implement a project wise consolidated complete action plan. Field officers were stressed to submit the out come of such action plans with its details. Project authorities are no doubt taking the cognizance of the low performances and are taking suitable actions to seek the desired improvement in Irrigation Management. But the information gathered so far indicates that instead of preparing a detail, integrated action plan, actions are taken in the form of a single activity.

Not a single action plan is received from Project authorities for the year 2008-09; hence it is not incorporated in this report.

Chapter VI
Benchmarking of Water Users Association's - A Case Study

Till the end of June 2008, a potential to the tune of 4.486Mha has been created in the state. At present, the Irrigation Management of created irrigation potential is managed at Water Resources Department level with 0.403 Mha managed by the794 Water Users Associations working on Major / Medium and 306 on Minor projects. These WUA's are registered under co-operative act.

Water Resources Department, GOM has categorically taken the decision of handing over the total potential created on all projects to the Water Users Associations. Accordingly, an act namely MMISF Act 2005 has been passed in the State Assembly.

At present, Maharashtra Water sector Improvement Programme (MWSIP) is under implementation through which a potential to the tune of 0.67 Mha on 286 projects shall be handed over to1539 WUAs in the stipulated period. The MMISF act 2005 is made applicable to the projects under MWSIP. The cost of the project is Rupees 1700 crores and it is aided by the World Bank. Above mentioned act is made applicable to all projects under MWSIP.

For evaluating the irrigation performance of irrigation projects and bringing about necessary improvement in Irrigation Water Management, the state is using Benchmarking as an effective management tool for last five years.

Considering huge public capital investment in construction of number of projects along with large amount of funds investment involved in rehabilitation of irrigation system before its handing over to WUAS, evaluation of the performance of each individual WUA each year by Benchmarking was felt necessary and was under consideration for last two years. Benchmarking of WUAs will help to determine and bring necessary improvement in the over all functioning of each WUA. Also it will help the WR Department to ascertain whether the objectives of handing over the Irrigation Management to WUAs are attained or not.

6.1 Objectives of Benchmarking of WUAs

1. To determine the participation of beneficiaries in working of WUA'S.
2. To ascertain whether the WUA is getting the water as per sanctioned water quota and management funds/share of revenue collected as per the agreement and guidelines or not.
3. To check the increase in area irrigated and Out Put after the irrigation management is handed over to WUA
4. To determine per ha water use (excluding well/ river lift) in the jurisdiction of WUA
5. To check the conjunctive use of wells in the command of WUA.
6. To determine the financial status / self-sustainability of WUA.
7. To check whether water is judiciously/ equitably supplied to beneficiaries at Head, Middle and Tail reaches of the canal system under the jurisdiction of WUA
8. To fix the area of problems so as to take suitable action to bring necessary changes in the working of WUA and improve the performance of a distribution system, ultimately of the project.
9. To create a sense of responsibility /accountability among the office bearers of WUA and discipline among members of the association.

6.2 Proforma for data submission for Benchmarking of WUA:

For calling the data/information for benchmarking of WUA, Proforma 1 and 3 are designed in regional language (Marathi). These Proforma in English are shown on subsequent pages of this report.

For accurate evaluation of performance of WUA, 9 indicators are designed and shown in Proforma 2 in subsequent pages of this report.

6.3 Selection of WUA for benchmarking study:

Looking to the large number of WUA's formed so far, to initialize the process as a case study, it was decided to call the data of two WUAs established on major project from each revenue division. Secondly, preference was given to WUAs which are in working for a longer range of period.

Accordingly, data for 12 WUAs on 7 Major projects from 5 Irrigation circles has been analyzed broadly in this typical study.

Plan group wise classification of these WUAs shows that, 1, 4, 6 and 1 WUA in number, belongs to Highly Deficit, Deficit, Normal and Abundant plan group respectively.

Out of 12 WUAs only two WUAs on Mula project are functioning under MMISF Act 2005. Rest of 10 WUAs are functioning under co-operative Act.

6.4 Methodology adopted for Benchmarking:

Considering the WUA selected are in limited numbers, Benchmarking is proposed to carry out by -

I) comparing the performances of individual WUA with state target

ii) Comparing the performances of two WUA's on the same project,

iii) Comparing the performances of two WUA's from two different projects but from same plan group and

iv) Incase of some indicators, Benchmarking is carried out by comparing the performances of WUA's from two different Plan groups also.

At present, the performance of individual WUA is compared with the state target only.

6.5 Targets:

Targets for indicator 1 to 3, 6, 7 & 9 are shown in Proforma 2 and are self explanatory.

Target for indicator IV (Annual water use per unit area irrigated) is decided by reducing the target for BM of irrigation projects (7692 cum/ha) by 30% for transit losses in canal as the water supplied to WUA'S is measured at off taking of the concerned Distributory /Minor. Thus target becomes 5384 cum/ha.

Target for indicator V (Annual expenditure per ha for irrigation management) for a WUA is evaluated as follows:

Total command area of a WUA: 200 ha (Presumption)

Salary of Staff and other mandatory expenditure for IWM per annum

S.N.	Item	Amount
1	Salary of One Canal inspector	Rs 36000
2	Salary of One Labour	Rs 18000
3	Office Building Rent	Rs 6000
4	Maintenance of distribution system	Rs 4000
5	Telephone/ electricity bill	Rs 12000
6	Report publication etc	Rs 3000
7	Stationary	Rs 1000
	Total	Rs 80000

Annual expenditure per unit area irrigated = $\frac{80000}{200}$

= Rs 400 / ha

6.6 Indicator wise analysis

As mentioned here before, data of 2008-09 year for Benchmarking of WUA was received from some selected WUA'S in prescribed Proforma and indicator values were obtained as shown in table 1.

Indicator wise, WUA wise findings along with charts are given in Chart I to IX

Indicator I: Percentage of WUA'S member to total beneficiaries in command of WUA

All the WUA,s except Datta & Yogeshwar (CADA Nashik -100%) have membership ranging between 52 to 85 %. It is opined that, to increase farmers participation in irrigation water management & to increase the efficiency of WUA'S, 100% membership should be developed on each WUA**.**

Indicator II: Percentage of Water supplied to the sanctioned Water quota

In Pandurang (CADA Solapur), Bhagawati (CADA Beed), Datta (CADA Nashik) & Nanaksingh (SIC Sangli) WUAs, water is supplied as per standard water quota. However in rest of the WUAs, the percentage of water supplied ranges from 13 to 86%.

Indicator III: Ratio of potential utilization to Maximum utilization prior to formation of WUA.

In all the WUAs expect Krishna (NIC Nanded) the ratio is more than 1.

Indicator IV: Annual Irrigation water use per unit area Irrigated (Cum/ha)

1. In Shukleshwar (CADA Beed), Datta (CADA Nashik) &Godavari (NIC Nanded), water use per unit irrigated area is nearer to the state norm.

Indicator V: Annual expenditure per Ha by WUA for irrigation management (Rs /ha)

Annual expenditure per Ha for irrigation management in Bhagwati (CADA Beed), Krishna (NIC Nanded), &Jai Ambica (CADA Nashik) WUA's exceeds state norms. These WUA's should take proper measures to maintain the economic sustainability. In case of Krishna WUA, as per field authorities, the excess expenditure is due to additional new activities like awards etc.

Indicator VI: Cost recovery ratio.

All WUAs expect St. Muktabai & Jai Ambaica (CADA Nashik) have achieved the state target.

Indicator VII: Ratio of Water revenue remitted to Govt. to Actual water revenue recovered

No WUA except Shukleshwar (CADA Beed) & Yogeshwar (CADA Nashik) had paid the recovered water charges to the Govt. The remittance of revenue in rest of the WUAs ranges from 13% to 89%.

Indicator VIII: Annual Output per ha of area irrigated (Rs/ha)

1. Out put per ha on all WUA's except Godavari (NIC Nanded) WUA on Purna project appears to be satisfactory as compared to the fixed norm.
2. In general, out put per ha observed on WUA's in normal plan group was more than that observed on WUA's in deficit plan group.

Indicator IX: Equity performance

From the available data it reveals that, there is no equitable distribution amongst the beneficiaries in the command by respective WUA's except Krishna & Godawari on Purna project and Saptashrangi on Ozerkhed project.

6.7 Action Ahead

1. At present looking to large numbers of WUAs, Benchmarking of selected WUAs on Major project is possible at State level. After handing over of total irrigation management of projects to WUA, Benchmarking of apex (Canal, Dystributory) WUAs would be feasible at State level.
2. In case of Medium and Minor projects which are totally handed over to WUAs for irrigation management, Benchmarking of WUAs on Medium and Minor projects could be entrusted to concerned Sub divisions and Divisions respectively. In case of Major projects, Benchmarking of WUAs on Canal can be carried out at circle level.
3. To bring about necessary improvement in functioning of WUAs, monitoring of Benchmarking of Major, Medium and Minor project's WUAs at concerned Division, Circle and Chief Engineer level will be desirable.

Prescribed format for Information to be submitted for Benchmarking of Water User Association (Proforma 1)

Irrigation Year :

Name of Project	Name of Circle	Basin No.	Name of Water User Association	Number of beneficiaries in command of WUA	Number of WUA members	Sanction Quota of WUA as per agreement (TCM)				Actual quota received to WUA (TCM)			
						Kharif	Rabbi	Hot weather	Total	Kharif	Rabbi	Hot weather	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Annual crop area measured in command of WUA before establishment (ha)	Crop area measured during irrigation year (ha)	Total area irrigated in irrigation year (ha)	Expenditure on irrigation management during irrigation year (Rs)	Water cess recovery during irrigation year (Rs)	Water cess paid to Govt. during irrigation year (Rs.)	Annual income during irrigation year (Rs.)	Number of WUA members in total length of channel			Number of WUA members as per actual area irrigated during the year			
							Head	Middle	Tail	Head	Middle	Tail	
15	16	17	18	19	20	21	22	23	24	25	26	27	

Details of Indicators used for Benchmarking of Water User Association (Proforma 2)			
Indicator No.	**Indicator**	**Target / Achievement**	**Purpose of Indicator**
Indicator No. I	Percentage of WUA members to total beneficiaries in Command of WUA (Column 6 /Column 5)* 100	100%	To check the participation of beneficiaries in the Irrigation Management of WUA
Indicator No. II	Percentage of water supplied to sanction quota (Column 14 /Column 10)* 100	100%	To check the actual water quota received as compared to the sanction water quota during the irrigation year.
Indicator No. III	Ratio of actual area irrigated to the area irrigated before functioning of the WUA (Column 16 /Column 15)	More than 1	To check whether area irrigated is increased or decreased after the formation of WUA.
Indicator No. IV	Annual irrigation water use per unit area irrigated (Cum/ha) (Column 14 x 1000/Column 17)	Less than 5382 Cum	To check the economic, efficient use of water in irrigation management.
Indicator No. V	Annual expenditure per ha for irrigation management (Rs/ha) (Column 18 /Column 16)	Rs. 400/ha	To check whether the expenditure for irrigation management is economical or not.
Indicator No. VI	Ratio of annual expenditure to recovered water charges (Column 19 /Column 18)	More than 1	To check and decide the self sustainability of WUA.
Indicator No. VII	Ratio of water revenue remitted to Govt. to actual water revenue recovered (Column 20 /Column 19)	More than 1	To check the actual remittance of water revenue to Govt. from the collected water charges.
Indicator No. VIII	Annual Output per ha of area irrigated (Rs/ha) (Column 21 /Column 16)	As per State target for project BM	To check actual increase in income of beneficiaries due to freedom of crops and participation of farmers in irrigation management.
Indicator No. IX	Equity Performance		To check equitable distribution of water in head, middle & tail reaches of WUA. Reaches are defined by equally dividing the total beneficiaries in three reaches namely head, middle and tail.
	Head (Column 25 /Column 22)	One	
	Middle (Column 26 /Column 23)	One	
	Tail (Column 27 /Column 24)	One	

Circle wise Ancillary information of WUA in Highly Deficit & Abundant Plan group (Proforma 3)			
Sr. No.	**Item /Circle**	**CADA Solapur**	**SIC Sangli**
	Project	Bhima (Ujani)	Warna
	Name of WUA	Pandurang	Nanaksingh
1	Jurisdiction of WUA	Dy No.35 On Ujani LBC	Dy No.1,2,3
2	ICA of WUA	117 ha	111 ha
3	Is WUA included in MWSIP?	No	No
4	Date of handing over of IWM (command area) to the WUA	12-12-1994	6-8-2004
5	No of wells in command area of WUA		
	a) Before handing over	50	0
	b) Total as on today	60	0
6	Subsidy received during the irrigation year	Rs60232/-	0
7	Year for which subsidy is not received	2004-05 to 2007-08	2004-05, 2005-06, 2006-07
8	Dose the well water was used as an additional source for irrigation during the irrigation year	Yes	No
9	Area under perennial crops during the irrigation year	150 ha	26.60 ha
10	No. of staff employed for irrigation management by WUA	2	3
11	Does water supply was on volumetric basis or not	Volumetric basis	Volumetric basis
12	Assessment of water charges were on volumetric basis or as per crop area measurement	On volumetric basis	On volumetric basis
13	Percentage of actual live storage to the design storage in the reservoir during the irrigation year	100%	100%
14	Reasons for less achievements compared to the set target during the irrigation year	1) The people getting benefit of irrigation from river are not becoming the members of WUAs. 2) There is conjunctive use of wells & canal.	1) Deterioted disnet system. 2) Fill Irrigation potential is not created. 3) Association is in preliminary stage

Circle wise Ancillary information of WUA in Deficit Plan group (Proforma 3)

Sr. No.	Item /Circle	CADA Beed	
	Project	Majalgaon	
	Name of WUA	Bhagwati	Shukleshwar
1	Jurisdiction of WUA	Minor No.1 to 7/ Tilsmukh branch/ MRBC	Minor No.8/ GM Branch Canal / MRBC
2	ICA of WUA	555 ha	725 ha
3	Is WUA included in MWSIP?	No	No
4	Date of handing over of IWM (command area) to the WUA	25-03-1998	9-10-1998
5	No of wells in command area of WUA		
	a) Before handing over	2	68
	b) Total as on today	61 (33 wells, 28 Bore wells)	93
6	Subsidy received during the irrigation year	0	0
7	Year for which subsidy is not received	2008-09	2007-08 & 2008-09
8	Dose the well water was used as an additional source for irrigation during the irrigation year	Yes	Yes
9	Area under perennial crops during the irrigation year	298 ha	134 ha
10	No. of staff employed for irrigation management by WUA	2	2
11	Does water supply was on volumetric basis or not	Volumetric basis	Volumetric basis
12	Assessment of water charges were on volumetric basis or as per crop area measurement	On volumetric basis	On volumetric basis
13	Percentage of actual live storage to the design storage in the reservoir during the irrigation year	100%	84%
14	Reasons for less achievements compared to the set target during the irrigation year	1) Less response from WUA members 2) Due to more number of wells in command ,there was low response to canal irrigation 3) Trend of cultivators towards cash crops	

Sr. No.	Item /Circle	NIC Nanded	
	Project	Purna	
	Name of WUA	Krishna	Godawari
1	Jurisdiction of WUA	Malegaon Minor /Dour Minor / camp colony DO No.5 to 9	Kamtha Minor 1,2,3/ Do No.10 to 15
2	ICA of WUA	1036 ha	619 ha
3	Is WUA included in MWSIP?	No	No
4	Date of handing over of IWM (command area) to the WUA	3.7.1991	3.7.1991
5	No of wells in command area of WUA		
	a) Before handing over	92	78
	b) Total as on today	141	102
6	Subsidy received during the irrigation year	Rs 235778/-	Rs 31548/-
7	Year for which subsidy is not received	Nil	Nil
8	Dose the well water was used as an additional source for irrigation during the irrigation year	Yes	Yes
9	Area under perennial crops during the irrigation year	65.5 ha	41 ha
10	No. of staff employed for irrigation management by WUA	8	6
11	Does water supply was on volumetric basis or not	Volumetric basis	Volumetric basis
12	Assessment of water charges were on volumetric basis or as per crop area measurement	On volumetric basis	On volumetric basis
13	Percentage of actual live storage to the design storage in the reservoir during the irrigation year	100%	100%
14	Reasons for less achievements compared to the set target during the irrigation year	Information not available	

Circle wise Ancillary information of WUA in normal plan group (Proforma 3)

Sr. No.	Item /Circle	CADA Nashik				
	Project	Ozerkhed	Ozerkhed	Palkhed		
	Name of WUA	Parashari	Saptashrangi	Sant Muktabai	Jai Ambika	
1	Jurisdiction of WUA	Godagaon Dy on Ozerkhed canal	Ambepimpalgaon Dy on Ozerkhed canal	Dy.14 Palkhed Left Bank Canal	Dy.10 & 11 Palkhed Left Bank Canal	
2	ICA of WUA	520 ha	583 ha	462 ha	534 ha	
3	Is WUA included in MWSIP?	No	No	No	No	
4	Date of handing over of IWM (command area) to the WUA	01/01/1993	29/07/1995	10/2006	01/ 11/2002	
5	No of wells in command area of WUA					
	a) Before handing over	98	107	379	390	
	b) Total as on today	125	192	391	415	
6	Subsidy received during the irrigation year	Rs. 27744/-	Rs56000/-	Yes Rs. 5140/-	Yes Rs 7306/-	
7	Year for which subsidy is not received	2004 -05	2004-05	2008-09	2008-09	
8	Dose the well water was used as an additional source for irrigation during the irrigation year	Yes	Yes	Yes	Yes	
9	Area under perennial crops during the irrigation year	115 Ha.	112ha	350 ha	111 ha	
10	No. of staff employed for irrigation management by WUA	2	1	1	1	
11	Does water supply was on volumetric basis or not	Volumetric basis	Volumetric basis	Volumetric basis	Volumetric basis	
12	Assessment of water charges were on volumetric basis or as per crop area measurement	On volumetric basis	On volumetric basis	On volumetric basis	On volumetric basis	
13	Percentage of actual live storage to the design storage in the reservoir during the irrigation year	100%	100%	100%	100%	
14	Reasons for less achievements compared to the set target during the irrigation year	More rain fall in command area resulting increase in irrigation on wells	More rain fall in command area resulting increase in irrigation on wells	More rain fall in command area in Rabbi season	More rain fall in command area in Rabbi season	

Sr. No.	Item /Circle	CADA Nashik	
	Project	Mula	
	Name of WUA	Datta	Yogeshwar
1	Jurisdiction of WUA	Dy No 7 of Mula Right Bank Canal.	Dy No 3, Minor No 2 of Mula Right Bank Canal.
2	ICA of WUA	361 Ha	200.70 Ha
3	Is WUA included in MWSIP?	Yes	Yes
4	Date of handing over of IWM (command area) to the WUA	30-06-1989	24-10-1997
5	No of wells in command area of WUA		
	a) Before handing over	162	88
	b) Total as on today	109	109
6	Subsidy received during the irrigation year	Rs78900/-	Rs13400/-
7	Year for which subsidy is not received	2001-02to2007-08	2006-07&2007-08
8	Dose the well water was used as an additional source for irrigation during the irrigation year	Yes	Yes
9	Area under perennial crops during the irrigation year	155Ha	40 Ha
10	No. of staff employed for irrigation management by WUA	3	2
11	Does water supply was on volumetric basis or not	Volumetric basis	Volumetric basis
12	Assessment of water charges were on volumetric basis or as per crop area measurement	Volumetric basis	Volumetric basis
13	Percentage of actual live storage to the design storage in the reservoir during the irrigation year	100%	100%
14	Reasons for less achievements compared to the set target during the irrigation year	-	

IND I- Percentage of WUA members to total beneficiaries

Highly Deficit	CADA Solapur	Bhima	Pandurang	61
Deficit	CADA Beed	Majalgaon	Shukleshwar	59
			Bhagwati	70
	NIC Nanded	Purna	Krishna	77
			Godavari	65
Normal	CADA Nashik	Ozerkhed	Parashari	64
			Saptashrangi	53
		Palkhed	St.Muktabai	54
			Jai Ambika	85
		Mula	Datta	100
			Yogeshwar	100
Abundant	SIC Sangli	Warna	Nanaksingh	53

IND II- Percentage of Water supplied to sanctioned water quota

Highly Deficit	CADA Solapur	Bhima	Pandurang	100
Deficit	CADA Beed	Majalgaon	Shukleshwar	53
			Bhagwati	100
	NIC Nanded	Purna	Krishna	17
			Godavari	61
Normal	CADA Nashik	Ozerkhed	Parashari	22
			Saptashrangi	59
		Palkhed	St.Muktabai	53
			Jai Ambika	13
		Mula	Datta	158
			Yogeshwa	86
Abundant	SIC Sangli	Warna	Nanaksingh	100

Indicator III: Ratio of Potential Utilisation to maximum Utilisation prior to formation of WUA

Plan group	Circle	Project	W U A	Value
Highly Deficit	CADA Solapur	Bhima	Pandurang	2.56
Deficit	CADA Beed	Majalgaon	Shukleshwar	1.22
			Bhagwati	2.37
	NIC Nanded	Purna	Krishna	0.63
			Godavari	1.12
Normal	CADA Nashik	Ozerkhed	Parashari	2.20
			Saptashrangi	4.60
		Palkhed	St.Muktabai	2.32
			Jai Ambika	1.95
		Mula	Datta	1.20
			Yogeshwa	1.43
Abundant	SIC Sangli	Warna	Nanaksingh	1.81

Indicator IV: Annual Irrigation water use per unit area Irrigated (Cum/ha)

Plan group	Circle	Project	W U A	Value
Highly Deficit	CADA Solapur	Bhima	Pandurang	3012
Deficit	CADA Beed	Majalgaon	Shukleshwar	7254
			Bhagwati	10911
	NIC Nanded	Purna	Krishna	2888
			Godavari	5396
Normal	CADA Nashik	Ozerkhed	Parashari	1176
			Saptashrangi	1951
		Palkhed	St.Muktabai	3750
			Jai Ambika	3452
		Mula	Datta	5366
			Yogeshwa	3282
Abundant	SIC Sangli	Warna	Nanaksingh	11000

Indicator V: Annual expenditure for IWM per unit area irrigated (Rs /ha)

Plan group	Circle	Project	W U A	Value
Highly Deficit	CADA Solapur	Bhima	Pandurang	157
Deficit	CADA Beed	Majalgaon	Shukleshwar	160
			Bhagwati	1190
	NIC Nanded	Purna	Krishna	1528
			Godavari	477
Normal	CADA Nashik	Ozerkhed	Parashari	28
			Saptashrangi	180
		Palkhed	St.Muktabai	174
			Jai Ambika	959
		Mula	Datta	303
			Yogeshwa	351
Abundant	SIC Sangli	Warna	Nanaksingh	388

Indicator VI: Cost recovery Ratio

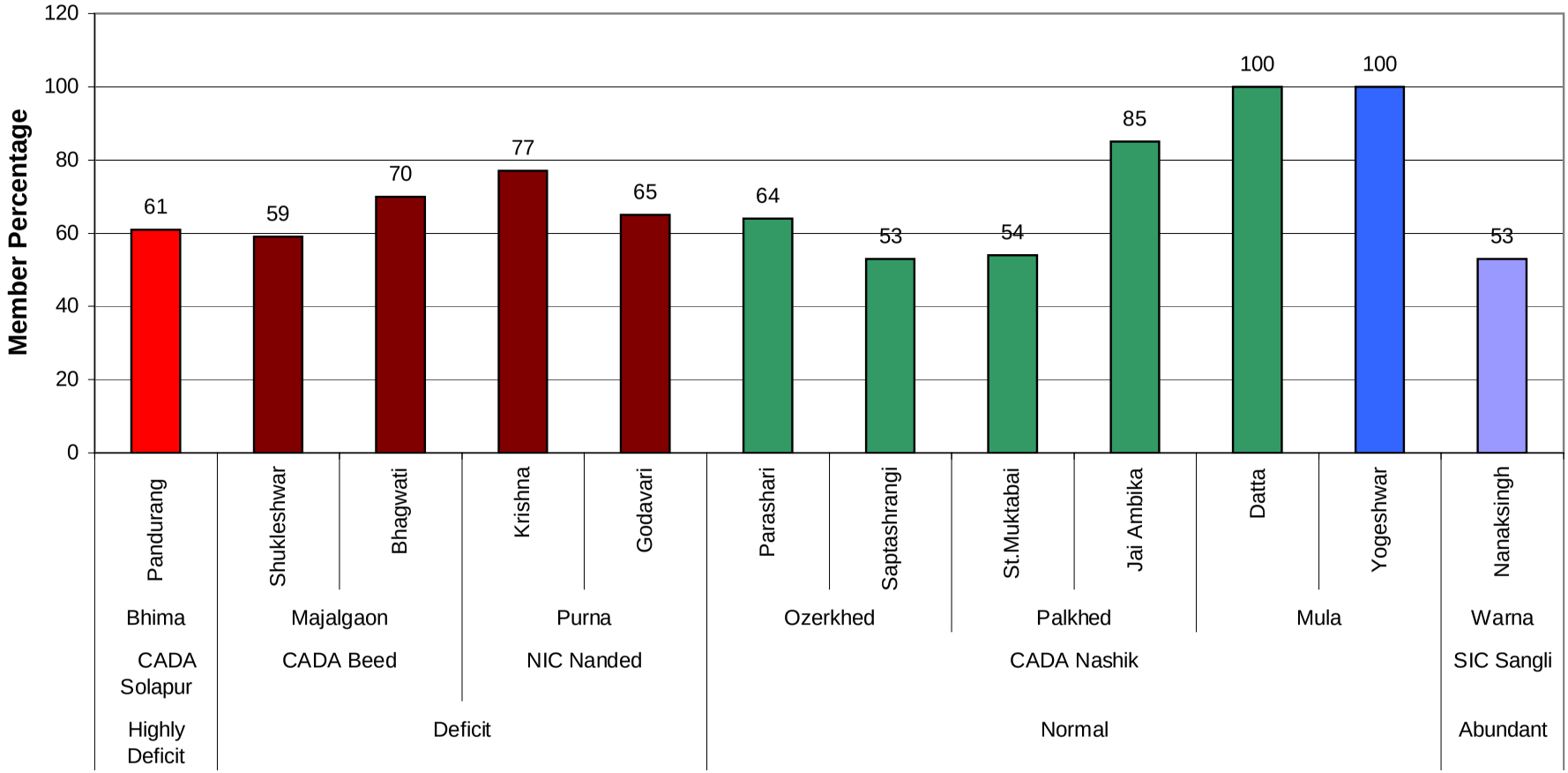
Plan group	Circle	Project	W U A	Value
Highly Deficit	CADA Solapur	Bhima	Pandurang	2.64
Deficit	CADA Beed	Majalgaon	Shukleshwar	2.94
			Bhagwati	2.37
	NIC Nanded	Purna	Krishna	1.49
			Godavari	1.81
Normal	CADA Nashik	Ozerkhed	Parashari	10.13
			Saptashrangi	2.1
		Palkhed	St.Muktabai	0.17
			Jai Ambika	0.14
		Mula	Datta	2.66
			Yogeshwa	1.89
Abundant	SIC Sangli	Warna	Nanaksingh	2.15

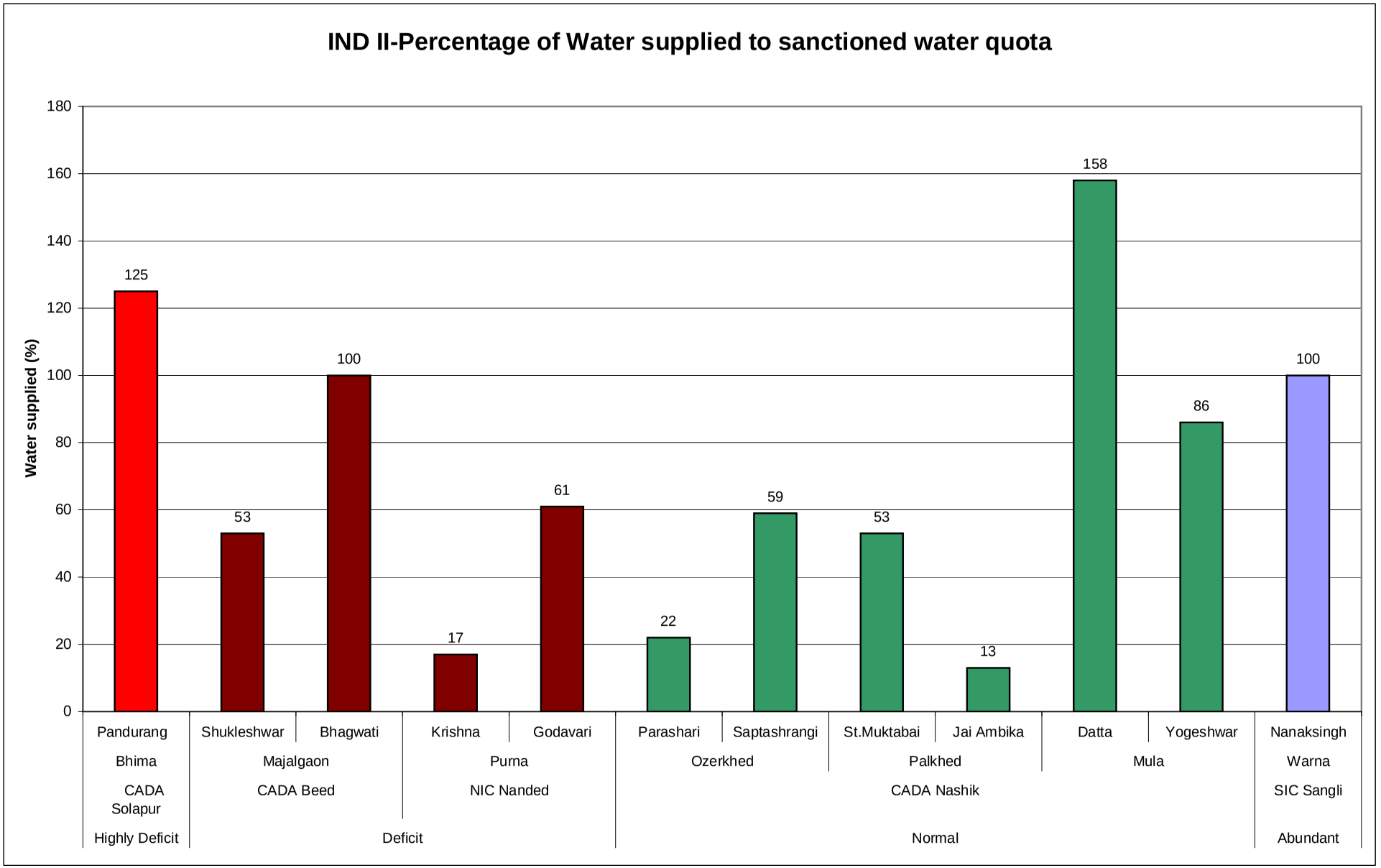
Indicator VII: Ratio of Recovery remittance to Total recovery				
Plan group	Circle	Project	W U A	Value
Highly Deficit	CADA Solapur	Bhima	Pandurang	0.49
Deficit	CADA Beed	Majalgaon	Shukleshwar	1.00
			Bhagwati	0.85
	NIC Nanded	Purna	Krishna	0.85
			Godavari	0.62
Normal	CADA Nashik	Ozerkhed	Parashari	0.46
			Saptashrangi	0.70
		Palkhed	St.Muktabai	0.78
			Jai Ambika	0.80
		Mula	Datta	0 .89
			Yogeshwa	0.95
Abundant	SIC Sangli	Warna	Nanaksingh	0.13
Indicator VIII: Annual Out put per unit area irrigated (Rs/ha)				
Plan group	Circle	Project	W U A	Value
Highly Deficit	CADA Solapur	Bhima	Pandurang	95001
Deficit	CADA Beed	Majalgaon	Shukleshwar	28845
			Bhagwati	90699
	NIC Nanded	Purna	Krishna	21990
			Godavari	12358
Normal	CADA Nashik	Ozerkhed	Parashari	480000
			Saptashrangi	383965
		Palkhed	St.Muktabai	385000
			Jai Ambika	395
		Mula	Datta	56230
			Yogeshwa	40839
Abundant	SIC Sangli	Warna	Nanaksingh	40854

Indicator IX: Equity performance

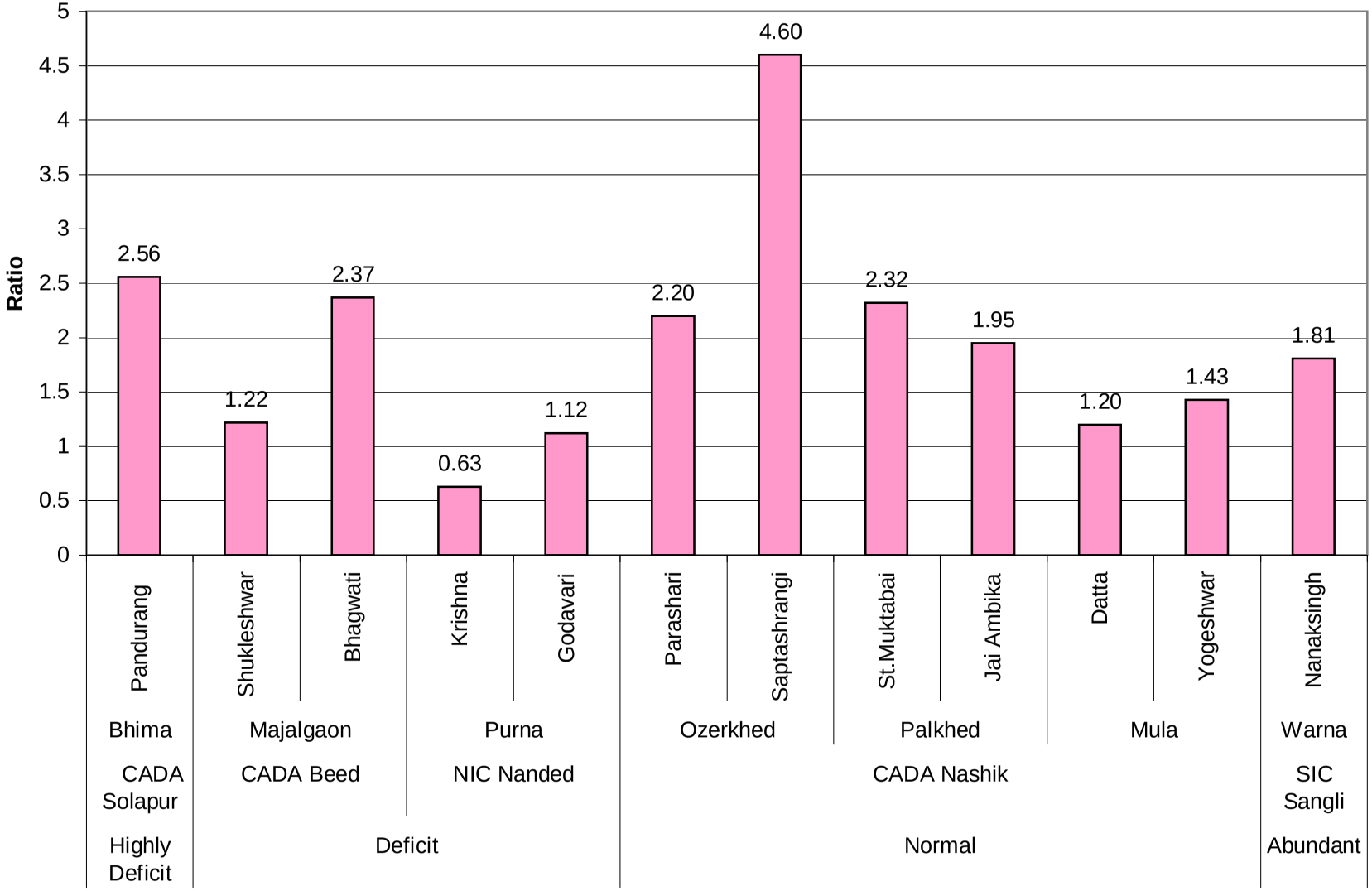
Plan Group	Circle	Project	WUA	Reach	Value
Highly Deficit	CADA Solapur	Bhima	Pandurang	H	0.58
				M	0.74
				T	0.44
Deficit	CADA Beed	Majalgaon	Shukleshwar	H	0.76
				M	0.62
				T	0.22
			Bhagawati	H	0.63
				M	0.70
				T	0.83
	NIC Nanded	Purna	Krishna	H	1.00
				M	1.00
				T	1.00
			Godavari	H	1.00
				M	1.00
				T	1.00
Normal	CADA Nashik	Ozerkhed	Parashari	H	0.75
				M	0.42
				T	0.92
			Saptashrangi	H	0.96
				M	0.95
				T	0.97
		Palkhed	St. Muktabai	H	0.21
				M	0.30
				T	0.56
			Jai Ambika	H	0.49
				M	0.19
				T	0.21
		Mula	Datta	H	0.19
				M	0.23
				T	0.19
			Yogeshwa	H	0.35
				M	0.48
				T	0.33
Abundant	SIC Sangli	Warna	Nanaksingh	H	0.80
				M	0.44
				T	0.14

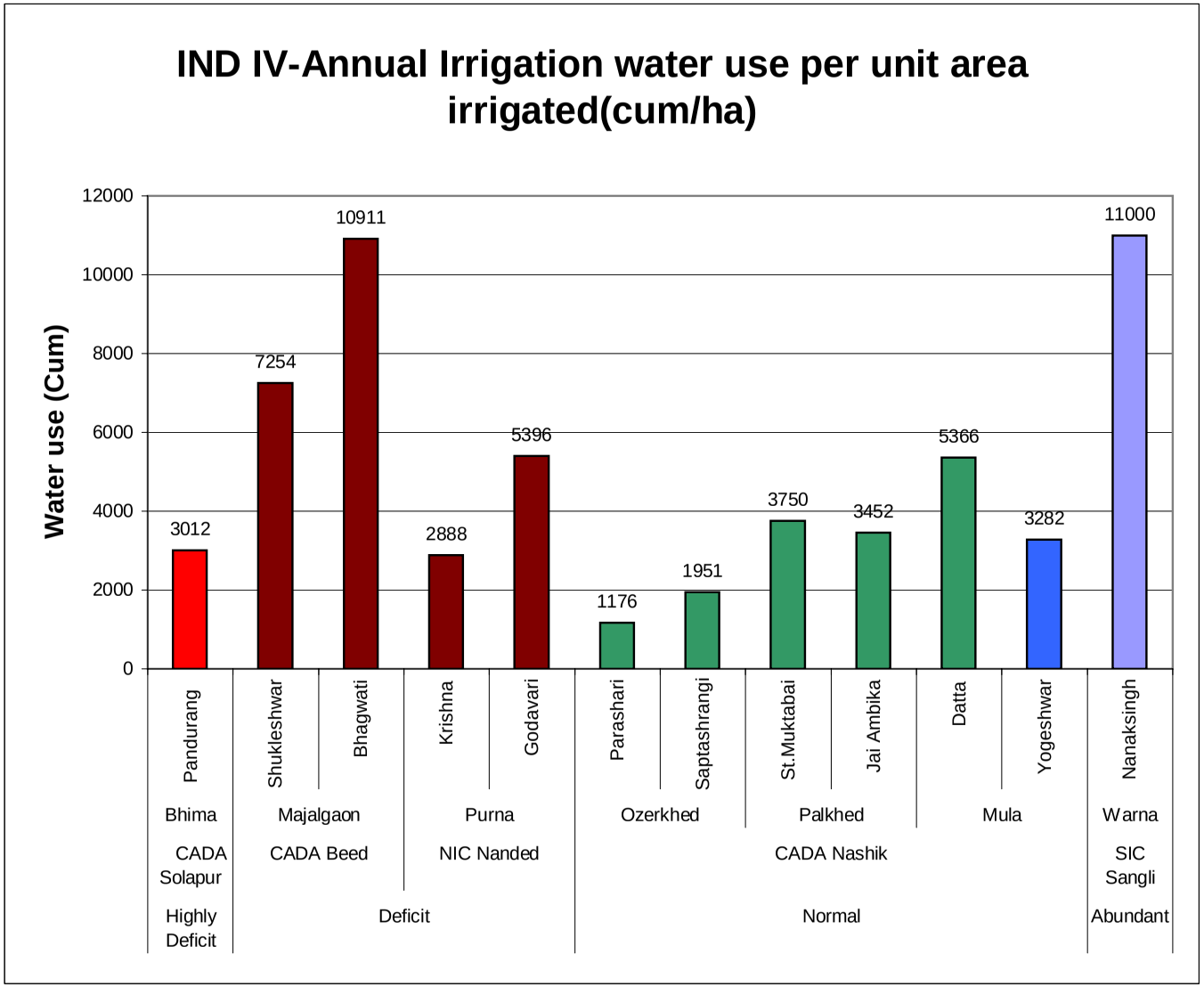
IND I
Percentage of WUA members to total beneficiaries



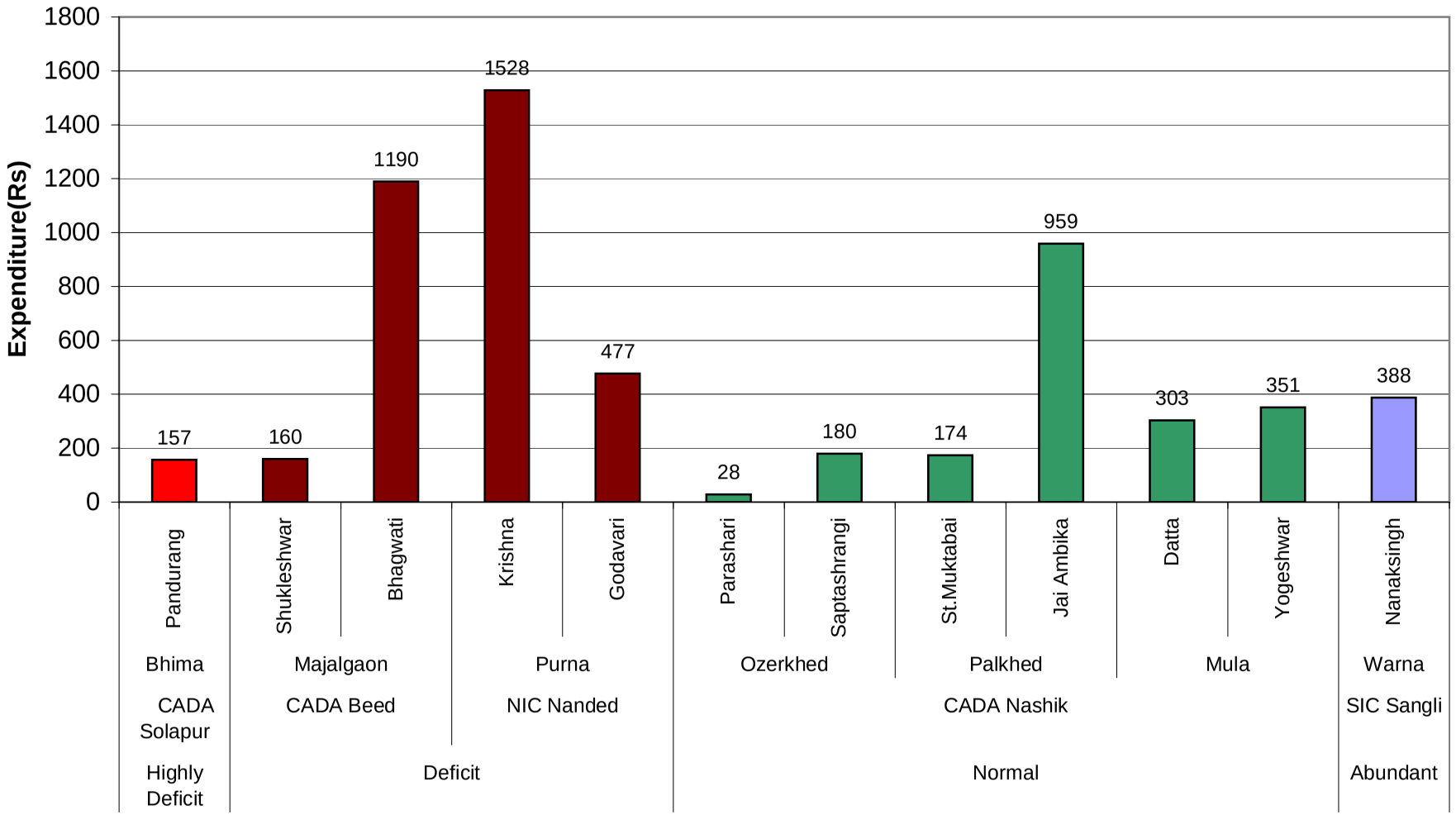

IND II-Percentage of Water supplied to sanctioned water quota
Water supplied (%)
180
160
140
120
100
80
60
40
20
0
125
53
100
17
61
22
59
53
13
158
86
100
Pandurang
Shukleshwar
Bhagwati
Krishna
Godavari
Parashari
Saptashrangi
St.Muktabai
Jai Ambika
Datta
Yogeshwar
Nanaksingh
Bhima
Majalgaon
Purna
Ozerkhed
Palkhed
Mula
Warna
CADA Solapur
CADA Beed
NIC Nanded
CADA Nashik
SIC Sangli
Highly Deficit
Deficit
Normal
Abundant

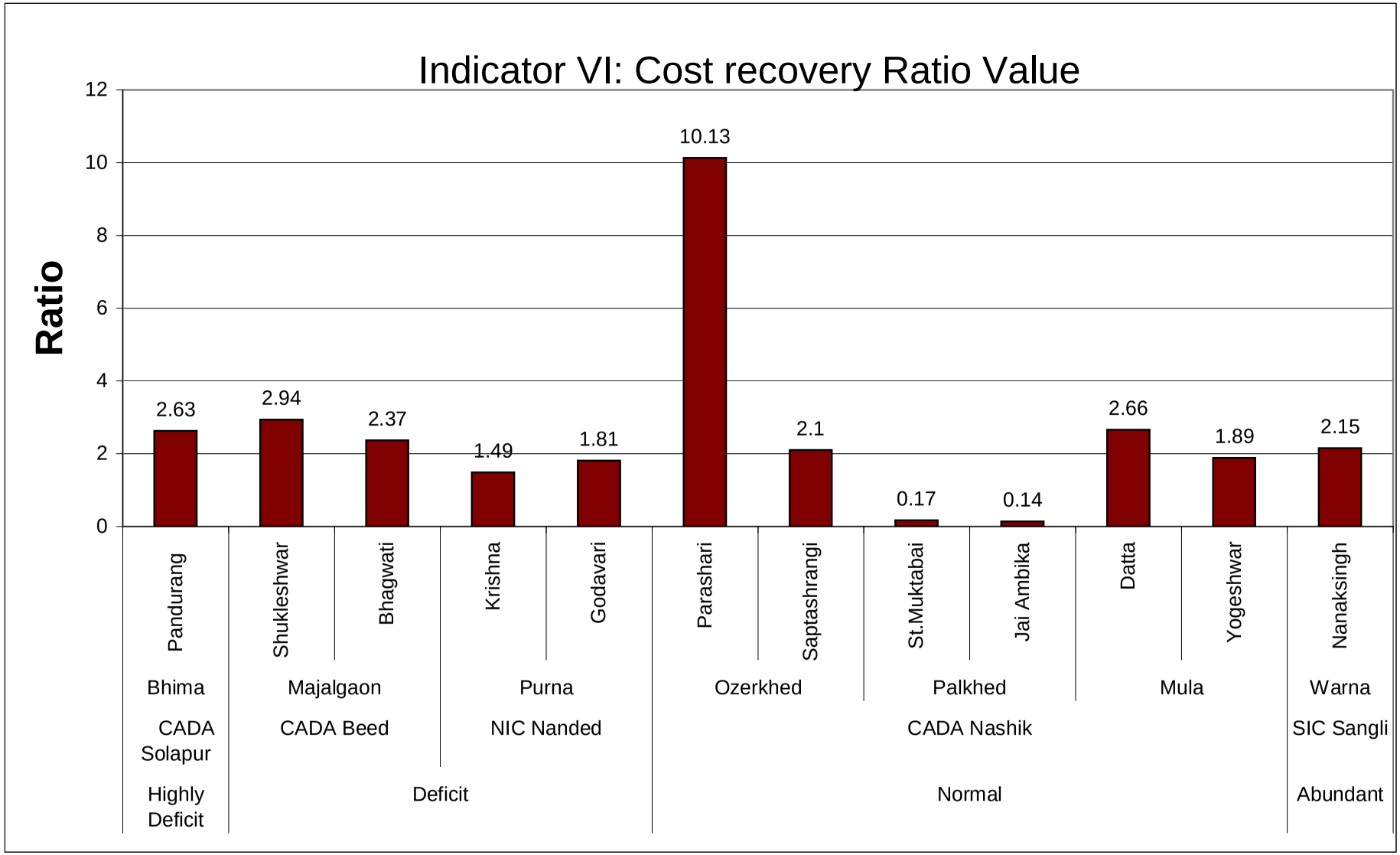
Indicator III: Ratio of Potential Utilisation to maximum Utilisation prior to formation of WUA Value

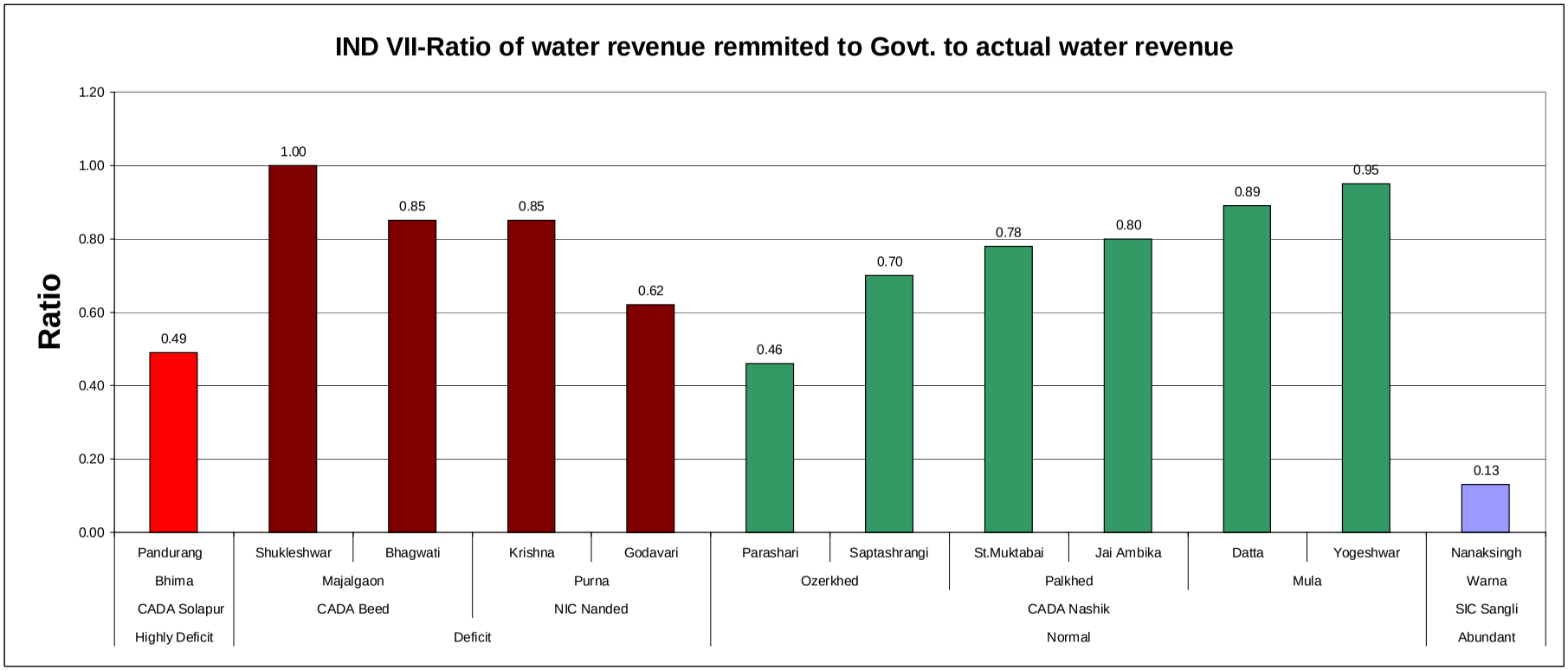



IND IV-Annual Irrigation water use per unit area irrigated(cum/ha)
Water use (Cum)
12000
10000
8000
6000
4000
2000
0
3012
7254
10911
2888
5396
1176
1951
3750
3452
5366
3282
11000
Pandurang
Shukleshwar
Bhagwati
Krishna
Godavari
Parashari
Saptashrangi
St.Muktabai
Jai Ambika
Datta
Yogeshwar
Nanaksingh
Bhima
Majalgaon
Purna
Ozerkhed
Palkhed
Mula
Warna
CADA Solapur
CADA Beed
NIC Nanded
CADA Nashik
SIC Sangli
Highly Deficit
Deficit
Normal
Abundant

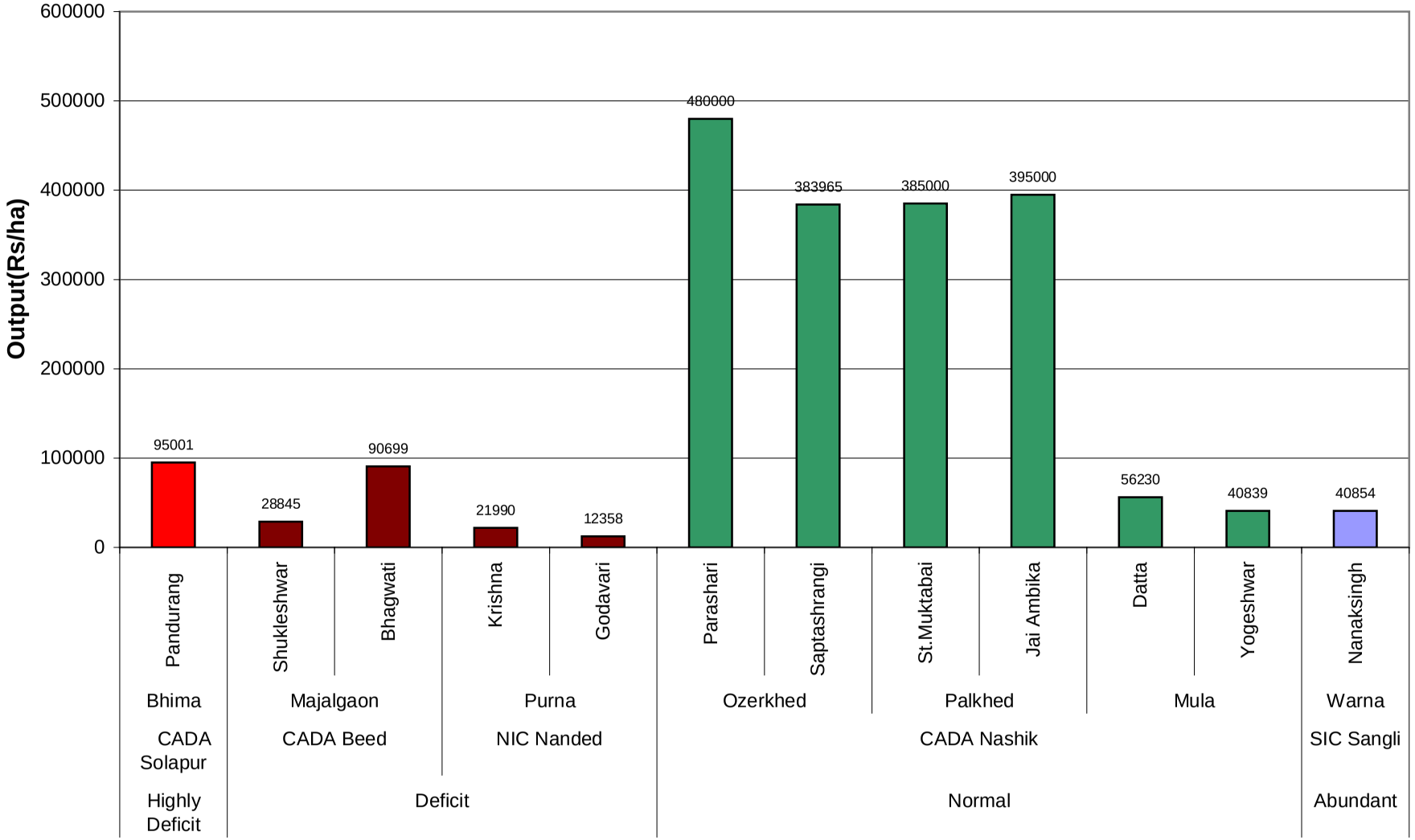
IND V-Annual Expenditure per ha by WUA for irrigation management (Rs./ha)

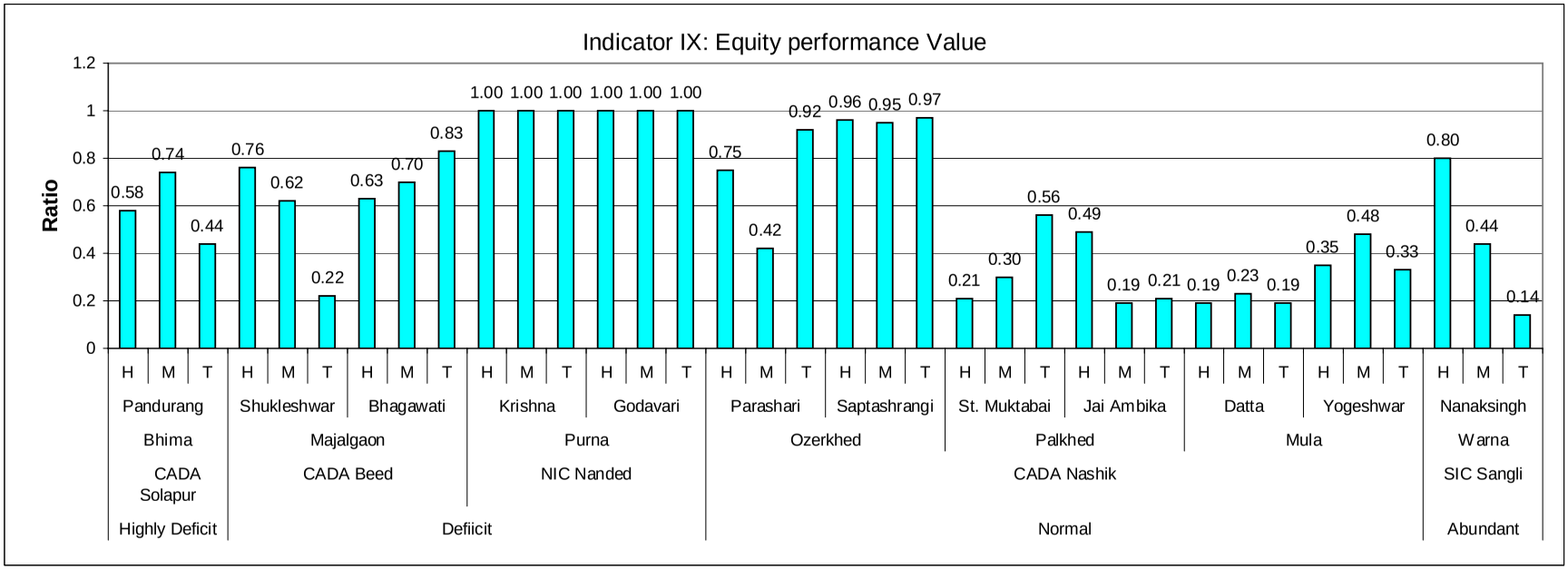



Indicator VI: Cost recovery Ratio Value
Ratio
12
10
8
6
4
2
0
2.63
2.94
2.37
1.49
1.81
10.13
2.1
0.17
0.14
2.66
1.89
2.15
Pandurang
Shukleshwar
Bhagwati
Krishna
Godavari
Parashari
Saptashrangi
St.Muktabai
Jai Ambika
Datta
Yogeshwar
Nanaksingh
Bhima
Majalgaon
Purna
Ozerkhed
Palkhed
Mula
Warna
CADA Solapur
CADA Beed
NIC Nanded
CADA Nashik
SIC Sangli
Highly Deficit
Deficit
Normal
Abundant


IND VII-Ratio of water revenue remmited to Govt. to actual water revenue
Ratio
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.49
1.00
0.85
0.85
0.62
0.46
0.70
0.78
0.80
0.89
0.95
0.13
Pandurang
Bhima
CADA Solapur
Highly Deficit
Shukleshwar
Majalgaon
CADA Beed
Bhagwati
Krishna
Purna
NIC Nanded
Godavari
Deficit
Parashari
Ozerkhed
Saptashrangi
St.Muktabai
Palkhed
CADA Nashik
Jai Ambika
Datta
Mula
Yogeshwar
Normal
Nanaksingh
Warna
SIC Sangli
Abundant

IND VIII-Annual output per ha of area irrigated(Rs/ha)




Indicator IX: Equity performance Value
Ratio
1.2
1
0.8
0.6
0.4
0.2
0
0.58 0.74 0.44 0.76 0.62 0.22 0.63 0.70 0.83 1.00 1.00 1.00 1.00 1.00 1.00 0.75 0.42 0.92 0.96 0.95 0.97 0.21 0.30 0.56 0.49 0.19 0.21 0.19 0.23 0.19 0.35 0.48 0.33 0.80 0.44 0.14
H M T
Pandurang
Bhima
CADA Solapur
Highly Deficit
Shukleshwar
Majalgaon
CADA Beed
Bhagawati
Krishna
Purna
NIC Nanded
Godavari
Defiicit
Parashari
Ozerkhed
Saptashrangi
St. Muktabai
Palkhed
Jai Ambika
CADA Nashik
Datta
Mula
Yogeshwar
Normal
Nanaksingh
Warna
SIC Sangli
Abundant

Chapter - 7

Project wise Review of Major and Medium Projects

The Benchmarking Reports published for year 2003-04 to 2007-08 consist of the graphical representation of each indicator with circle as a unit. Project wise data for each indicator was not appearing any where in the said reports.

As per directives of Secretary (CAD) it is decided to incorporate project wise data for last 5 years for all the Major and Medium projects in the Benchmarking report of year 2008-09.

The project wise data incorporated is as below

I) Name of project.

II) Designed live storage in Mm^3

III) Irrigable Command Area in Ha.

IV) Irrigation year

V) Year status

VI) Live storage available as on 15^{th} October

VII) Water used for irrigation in Mm^3

VIII) Irrigated Area in Ha.

IX) Recovery for irrigation in Rs Lakh

X) Recovery for Non irrigation in Rs lakh

XI) Total Recovery for Irrigation & Non irrigation in Rs lakh

XII) Annual Water Supply for irrigation in ha /Mm^3

Data for last five years of the above parameters for all Major and Medium projects of is tabulated here to have a project wise performance at a glance.

Analysis of Major projects in Maharashtra State (2003-04 to 2008-09)

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non Irrigation Rs. In lakhs	Total recovery Irrigation + Non Irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13*
1	Katepurna	86.35	8325	2003-04	Ist	23.48	0.00	0	27.10	132.74	159.84	0
				2004-05	Iind	2.34	0.00	0	0.00	25.62	25.62	0
				2005-06	IIIrd	56.74	23.43	2627	0.00	39.65	39.65	112
				2006-07	Ivth	86.35	28.64	4740	3.10	131.66	134.76	166
				2007-08	Vth	80.50	34.42	5985	3.49	136.16	139.65	174
				2008-09	Current	15.40	0.00	0	0.45	92.29	92.74	0
2	Nalganga	69.32	8604	2003-04	Ist	60.38	25.13	3338	14.26	15.60	29.86	133
				2004-05	Iind	24.86	12.74	1324	5.65	5.10	10.75	104
				2005-06	IIIrd	5.63	2.48	688	3.61	2.50	6.11	277
				2006-07	Ivth	69.32	35.21	5357	1.55	0.28	1.83	152
				2007-08	Vth	32.59	24.89	3946	2.98	1.49	4.47	159
				2008-09	Current	19.11	10.51	1513	0.87	3.42	4.29	144
3	Pus	91.26	8215	2003-04	Ist	76.99	52.85	5621	33.13	53.70	86.83	106
				2004-05	Iind	7.14	0.00	0	1.15	12.16	13.31	0
				2005-06	IIIrd	91.26	62.44	2958	0.10	0.95	1.05	47
				2006-07	Ivth	91.26	69.46	7021	1.01	9.94	10.95	101
				2007-08	Vth	91.26	59.98	7544	1.73	8.60	10.33	126
				2008-09	Current	75.25	56.32	3917	6.00	14.57	20.57	70
4	Upper Wardha	614.80	75000	2003-04	Ist	614.80	262.65	13233	23.41	54.40	77.81	50
				2004-05	Iind	514.21	291.65	16890	19.55	59.04	78.59	58
				2005-06	IIIrd	582.86	241.88	12067	22.15	66.44	88.59	50
		548.14		2006-07	Ivth	548.14	281.68	13631	35.57	59.50	95.07	48
				2007-08	Vth	548.14	327.04	18342	49.23	80.44	129.66	56
				2008-09	Current	288.39	72.44	7118	39.57	101.24	140.81	98

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non Irrigation Rs. In lakhs	Total recovery Irrigation + Non Irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13*
5	Wan (Buldhana)	81.96	15100	2003-04	Ist	NA	66.97	9481	12.39	0.65	13.04	142
				2004-05	Iind	30.76	11.29	3003	1.62	8.09	9.71	266
				2005-06	IIIrd	81.96	64.05	6963	7.77	6.00	13.77	109
				2006-07	Ivth	81.96	67.87	7460	0.00	34.44	34.44	110
				2007-08	Vth	81.96	67.57	8230	2.62	24.07	26.69	122
				2008-09	Current	72.30	58.57	4263	8.67	73.95	82.62	73
6	Arunavati	169.92	20515	2003-04	Ist	37.92	15.11	2347	3.78	1.08	4.86	155
				2004-05	Iind	7.07	0.00	0	0.00	0.71	0.71	0
				2005-06	IIIrd	129.69	66.15	2689	0.00	1.00	1.00	41
				2006-07	Ivth	168.10	70.91	6061	3.13	2.10	5.23	85
				2007-08	Vth	108.68	66.27	5570	1.48	0.00	1.48	84
				2008-09	Current	23.87	2.72	279	0.00	0.00	0.00	103
7	Pench	1374	101200	2003-04	Ist	1303.00	791.00	85134	134.50	1642.15	1776.65	108
				2004-05	Iind	432.22	534.38	51243	108.74	2010.87	2119.61	96
				2005-06	IIIrd	1249.73	765.67	79049	139.52	2056.76	2196.28	103
				2006-07	Ivth	1156.94	1028.00	80097	238.91	2113.05	2351.96	78
				2007-08	Vth	1069.31	1062.03	80344	225.94	2216.21	2442.15	76
				2008-09	Current	658.17	544.78	52566	64.45	1491.29	1555.74	96
8	Bagh	268	23740	2003-04	Ist	269.00	150.04	30738	18.82	10.08	28.90	205
				2004-05	Iind	113.85	107.75	21980	11.71	0.00	11.71	204
				2005-06	IIIrd	207.78	196.99	30691	12.55	0.14	12.69	156
				2006-07	Ivth	186.74	186.00	25966	12.59	0.47	13.06	140
				2007-08	Vth	221.53	241.62	30037	18.77	12.21	30.98	124
				2008-09	Current	76.06	151.18	23460	1.83	2.50	4.33	155

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non Irrigation Rs. In lakhs	Total recovery Irrigation + Non Irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13*
9	Itiahdoh	318.86	17500	2003-04	Ist	234.00	220.60	25240	23.63	5.36	28.99	114
				2004-05	Iind	121.79	162.12	17823	16.56	0.00	16.56	110
				2005-06	IIIrd	287.80	294.75	28488	28.23	21.60	49.83	97
				2006-07	Ivth	271.96	348.91	26325	38.03	1.63	39.66	75
				2007-08	Vth	302.98	292.56	28249	45.30	2.43	47.73	97
				2008-09	Current	51.75	178.73	17530	5.32	0.00	5.32	98
10	Asola Mendha	56.38	9919	2003-04	Ist	46.37	49.12	9919	8.67	0.00	8.67	202
				2004-05	Iind	33.61	38.00	11745	4.60	2.10	6.70	309
				2005-06	IIIrd	42.63	63.70	11967	8.07	2.17	10.24	188
				2006-07	Ivth	36.70	77.63	10702	5.59	2.61	8.20	138
				2007-08	Vth	56.38	69.28	10684	3.05	3.10	6.15	154
				2008-09	Current	12.66	65.96	9198	14.98	2.38	17.36	139
11	Dina	55.94	7826	2003-04	Ist	55.94	52.35	11356	14.66	0.00	14.66	217
				2004-05	Iind	55.94	49.00	10736	15.62	0.00	15.62	219
				2005-06	IIIrd	34.32	54.15	11060	12.36	1.28	13.64	204
		68.3		2006-07	Ivth	52.66	67.70	11392	24.08	0.00	24.08	168
				2007-08	Vth	46.10	48.29	10794	5.82	1.63	7.45	224
				2008-09	Current	3.04	58.06	10913	14.54	0.21	14.75	188
12	Bor	127.42	13360	2003-04	Ist	81.84	67.06	6108	12.68	0.00	12.68	91
				2004-05	Iind	41.42	17.36	2339	7.22	0.00	7.22	135
				2005-06	IIIrd	98.90	72.58	4424	2.89	5.15	8.04	61
				2006-07	Ivth	88.45	79.88	4331	6.66	2.91	9.57	54
				2007-08	Vth	127.35	85.27	4716	10.29	0.29	10.58	55
				2008-09	Current	57.44	40.21	2256	5.65	0.21	5.86	56

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non Irrigation Rs. In lakhs	Total recovery Irrigation + Non Irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13*

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non Irrigation Rs. In lakhs	Total recovery Irrigation + Non Irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13*
13	Lower Wunna	189.18	19500	2003-04	Ist	189.18	78.84	5927	0.00	0.00	0.00	75
				2004-05	Iind	159.77	87.09	6934	10.81	166.85	177.66	80
				2005-06	IIIrd	187.87	70.43	7829	7.50	186.23	193.73	111
				2006-07	Ivth	189.18	115.44	6855	10.37	222.08	232.45	59
				2007-08	Vth	187.82	101.02	6000	3.58	120.25	123.83	59
				2008-09	Current	126.84	69.42	7185	3.85	71.78	75.63	104
												0
14	Girna	525.06	69350	2003-04	Ist	217.53	58.25	4434	13.28	145.27	158.55	76
				2004-05	Iind	523.55	284.81	20016	34.93	169.22	204.15	70
				2005-06	IIIrd	523.55	285.17	19892	48.66	173.97	222.63	70
				2006-07	Ivth	523.55	321.02	21766	38.55	213.48	252.03	68
				2007-08	Vth	519.65	378.07	27306	53.83	255.68	309.51	72
				2008-09	Current	484.58	335.64	23063	44.56	258.34	302.90	69
15	Hatnur	255	37838	2003-04	Ist	255.00	64.93	9017	15.33	1253.37	1268.70	139
				2004-05	Iind	255.00	73.68	8861	12.49	1414.25	1426.74	120
				2005-06	IIIrd	255.00	71.15	6126	14.16	1875.83	1889.99	86
				2006-07	Ivth	255.00	99.21	6874	7.29	1646.78	1654.07	69
				2007-08	Vth	255.00	84.75	6950	9.11	1934.47	1943.58	82
				2008-09	Current	255.00	56.67	6668	7.86	2270.47	2278.33	118
16	Chanakapur	76.85	14042	2003-04	Ist	76.85	27.67	3289	9.67	81.17	90.84	119
				2004-05	Iind	76.85	11.29	2851	5.09	124.94	130.03	253
				2005-06	IIIrd	76.85	18.59	4285	5.98	171.68	177.66	231
				2006-07	Ivth	76.85	18.36	3065	6.78	133.24	140.02	167
				2007-08	Vth	76.85	17.06	2788	7.82	173.19	181.01	163
				2008-09	Current	76.85	14.22	2452	3.81	189.68	193.49	172

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non Irrigation Rs. In lakhs	Total recovery Irrigation + Non Irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13*
17	Kadva	52.91	10117	2003-04	Ist	52.91	52.34	2455	3.44	0.00	3.44	47
				2004-05	Iind	52.91	38.75	1630	4.26	29.10	33.36	42
				2005-06	IIIrd	52.91	49.51	2339	0.26	0.79	1.05	47
				2006-07	Ivth	52.91	41.60	1391	0.60	0.08	0.68	33
				2007-08	Vth	52.91	54.18	1965	0.80	0.62	1.42	36
				2008-09	Current	52.91	43.48	2125	5.96	1.16	7.12	49
18	Bhandardara	304.10	23077	2003-04	Ist	304.10	322.13	34732	14.53	5.75	20.28	108
				2004-05	Iind	304.10	339.92	32053	69.27	140.60	209.87	94
				2005-06	IIIrd	303.73	380.44	24428	24.27	31.59	55.86	64
				2006-07	Ivth	304.10	276.50	26348	143.95	213.85	357.80	95
				2007-08	Vth	304.09	344.02	28554	94.31	174.03	268.34	83
				2008-09	Current	304.10	349.15	26744	57.06	131.72	188.78	77
19	Mula	608.82	82920	2003-04	Ist	266.27	261.80	37329	82.04	105.98	188.02	143
				2004-05	Iind	608.82	571.27	40276	26.29	97.14	123.43	71
				2005-06	IIIrd	608.82	556.71	48185	107.39	157.82	265.21	87
				2006-07	Ivth	608.82	497.22	43001	170.96	173.10	344.06	86
				2007-08	Vth	608.82	638.35	52735	112.13	155.95	268.08	83
				2008-09	Current	608.82	549.79	40942	128.95	247.45	376.40	74
20	Gangapur	159.42	15960	2003-04	Ist	158.48	32.32	2710	39.69	1772.33	1812.02	84
				2004-05	Iind	158.48	24.75	2110	12.93	2628.67	2641.60	85
				2005-06	IIIrd	158.48	56.18	11293	17.85	2320.67	2338.52	201
				2006-07	Ivth	159.42	51.00	10553	25.18	3389.00	3414.18	207
				2007-08	Vth	157.12	50.08	7196	43.65	3838.91	3882.56	144
				2008-09	Current	158.54	50.20	7174	25.18	3389.00	3414.18	143

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1	2	3	4	5	6	7	8	9	10	11	12	13*
21	Ozerkhed	60.32	10400	2003-04	Ist	NA	28.26	3182	4.75	8.59	13.34	113
				2004-05	Iind	60.30	35.12	2292	16.16	5.91	22.07	65
				2005-06	IIIrd	60.31	39.95	3348	13.75	7.18	20.93	84
				2006-07	Ivth	60.31	33.16	3064	16.78	7.77	24.55	92
				2007-08	Vth	60.11	44.47	4264	15.24	25.14	40.38	96
				2008-09	Current	60.32	41.50	4436	14.84	11.89	26.73	107
22	Palkhed	21.24	43154	2003-04	Ist	NA	74.91	15851	26.65	464.10	490.75	212
				2004-05	Iind	21.23	94.10	11521	41.91	293.94	335.85	122
				2005-06	IIIrd	6.05	112.76	16951	28.03	266.57	294.60	150
				2006-07	Ivth	6.05	98.77	11043	34.11	249.60	283.71	112
				2007-08	Vth	21.24	167.69	13468	32.26	353.70	385.96	80
				2008-09	Current	21.23	179.95	11046	41.47	530.88	572.35	61
23	Waghad	72.2	6750	2003-04	Ist	NA	34.49	2264	7.18	3.98	11.16	66
				2004-05	Iind	72.20	30.98	3206	6.66	7.40	14.06	103
				2005-06	IIIrd	70.84	43.54	4079	9.80	0.53	10.33	94
				2006-07	Ivth	70.84	42.30	4100	12.18	2.66	14.84	97
				2007-08	Vth	70.86	39.88	4504	20.86	9.10	29.96	113
				2008-09	Current	70.86	45.46	4444	25.77	7.15	32.92	98
24	Bhima	1517.2	205277	2003-04	Ist	432.52	374.98	32901	128.77	476.54	605.31	88
		1688.41		2004-05	Iind	1642.98	1287.52	134516	455.44	657.18	1112.62	104
				2005-06	IIIrd	1688.11	1216.50	171475	260.24	540.91	801.15	141
				2006-07	Ivth	1688.10	1960.54	201402	414.34	672.79	1087.13	103
				2007-08	Vth	1675.14	1956.68	206523	802.19	816.06	1618.25	106
				2008-09	Current	1688.41	1650.33	208735	453.52	984.61	1438.13	126

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1	2	3	4	5	6	7	8	9	10	11	12	13*
25	Kukadi	864.39	119166	2003-04	Ist	615.16	377.97	61683	153.91	39.71	193.62	163
				2004-05	Iind	729.97	537.08	104790	180.83	20.47	201.30	195
				2005-06	IIIrd	850.56	404.30	50622	15.50	8.90	24.40	125
				2006-07	Ivth	863.20	382.41	47444	66.11	17.49	83.60	124
				2007-08	Vth	702.50	735.05	69938	150.63	43.20	193.83	95
				2008-09	Current	759.11	602.74	50866	142.04	83.42	225.46	84
26	Ghod	154.8	20500	2003-04	Ist	68.22	108.10	18891	5.46	53.07	58.53	175
				2004-05	Iind	154.80	121.19	22821	43.98	76.93	120.91	188
				2005-06	IIIrd	154.80	141.64	17335	69.56	106.28	175.84	122
				2006-07	Ivth	154.80	144.42	18932	40.39	147.34	187.73	131
				2007-08	Vth	154.80	141.34	16645	71.15	224.98	296.13	118
				2008-09	Current	154.80	169.02	17769	46.15	225.32	271.47	105
27	Krishna	602.73	69269	2003-04	Ist	443.02	261.68	49396	155.20	237.78	392.98	189
				2004-05	Iind	601.18	313.88	50996	25.41	152.18	177.59	162
				2005-06	IIIrd	602.73	357.36	30136	35.44	174.83	210.27	84
				2006-07	Ivth	602.11	411.72	26048	113.02	151.01	264.03	63
				2007-08	Vth	598.41	449.79	38826	102.12	270.57	372.69	86
				2008-09	Current	602.73	569.89	33954	76.96	158.54	235.50	60
28	Radhanagari	219.97	26560	2003-04	Ist	219.97	257.05	26274	213.97	587.90	801.87	102
				2004-05	Iind	219.97	280.11	27352	267.13	503.60	770.73	98
				2005-06	IIIrd	219.97	311.50	30327	202.91	496.02	698.93	97
				2006-07	Ivth	218.30	452.16	42495	120.43	359.21	479.64	94
				2007-08	Vth	214.67	307.73	42245	121.23	501.45	622.68	137
				2008-09	Current	217.64	340.54	42245	128.40	720.00	848.40	124

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1	2	3	4	5	6	7	8	9	10	11	12	13*
29	Tulashi	91.92	4720	2003-04	Ist	91.92	34.35	2560	18.64	0.00	18.64	75
				2004-05	Iind	91.92	34.98	2620	23.02	0.00	23.02	75
				2005-06	IIIrd	91.92	35.37	4032	14.15	7.48	21.63	114
				2006-07	Ivth	91.92	43.04	5028	12.30	2.54	14.84	117
				2007-08	Vth	91.92	60.89	3395	9.12	5.75	14.87	56
				2008-09	Current	91.92	37.79	2563	16.45	5.70	22.15	68
30	Warna	779.35	137254	2003-04	Ist	779.35	306.65	29151	147.26	134.64	281.90	95
				2004-05	Iind	779.35	256.10	25498	157.45	130.93	288.38	100
				2005-06	IIIrd	773.40	260.92	40433	195.48	78.93	274.41	155
				2006-07	Ivth	778.03	351.10	32971	94.21	80.70	174.91	94
				2007-08	Vth	746.52	273.55	40529	98.34	170.02	268.36	148
				2008-09	Current	779.35	296.15	38840	166.03	192.80	358.83	131
31	Dudhganga	679.11	73340	2003-04	Ist	675.03	147.40	14338	44.81	221.92	266.73	97
				2004-05	Iind	675.03	134.07	14217	90.50	228.15	318.65	106
				2005-06	IIIrd	672.67	211.57	28199	123.91	336.40	460.31	133
				2006-07	Ivth	674.49	264.97	26698	41.29	322.00	363.29	101
				2007-08	Vth	678.09	233.70	26293	50.87	534.00	584.87	113
				2008-09	Current	679.11	328.97	25748	25.08	619.76	644.84	78
32	Neera (Complex)	932.01	102576	2003-04	Ist	726.09	1034.84	111738	171.29	367.63	538.92	108
				2004-05	Iind	931.93	1220.76	135616	242.73	187.50	430.23	111
				2005-06	IIIrd	918.43	1184.00	127815	162.13	311.04	473.17	108
				2006-07	Ivth	931.94	1235.17	137872	165.90	363.55	529.45	112
				2007-08	Vth	931.93	1235.27	122016	328.62	437.00	765.62	99
				2008-09	Current	932.01	1331.25	145858	365.95	351.95	717.90	110

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1	2	3	4	5	6	7	8	9	10	11	12	13*
33	Khadakwasla	793.47	62146	2003-04	Ist	646.74	345.27	16213	94.45	1650.02	1744.47	47
				2004-05	Iind	717.49	317.33	48832	114.92	1401.39	1516.31	154
				2005-06	IIIrd	778.48	591.62	27405	187.39	2376.24	2563.63	46
				2006-07	Ivth	781.73	347.06	30477	217.08	2116.68	2333.76	88
				2007-08	Vth	775.62	362.62	38773	206.47	3013.00	3219.47	107
				2008-09	Current	793.47	361.47	45245	218.64	3009.00	3227.64	125
34	Pawana	241.11	5304	2003-04	Ist	232.54	25.31	3083	8.57	1835.70	1844.27	122
				2004-05	Iind	230.57	27.02	4441	7.34	2045.80	2053.14	164
				2005-06	IIIrd	235.68	21.99	4410	8.14	2294.61	2302.75	201
				2006-07	Ivth	241.11	10.78	1562	10.99	3022.17	3033.16	145
				2007-08	Vth	230.11	10.89	1812	10.41	4479.76	4490.17	166
				2008-09	Current	241.11	36.96	1982	12.14	4460.33	4472.47	54
35	Kal	528.19	12731	2003-04	Ist	427.71	115.40	4085	0.00	0.00	0.00	35
				2004-05	Iind	443.67	128.73	4170	14.20	2594.00	2608.20	32
				2005-06	IIIrd	322.07	116.10	4212	13.15	0.94	14.09	36
				2006-07	Ivth	398.50	110.02	4585	12.00	12.00	24.00	42
				2007-08	Vth	405.21	105.84	4100	15.30	2.00	17.30	39
				2008-09	Current	423.19	103.51	3400	12.70	3263.41	3276.11	33
36	Bhatsa	942.1	47860	2003-04	Ist	711.86	18.18	811	3.82	2966.69	2970.51	45
				2004-05	Iind	711.86	26.38	1191	9.25	2319.97	2329.22	45
				2005-06	IIIrd	838.63	33.14	1537	4.34	1270.07	1274.41	46
				2006-07	Ivth	810.83	50.40	2839	7.59	1968.55	1976.14	56
				2007-08	Vth	787.26	67.98	2566	6.07	2405.65	2411.72	38
				2008-09	Current	782.34	62.84	2667	5.52	8214.07	8219.59	42

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1	2	3	4	5	6	7	8	9	10	11	12	13*
37	Surya	286.31	8988	2003-04	Ist	176.48	70.48	2333	3.19	916.94	920.13	33
				2004-05	Iind	176.48	59.82	2478	5.23	873.00	878.23	41
				2005-06	IIIrd	158.69	86.66	2000	2.00	1000.00	1002.00	23
				2006-07	Ivth	216.31	85.00	4300	4.00	1141.00	1145.00	51
				2007-08	Vth	175.43	62.85	3580	3.27	1658.96	1662.23	57
				2008-09	Current	172.12	93.57	3683	5.98	1748.55	1754.53	39
38	Jayakwadi	2171	183322	2003-04	Ist	400.07	137.22	10595	219.89	1425.42	1645.31	77
				2004-05	Iind	2129.14	923.52	55604	79.07	1995.98	2075.05	60
				2005-06	IIIrd	1927.72	1115.79	100826	197.59	1421.44	1619.03	90
				2006-07	Ivth	2170.94	1210.14	113086	220.64	2915.73	3136.37	93
				2007-08	Vth	2170.94	1183.10	126048	199.06	3515.20	3714.26	107
				2008-09	Current	2170.94	1548.90	104339	331.79	4892.11	5223.90	67
39	Majalgaon	312	54737	2003-04	Ist	114.50	2.63	494	0.00	697.48	697.48	188
				2004-05	Iind	0.00	25.13	4089	4.85	73.58	78.43	163
				2005-06	IIIrd	312.00	195.71	10828	36.98	208.64	245.62	55
				2006-07	Ivth	312.00	216.48	13349	108.23	284.52	392.75	62
				2007-08	Vth	260.40	192.10	14979	49.21	86.08	135.29	78
				2008-09	Current	312.00	235.49	15465	86.35	25.39	111.74	66
40	Manjra	173.32	18223	2003-04	Ist	0.00	0.00	0	0.00	23.72	23.72	0
				2004-05	Iind	0.00	0.00	0	0.00	102.89	102.89	0
				2005-06	IIIrd	173.32	97.41	9252	93.99	95.36	189.35	95
				2006-07	Ivth	173.32	129.99	13008	81.28	51.29	132.57	100
				2007-08	Vth	173.32	104.55	12738	52.47	86.39	138.86	122
				2008-09	Current	173.32	119.90	12553	23.21	96.00	119.21	105

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non Irrigation Rs. In lakhs	Total recovery Irrigation + Non Irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13*
41	Lower Terna	113.95	11610	2003-04	Ist	0.00	0.00	0	0.00	0.47	0.47	0
				2004-05	Iind	0.00	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	37.52	12.59	2023	6.89	3.41	10.30	161
				2006-07	Ivth	91.22	28.11	3926	6.50	0.65	7.15	140
				2007-08	Vth	76.15	30.53	4616	2.03	1.15	3.18	151
				2008-09	Current	91.22	37.04	5154	17.25	0.96	18.21	139
42	Vishnupuri	80.79	28340	2003-04	Ist	81.37	51.27	9876	1.65	26.68	28.33	193
				2004-05	Iind	80.79	59.09	11638	24.72	91.54	116.26	197
				2005-06	IIIrd	80.79	65.78	10435	25.57	109.44	135.01	159
				2006-07	Ivth	39.49	96.20	12031	16.37	159.51	175.88	125
				2007-08	Vth	28.67	87.96	11025	21.16	196.63	217.79	125
				2008-09	Current	80.02	94.00	12046	11.11	0.00	11.11	128
43	Manar	138.21	23310	2003-04	Ist	111.03	83.13	11166	20.39	1.83	22.22	134
				2004-05	Iind	95.15	67.14	10950	20.23	2.32	22.55	163
				2005-06	IIIrd	138.21	116.87	9045	21.00	2.48	23.48	77
				2006-07	Ivth	137.08	124.56	15304	28.17	1.90	30.07	123
				2007-08	Vth	134.29	107.84	12495	15.58	8.63	24.21	116
				2008-09	Current	39.22	8.42	918	2.61	0.00	2.61	109
44	Purna	890.22	57988	2003-04	Ist	471.59	353.30	38757	123.76	127.32	251.08	110
				2004-05	Iind	51.51	31.10	4033	21.81	73.11	94.92	130
				2005-06	IIIrd	499.31	419.50	36975	78.67	3.90	82.57	88
				2006-07	Ivth	890.22	670.33	36451	60.93	2.00	62.93	54
				2007-08	Vth	437.70	373.42	23777	31.44	0.97	32.41	64
				2008-09	Current	265.32	219.68	20276	21.20	61.45	82.65	92

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non Irrigation Rs. In lakhs	Total recovery Irrigation + Non Irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13*
45	Upper Penganga	964.09	125495	2003-04	Ist	555.40	330.00	33913	144.54	30.19	174.73	103
				2004-05	Iind	137.10	42.93	10932	31.00	61.06	92.06	255
				2005-06	IIIrd	964.09	267.29	22052	8.19	22.17	30.36	83
				2006-07	Ivth	963.14	369.05	22843	1.07	1.07	2.14	62
				2007-08	Vth	871.48	419.20	21188	1.28	2.34	3.62	51
				2008-09	Current	411.27	302.17	23131	42.65	3.45	46.10	77

NOTE :

1 Change in col.No.3 of designed live storage in respective years if any is due to revision in designed live storage capicity

2 In col. No.8 of water used for irrigation is more than col.No. 7 of live storage as on 15th Oct. of respictive year is due to water utilisation in kharif of east Vidharbha Region.

3 Col.No.9 of irrigated area is more than Col.No.4 of ICA is due to increase of area in kharif seasion in east Vidharbha region.

4 Zero value in col. 13 due to non availability of water for irrigation.

Analysis of Medium projects in Maharashtra State (2003-04 to 2008-09)												
Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Morna	41.46	4633	2003-04	Ist	12.06	1.83	343	2.58	10.60	13.18	187
				2004-05	IInd	2.61	0.00	0	0.08	10.98	11.06	0
				2005-06	IIIrd	15.49	8.35	733	0.00	2.07	2.07	88
				2006-07	IVth	41.46	19.68	3150	1.19	2.84	4.03	160
				2007-08	Vth	41.46	33.29	3606	4.07	5.19	9.26	108
				2008-09	Current	8.65	3.82	840	1.21	3.74	4.95	220
2	Nirguna	28.85	5836	2003-04	Ist	18.66	10.16	918	5.77	2.10	7.87	90
				2004-05	IInd	3.37	0.00	0	0.00	3.12	3.12	0
				2005-06	IIIrd	21.33	16.87	1279	0.00	5.50	5.50	76
				2006-07	IVth	28.85	23.84	3293	4.27	1.17	5.44	138
				2007-08	Vth	20.03	14.85	2818	4.11	1.87	5.98	190
				2008-09	Current	14.48	9.69	1401	1.73	1.09	2.82	145
3	Uma	11.68	2241	2003-04	Ist	1.23	0.20	71	0.28	0.25	0.53	355
				2004-05	IInd	0.10	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	11.68	7.02	791	0.00	0.54	0.54	113
				2006-07	IVth	11.68	9.16	1533	2.12	2.44	4.56	167
				2007-08	Vth	11.68	10.32	2066	4.46	2.81	7.27	200
				2008-09	Current	0.24	0.00	0	0.26	1.05	1.31	0
4	Gyanganga	33.93	4249	2003-04	Ist	30.08	12.32	1236	4.35	77.82	82.17	100
				2004-05	IInd	6.48	0.00	0	0.09	45.07	45.16	0
				2005-06	IIIrd	4.69	0.00	0	0.00	5.98	5.98	0
				2006-07	IVth	33.93	9.91	1795	0.00	5.04	5.04	181
				2007-08	Vth	22.36	6.35	1428	0.00	53.00	53.00	225
				2008-09	Current	20.10	7.47	1188	0.00	72.69	72.69	159

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
5	Paldhag	7.51	1932	2003-04	Ist	7.51	4.85	835	2.86	2.19	5.05	172
				2004-05	IInd	2.14	0.00	0	0.03	0.26	0.29	0
				2005-06	IIIrd	0.70	0.00	0	0.01	0.50	0.51	0
				2006-07	IVth	7.51	5.39	922	0.00	0.00	0.00	171
				2007-08	Vth	7.23	4.87	809	0.00	2.62	2.62	166
				2008-09	Current	7.51	4.09	521	0.00	3.81	3.81	127
6	Mas	22.04	4415	2003-04	Ist	7.35	2.42	340	1.74	4.33	6.07	140
				2004-05	IInd	4.50	0.00	0	0.22	3.65	3.87	0
				2005-06	IIIrd	0.70	0.00	0	0.02	0.81	0.83	0
				2006-07	IVth	15.04	11.55	1673	0.00	0.92	0.92	145
				2007-08	Vth	12.96	8.23	1382	0.00	1.02	1.02	168
				2008-09	Current	7.85	2.64	564	0.00	5.40	5.40	214
7	Koradi	20.7	4061	2003-04	Ist	0.79	0.05	11	0.85	13.45	14.30	220
				2004-05	IInd	3.19	1.42	384	0.00	3.79	3.79	270
				2005-06	IIIrd	15.89	12.09	2700	4.00	3.91	7.91	223
				2006-07	IVth	20.70	16.95	4224	6.29	0.00	6.29	249
				2007-08	Vth	18.47	13.75	3051	0.00	0.54	0.54	222
				2008-09	Current	1.90	0.43	98	0.02	4.95	4.97	228
8	Shahanoor	46.04	7466	2003-04	Ist	NA	14.67	2343	5.59	26.90	32.49	160
				2004-05	IInd	17.90	5.51	463	2.07	23.82	25.89	84
				2005-06	IIIrd	46.04	12.53	962	6.98	18.92	25.90	77
				2006-07	IVth	46.04	15.49	2796	7.02	38.32	45.34	181
				2007-08	Vth	43.88	17.59	2847	6.82	52.61	59.43	162
				2008-09	Current	32.93	14.99	2495	7.01	13.44	20.45	166

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
9	Saikheda	27.18	3116	2003-04	Ist	NA	13.93	1248	3.91	11.04	14.95	90
				2004-05	IInd	12.89	0.00	0	0.70	1.38	2.08	0
				2005-06	IIIrd	27.18	11.86	831	0.02	0.00	0.02	70
				2006-07	IVth	27.18	13.87	1482	0.04	1.68	1.72	107
				2007-08	Vth	27.18	13.37	1726	0.13	3.18	3.31	129
				2008-09	Current	27.18	15.50	1450	1.06	6.92	7.98	94
10	Borgaon	6.61	2271	2003-04	Ist	NA	5.24	736	2.98	0.17	3.15	140
				2004-05	IInd	2.11	0.00	0	0.00	0.09	0.09	0
				2005-06	IIIrd	6.53	5.28	902	0.12	0.09	0.21	171
				2006-07	IVth	6.61	5.49	130	1.13	0.09	1.22	24
				2007-08	Vth	6.61	5.71	987	0.10	0.09	0.19	173
				2008-09	Current	1.69	0.41	182	0.10	0.09	0.19	444
11	Sonal	16.92	2447	2003-04	Ist	NA	2.90	521	1.55	0.00	1.55	180
				2004-05	IInd	0.20	0.20	41	0.00	0.00	0.00	205
				2005-06	IIIrd	16.92	10.46	1798	6.10	0.00	6.10	172
				2006-07	IVth	16.92	13.81	2507	7.19	0.00	7.19	182
				2007-08	Vth	16.92	13.05	2813	8.81	0.87	9.68	216
				2008-09	Current	0.00	0.00	0	0.00	1.02	1.02	0
12	Ekburji	11.97	2271	2003-04	Ist	NA	4.83	965	1.75	5.94	7.69	200
				2004-05	IInd	3.13	0.00	0	0.00	2.76	2.76	0
				2005-06	IIIrd	11.97	0.00	0	0.01	5.98	5.99	0
				2006-07	IVth	11.97	8.79	1338	2.41	4.69	7.10	152
				2007-08	Vth	11.97	7.92	1249	2.43	8.25	10.68	158
				2008-09	Current	9.29	2.82	753	1.02	11.09	12.11	267

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
13	Lowerpus	59.63	6600	2003-04	Ist	NA	36.24	3749	9.08	4.89	13.97	103
				2004-05	IInd	0.00	0.00	0	0.00	2.87	2.87	0
				2005-06	IIIrd	59.63	40.98	7829	7.50	7.62	15.12	191
				2006-07	Ivth	59.63	47.49	4098	0.76	3.50	4.26	86
				2007-08	Vth	59.50	40.55	4568	0.92	5.59	6.51	113
				2008-09	Current	54.30	34.72	4627	3.03	13.02	16.05	133
14	Mun	36.83	7804	2003-04	Ist	22.66	8.42	1422	11.72	0.00	11.72	169
				2004-05	IInd	7.79	4.79	757	4.50	3.04	7.54	158
				2005-06	IIIrd	3.85	0.02	31	0.55	4.68	5.23	1550
				2006-07	Ivth	36.83	28.79	2618	0.12	0.00	0.12	91
				2007-08	Vth	13.31	11.14	1056	9.87	0.71	10.58	95
				2008-09	Current	17.50	16.28	1903	6.02	1.16	7.18	117
15	Torna	7.9	1465	2003-04	Ist	NA	1.43	294	1.65	0.00	1.65	206
				2004-05	IInd	2.04	1.21	43	0.86	0.00	0.86	36
				2005-06	IIIrd	0.50	0.04	5	0.20	0.00	0.20	125
				2006-07	Ivth	7.90	5.65	462	0.35	0.00	0.35	82
				2007-08	Vth	1.26	0.04	27	0.00	0.00	0.00	675
				2008-09	Current	6.91	5.23	576	0.00	0.00	0.00	110
16	Adan	67.25	7804	2003-04	Ist	17.73	6.95	1212	1.30	12.15	13.45	174
				2004-05	IInd	1.25	0.00	0	0.00	4.63	4.63	0
				2005-06	IIIrd	67.25	39.35	1695	0.00	0.00	0.00	43
				2006-07	Ivth	67.25	56.26	4862	0.43	7.38	7.81	86
				2007-08	Vth	67.25	41.18	4281	0.48	12.14	12.62	104
				2008-09	Current	3.81	3.07	745	0.00	0.00	0.00	243

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
17	Navargaon	12.47	2056	2003-04	Ist	12.47	6.90	909	0.34	0.30	0.64	132
				2004-05	IInd	2.97	0.00	0	0.00	0.30	0.30	0
				2005-06	IIIrd	12.47	3.91	577	0.00	0.67	0.67	148
				2006-07	Ivth	12.47	3.15	436	0.00	0.00	0.00	138
				2007-08	Vth	12.17	4.30	479	0.00	1.00	1.00	111
				2008-09	Current	12.34	4.22	526	0.00	4.66	4.66	125
18	Bodalkasa	16.45	4047	2003-04	Ist	16.45	12.59	4498	4.62	0.00	4.62	357
				2004-05	IInd	10.74	10.69	2879	0.56	0.00	0.56	269
				2005-06	IIIrd	8.73	13.17	4295	7.55	0.00	7.55	326
				2006-07	Ivth	5.93	15.57	4303	4.45	0.81	5.26	276
				2007-08	Vth	4.04	12.07	4345	14.81	0.07	14.88	360
				2008-09	Current	1.75	10.05	4023	0.30	0.04	0.34	400
19	Chorakhmara	20.8	4047	2003-04	Ist	10.71	9.65	5044	4.43	0.00	4.43	523
				2004-05	IInd	4.44	4.44	1333	0.22	0.00	0.22	300
				2005-06	IIIrd	13.11	13.24	5409	7.87	0.00	7.87	409
				2006-07	Ivth	9.72	16.65	5064	3.55	0.01	3.56	304
				2007-08	Vth	2.24	11.74	5064	12.80	0.00	12.80	431
				2008-09	Current	0.98	9.73	3749	0.03	0.00	0.03	385
20	Chulband	21.46	3167	2003-04	Ist	19.99	20.54	3752	8.54	0.00	8.54	183
				2004-05	IInd	7.22	6.76	2433	1.10	0.00	1.10	360
				2005-06	IIIrd	14.27	16.60	3552	5.60	0.00	5.60	214
				2006-07	Ivth	11.39	16.66	3196	3.37	0.00	3.37	192
				2007-08	Vth	18.38	17.72	3533	12.34	0.00	12.34	199
				2008-09	Current	2.63	13.03	3009	1.40	0.00	1.40	231

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
21	Khairbanda	15.95	6109	2003-04	Ist	15.38	11.27	5422	7.21	0.00	7.21	481
				2004-05	IInd	4.48	3.59	1338	0.00	0.00	0.00	373
				2005-06	IIIrd	11.91	10.48	5647	11.23	0.00	11.23	539
				2006-07	Ivth	15.95	12.76	5239	5.73	0.00	5.73	410
				2007-08	Vth	6.93	9.09	5285	15.52	0.00	15.52	582
				2008-09	Current	1.23	8.44	5045	1.25	0.00	1.25	598
22	Sangrampur	3.87	1094	2003-04	Ist	3.67	3.39	1018	1.45	0.00	1.45	300
				2004-05	IInd	1.38	0.88	234	0.12	0.00	0.12	266
				2005-06	IIIrd	2.15	3.35	1161	2.48	0.00	2.48	347
				2006-07	Ivth	0.64	3.59	1099	1.29	0.00	1.29	306
				2007-08	Vth	1.17	2.58	1004	3.60	0.00	3.60	389
				2008-09	Current	0.16	1.96	792	0.01	0.00	0.01	404
23	Managadh	7.05	1700	2003-04	Ist	7.05	5.28	1065	0.80	0.00	0.80	202
				2004-05	IInd	3.36	3.15	800	0.12	0.00	0.12	254
				2005-06	IIIrd	4.90	5.82	1029	0.78	0.00	0.78	177
				2006-07	Ivth	4.30	4.85	1008	1.20	0.00	1.20	208
				2007-08	Vth	6.89	3.77	1251	2.31	0.00	2.31	332
				2008-09	Current	4.04	6.78	1045	0.15	0.00	0.15	154
24	Rengepar	3.57	870	2003-04	Ist	3.57	2.60	994	2.08	0.00	2.08	382
				2004-05	IInd	3.57	3.38	959	2.40	0.00	2.40	284
				2005-06	IIIrd	1.96	2.71	985	2.67	0.00	2.67	363
				2006-07	Ivth	1.42	3.44	943	1.84	0.00	1.84	274
				2007-08	Vth	2.78	2.92	980	2.57	0.00	2.57	336
				2008-09	Current	0.65	3.62	945	0.79	0.00	0.79	261

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
25	Chandpur	28.87	6271	2003-04	Ist	16.22	8.41	5767	7.76	0.00	7.76	686
				2004-05	IInd	8.14	8.04	2727	0.12	0.00	0.12	339
				2005-06	IIIrd	13.93	8.43	5998	6.96	0.00	6.96	711
				2006-07	Ivth	11.71	1.00	130	41.00	41.00	82.00	130
				2007-08	Vth	6.86	14.28	6390	9.23	0.00	9.23	448
				2008-09	Current	0.09	12.23	6448	2.91	0.00	2.91	527
26	Bagheda	4.53	1798	2003-04	Ist	4.04	7.07	1100	1.31	0.00	1.31	156
				2004-05	IInd	2.57	2.43	662	0.00	0.00	0.00	272
				2005-06	IIIrd	2.62	1.83	1284	0.58	0.00	0.58	704
				2006-07	Ivth	1.62	3.62	1192	0.83	0.05	0.88	329
				2007-08	Vth	1.22	3.12	1185	0.95	0.00	0.95	380
				2008-09	Current	0.13	1.68	1149	0.20	0.00	0.20	684
27	Betekar Bothali	3.66	1315	2003-04	Ist	3.66	5.10	793	0.99	0.00	0.99	155
				2004-05	IInd	3.49	3.49	750	0.01	0.00	0.01	215
				2005-06	IIIrd	1.79	3.36	769	1.18	0.00	1.18	229
				2006-07	Ivth	1.00	3.43	768	1.11	0.00	1.11	224
				2007-08	Vth	1.78	3.30	809	1.28	0.00	1.28	245
				2008-09	Current	0.00	1.54	767	0.35	0.00	0.35	498
28	Sorna	5.73	933	2003-04	Ist	5.73	6.30	981	2.01	0.00	2.01	156
				2004-05	IInd	3.57	3.57	662	0.01	0.00	0.01	186
				2005-06	IIIrd	3.70	3.19	966	2.16	0.00	2.16	303
				2006-07	Ivth	3.04	3.67	994	2.72	0.00	2.72	271
				2007-08	Vth	2.58	4.12	1042	1.89	0.00	1.89	253
				2008-09	Current	0.00	3.22	875	0.89	0.00	0.89	272

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
29	Chandrabhaga	8.26	3181	2003-04	Ist	8.26	6.25	745	1.84	0.00	1.84	119
				2004-05	IInd	3.87	1.71	524	0.66	0.02	0.68	306
				2005-06	IIIrd	8.26	4.98	571	0.29	0.03	0.32	115
				2006-07	Ivth	8.26	6.12	547	1.57	0.33	1.90	89
				2007-08	Vth	7.64	6.23	574	2.65	0.33	2.98	92
				2008-09	Current	0.73	0.79	70	0.02	0.21	0.23	89
30	Mordham	4.95	1315	2003-04	Ist	4.95	4.95	337	1.00	0.08	1.08	68
				2004-05	IInd	1.94	1.21	361	0.76	0.07	0.83	300
				2005-06	IIIrd	4.95	2.92	274	0.47	0.08	0.55	94
				2006-07	Ivth	4.95	3.62	349	0.96	0.10	1.06	96
				2007-08	Vth	4.46	3.37	325	1.75	0.10	1.85	97
				2008-09	Current	0.93	0.68	101	0.02	0.05	0.07	148
31	Kesarnala	3.93	780	2003-04	Ist	2.20	1.54	159	0.14	0.03	0.17	103
				2004-05	IInd	0.98	0.28	136	0.04	0.34	0.38	486
				2005-06	IIIrd	3.93	2.09	214	0.02	0.36	0.38	102
				2006-07	Ivth	2.45	1.99	235	0.60	0.47	1.07	118
				2007-08	Vth	3.52	3.40	324	0.99	0.00	0.99	95
				2008-09	Current	0.63	6.57	522	0.05	0.00	0.05	79
32	Umri	5.14	12	2003-04	Ist	5.14	2.37	396	0.92	0.00	0.92	167
				2004-05	IInd	2.85	1.85	505	0.03	0.00	0.03	273
				2005-06	IIIrd	5.14	2.26	368	0.43	0.00	0.43	163
				2006-07	Ivth	3.50	3.07	395	1.14	0.00	1.14	129
				2007-08	Vth	4.51	4.89	393	0.58	0.00	0.58	80
				2008-09	Current	4.76	3.56	450	0.19	0.00	0.19	126

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
33	Kolar	31.32	5940	2003-04	Ist	24.45	13.12	1460	1.50	10.97	12.47	111
				2004-05	IInd	9.16	2.77	1418	1.16	46.52	47.68	513
				2005-06	IIIrd	31.32	13.31	1232	0.63	9.98	10.61	93
				2006-07	Ivth	27.74	20.75	2814	2.83	9.81	12.64	136
				2007-08	Vth	27.26	21.90	2587	0.62	15.77	16.39	118
				2008-09	Current	17.65	13.96	2148	0.70	4.92	5.62	154
34	Khekranala	23.81	2610	2003-04	Ist	19.64	8.76	1580	0.74	0.00	0.74	180
				2004-05	IInd	13.15	3.52	866	0.05	51.00	51.05	246
				2005-06	IIIrd	22.14	13.76	325	0.27	0.00	0.27	24
				2006-07	Ivth	21.72	16.99	522	0.58	0.00	0.58	31
				2007-08	Vth	20.86	14.42	517	1.18	0.00	1.18	36
				2008-09	Current	8.68	6.57	522	0.05	0.00	0.05	79
35	Wunna	21.64	1214	2003-04	Ist	NA	2.40	234	0.04	185.67	185.71	98
				2004-05	IInd	10.41	0.15	61	0.04	228.56	228.60	407
				2005-06	IIIrd	11.06	0.13	22	0.02	211.26	211.28	169
				2006-07	Ivth	6.17	0.36	72	0.05	228.28	228.33	202
				2007-08	Vth	21.30	3.53	240	0.70	250.11	250.81	68
				2008-09	Current	12.39	0.18	44	0.07	259.35	259.42	244
36	Kanholibara	20.49	3371	2003-04	Ist	18.15	15.12	1244	1.64	0.69	2.33	82
				2004-05	IInd	14.27	7.22	1030	1.95	0.00	1.95	143
				2005-06	IIIrd	19.71	14.72	1436	1.73	0.00	1.73	98
				2006-07	Ivth	20.48	15.42	1683	3.11	0.00	3.11	109
				2007-08	Vth	20.49	13.05	1675	2.60	0.00	2.60	128
				2008-09	Current	18.00	13.86	1781	0.02	0.00	0.02	128

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
37	Pandhrabodi	13.14	862	2003-04	Ist	13.14	8.02	1677	3.98	2.38	6.36	209
				2004-05	IInd	13.14	5.86	1690	2.60	2.32	4.92	288
				2005-06	IIIrd	12.01	8.03	1437	3.64	2.71	6.35	179
				2006-07	Ivth	11.16	7.42	1422	2.11	3.50	5.61	192
				2007-08	Vth	11.66	7.60	1427	2.00	4.49	6.49	188
				2008-09	Current	3.33	0.00	0	0.00	0.00	0.00	0
38	Makardhokda	25.9	5477	2003-04	Ist	19.05	24.23	3473	7.01	1.22	8.23	143
				2004-05	IInd	14.38	15.08	2691	4.17	3.01	7.18	178
				2005-06	IIIrd	15.38	21.92	2490	3.09	2.11	5.20	114
				2006-07	Ivth	25.90	21.11	2890	7.34	2.41	9.75	137
				2007-08	Vth	25.90	25.02	2760	6.00	5.89	11.89	110
				2008-09	Current	4.08	1.86	311	0.04	10.74	10.78	167
39	Ghorazari	43.16	3846	2003-04	Ist	33.25	20.07	3846	12.70	0.00	12.70	192
				2004-05	IInd	23.22	19.36	5729	9.33	0.69	10.02	296
				2005-06	IIIrd	28.92	6.29	762	1.53	2.12	3.65	121
				2006-07	Ivth	19.26	29.60	5912	9.92	1.75	11.67	200
				2007-08	Vth	26.54	34.48	5868	3.38	1.81	5.19	170
				2008-09	Current	2.77	20.49	5844	0.63	0.18	0.81	285
40	Naleshwar	10.23	1888	2003-04	Ist	8.18	12.19	1688	4.42	0.00	4.42	138
				2004-05	IInd	8.18	14.20	2843	4.35	0.39	4.74	200
				2005-06	IIIrd	5.79	14.35	2840	3.83	0.55	4.38	198
				2006-07	Ivth	8.48	19.95	2850	3.89	0.48	4.37	143
				2007-08	Vth	9.36	13.83	2795	1.63	0.18	1.81	202
				2008-09	Current	0.97	11.88	2876	1.93	0.02	1.95	242

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
41	Chandai	10.69	2056	2003-04	Ist	10.69	7.37	1367	2.79	0.00	2.79	185
				2004-05	IInd	10.69	7.57	1102	1.03	0.35	1.38	146
				2005-06	IIIrd	8.95	10.57	1369	1.53	0.53	2.06	129
				2006-07	Ivth	9.52	5.93	1340	1.80	0.27	2.07	226
				2007-08	Vth	9.52	7.32	1336	0.79	0.42	1.21	183
				2008-09	Current	1.12	4.89	1178	0.29	0.13	0.42	241
42	Chargaon	19.87	1500	2003-04	Ist	19.87	16.36	2120	3.42	0.00	3.42	130
				2004-05	IInd	18.43	13.23	1724	2.49	0.48	2.97	130
				2005-06	IIIrd	17.73	17.22	1924	1.62	1.41	3.03	112
				2006-07	Ivth	18.24	16.44	1825	2.29	0.85	3.14	111
				2007-08	Vth	18.28	16.41	916	1.89	2.26	4.15	56
				2008-09	Current	8.80	11.94	873	2.53	0.07	2.60	73
43	Labhansarad	7.35	2024	2003-04	Ist	2.35	6.52	2000	2.16	0.00	2.16	307
				2004-05	IInd	4.80	3.17	442	0.81	0.19	1.00	139
				2005-06	IIIrd	7.24	6.90	1119	1.21	0.45	1.66	162
				2006-07	Ivth	7.35	6.70	1055	2.44	0.65	3.09	157
				2007-08	Vth	7.35	6.07	877	1.01	0.39	1.40	144
				2008-09	Current	7.35	4.18	949	0.81	0.63	1.44	227
44	Amal Nala	24.48	2962	2003-04	Ist	21.20	14.32	3900	2.99	158.68	161.67	272
				2004-05	IInd	5.20	0.00	0	0.00	163.15	163.15	0
				2005-06	IIIrd	21.20	12.45	2017	2.50	174.80	177.30	162
				2006-07	Ivth	24.48	16.05	2051	5.21	176.08	181.29	128
				2007-08	Vth	21.20	15.83	2571	2.38	204.81	207.19	162
				2008-09	Current	16.24	9.98	1768	2.71	189.31	192.02	177

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
45	Panchadhara	10.39	1822	2003-04	Ist	6.20	3.75	724	1.10	0.00	1.10	193
				2004-05	IInd	3.81	1.72	245	0.46	0.00	0.46	142
				2005-06	IIIrd	10.10	6.52	480	0.31	0.00	0.31	74
				2006-07	IVth	9.80	9.21	525	0.40	0.00	0.40	57
				2007-08	Vth	10.39	9.85	514	1.73	0.13	1.86	52
				2008-09	Current	9.82	9.82	500	1.27	0.11	1.38	51
46	Pothra	34.72	8948	2003-04	Ist	NA	25.41	2588	2.82	0.00	2.82	102
				2004-05	IInd	19.39	11.54	1550	0.91	0.00	0.91	134
				2005-06	IIIrd	34.17	25.34	2343	0.86	0.00	0.86	92
				2006-07	IVth	34.58	22.63	2080	2.36	0.90	3.26	92
				2007-08	Vth	34.72	24.32	2054	2.71	1.78	4.49	84
				2008-09	Current	23.38	16.55	1759	2.96	2.05	5.01	106
47	Dongargaon (Chandrapur)	4.44	631	2003-04	Ist	2.96	2.55	730	1.18	0.07	1.25	286
				2004-05	IInd	0.83	0.44	216	0.31	0.00	0.31	491
				2005-06	IIIrd	4.44	3.52	201	0.03	0.00	0.03	57
				2006-07	IVth	4.44	2.81	206	0.31	0.00	0.31	73
				2007-08	Vth	4.44	2.87	215	0.62	0.07	0.69	75
				2008-09	Current	4.39	3.38	220	0.51	0.07	0.58	65
48	Manyad	40.27	4864	2003-04	Ist	11.68	11.06	1761	7.27	0.45	7.72	159
				2004-05	IInd	40.27	36.92	4786	3.56	0.32	3.88	130
				2005-06	IIIrd	20.02	16.66	1860	4.03	0.80	4.83	112
				2006-07	IVth	40.27	35.60	4105	0.95	9.48	10.43	115
				2007-08	Vth	40.27	35.10	3941	4.47	3.55	8.02	112
				2008-09	Current	40.27	35.66	3502	5.55	7.88	13.43	98

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
49	Bori	25.15	4553	2003-04	Ist	25.15	9.07	1127	2.01	4.03	6.04	124
				2004-05	IInd	2.11	0.45	2795	0.31	15.29	15.60	6211
				2005-06	IIIrd	11.35	1.35	1515	0.31	7.68	7.99	1122
				2006-07	Ivth	25.15	16.35	1905	0.07	17.70	17.77	117
				2007-08	Vth	25.15	20.63	2161	7.44	8.91	16.35	105
				2008-09	Current	25.15	15.00	1662	5.26	24.03	29.29	111
50	Bhokarbari	6.54	1205	2003-04	Ist	6.54	2.00	192	0.49	0.00	0.49	96
				2004-05	IInd	1.76	0.07	18	0.49	0.00	0.49	257
				2005-06	IIIrd	2.77	1.32	134	0.05	0.21	0.26	102
				2006-07	Ivth	6.54	4.56	406	0.14	1.60	1.74	89
				2007-08	Vth	6.54	4.87	415	1.15	0.45	1.60	85
				2008-09	Current	3.14	2.05	192	0.49	1.07	1.56	94
51	Suki	39.85	5128	2003-04	Ist	39.85	16.72	2030	10.15	5.75	15.90	121
				2004-05	IInd	39.58	20.84	2371	8.55	6.40	14.95	114
				2005-06	IIIrd	39.66	23.04	2604	16.16	9.60	25.76	113
				2006-07	Ivth	39.85	22.65	872	4.17	6.15	10.32	38
				2007-08	Vth	39.85	33.38	945	3.91	4.62	8.53	28
				2008-09	Current	39.85	35.56	926	3.75	10.87	14.62	26
52	Abhora	6.02	1115	2003-04	Ist	6.02	3.00	412	2.61	0.00	2.61	137
				2004-05	IInd	6.02	3.86	547	2.43	0.00	2.43	142
				2005-06	IIIrd	3.95	3.02	310	4.64	0.00	4.64	103
				2006-07	Ivth	6.02	2.91	275	0.41	0.00	0.41	95
				2007-08	Vth	6.02	2.35	400	0.87	0.00	0.87	170
				2008-09	Current	6.02	3.30	355	0.81	0.00	0.81	108

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
53	Agnawati	2.76	605	2003-04	Ist	2.76	0.64	94	0.56	0.00	0.56	147
				2004-05	IInd	2.76	0.12	47	0.07	0.00	0.07	392
				2005-06	IIIrd	2.18	0.12	22	0.08	0.34	0.42	183
				2006-07	Ivth	2.76	0.60	79	0.52	0.89	1.41	132
				2007-08	Vth	0.00	0.00	0	0.00	0.77	0.77	0
				2008-09	Current	2.76	1.36	158	0.00	3.40	3.40	116
54	Hiwara	9.6	2231	2003-04	Ist	9.60	5.22	594	1.13	0.00	1.13	114
				2004-05	IInd	9.60	5.19	731	1.31	0.00	1.31	141
				2005-06	IIIrd	6.11	1.80	262	0.00	1.54	1.54	146
				2006-07	Ivth	9.60	5.19	679	0.09	2.26	2.35	131
				2007-08	Vth	3.78	1.46	262	0.52	5.42	5.94	179
				2008-09	Current	9.60	6.59	844	0.20	4.86	5.06	128
55	Tondapur	4.64	1060	2003-04	Ist	4.64	0.75	305	0.81	1.06	1.87	407
				2004-05	IInd	4.64	0.44	284	0.68	1.12	1.80	645
				2005-06	IIIrd	0.00	0.00	0	0.00	1.78	1.78	0
				2006-07	Ivth	4.63	0.35	113	0.02	3.15	3.17	323
				2007-08	Vth	3.10	0.13	74	0.07	2.69	2.76	569
				2008-09	Current	0.98	0.00	0	0.00	1.52	1.52	0
56	Kanoli	8.45	1363	2003-04	Ist	NA	3.16	650	1.98	0.00	1.98	206
				2004-05	IInd	3.75	1.83	345	0.90	1.00	1.90	189
				2005-06	IIIrd	6.59	4.45	602	0.85	13.50	14.35	135
				2006-07	Ivth	8.45	5.48	415	1.33	6.92	8.25	76
				2007-08	Vth	8.45	8.32	890	1.21	0.41	1.62	107
				2008-09	Current	8.45	9.13	1331	1.03	2.46	3.49	146

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
57	Burai	14.21	2760	2003-04	Ist	NA	11.20	1462	1.85	0.00	1.85	131
				2004-05	IInd	14.21	9.34	1431	3.64	0.00	3.64	153
				2005-06	IIIrd	14.21	12.68	1667	4.10	0.00	4.10	131
				2006-07	Ivth	14.21	13.73	2619	3.49	0.00	3.49	191
				2007-08	Vth	14.21	12.90	3767	2.24	0.00	2.24	292
				2008-09	Current	14.21	12.57	2368	1.30	0.00	1.30	188
58	Malangaon	11.33	1587	2003-04	Ist	NA	6.81	804	2.01	0.00	2.01	118
				2004-05	IInd	11.33	6.86	855	2.16	0.70	2.86	125
				2005-06	IIIrd	11.32	6.02	985	2.10	4.37	6.47	164
				2006-07	Ivth	11.32	7.90	1325	2.46	1.20	3.66	168
				2007-08	Vth	11.33	8.34	1090	2.38	0.00	2.38	131
				2008-09	Current	11.33	7.35	921	1.55	1.81	3.36	125
59	Panzra	35.63	6868	2003-04	Ist	NA	19.42	4579	7.07	0.00	7.07	236
				2004-05	IInd	35.63	26.49	3748	8.95	1.00	9.95	141
				2005-06	IIIrd	35.63	22.82	4032	10.78	7.99	18.77	177
				2006-07	Ivth	35.63	22.98	4507	8.86	25.28	34.14	196
				2007-08	Vth	35.63	21.89	2994	9.28	15.27	24.55	137
				2008-09	Current	35.63	25.93	3538	5.63	0.91	6.54	7331
60	Aner	59.21	7180	2003-04	Ist	NA	24.22	2272	11.71	0.00	11.71	94
				2004-05	IInd	21.39	30.39	3358	12.50	0.00	12.50	110
				2005-06	IIIrd	59.20	33.86	3695	9.54	39.02	48.56	109
				2006-07	Ivth	59.20	48.78	3286	14.07	0.00	14.07	67
				2007-08	Vth	59.21	45.75	4360	11.01	0.00	11.01	95
				2008-09	Current	59.21	46.62	3106	11.00	0.00	11.00	67

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
61	Karwand	21.39	4534	2003-04	Ist	NA	8.91	1011	5.57	2.00	7.57	113
				2004-05	IInd	21.39	6.45	987	4.50	2.80	7.30	153
				2005-06	IIIrd	10.41	5.19	756	9.85	8.25	18.10	146
				2006-07	Ivth	21.39	7.64	1281	4.70	13.41	18.11	168
				2007-08	Vth	20.73	9.72	1612	3.00	9.58	12.58	166
				2008-09	Current	18.04	14.87	3145	2.87	11.09	13.96	211
62	Rangawali	12.89	3124	2003-04	Ist	NA	10.96	1407	5.24	1.20	6.44	128
				2004-05	IInd	12.89	9.57	1532	2.34	2.55	4.89	160
				2005-06	IIIrd	12.82	10.81	2203	3.24	0.66	3.90	204
				2006-07	Ivth	12.89	14.83	1938	2.63	1.83	4.46	131
				2007-08	Vth	12.89	12.16	2052	3.31	0.00	3.31	169
				2008-09	Current	12.89	14.55	2513	4.80	0.00	4.80	173
63	Haranbari	33.02	9726	2003-04	Ist	33.02	12.34	3471	4.17	0.57	4.74	281
				2004-05	IInd	33.02	15.74	2609	2.22	0.76	2.98	166
				2005-06	IIIrd	33.02	17.95	2563	6.02	8.87	14.89	143
				2006-07	Ivth	33.02	16.26	3089	5.54	8.07	13.61	190
				2007-08	Vth	33.02	16.63	2924	4.30	27.27	31.57	176
				2008-09	Current	33.02	15.80	2554	3.28	21.64	24.92	162
64	Kelzar	16.20	3394	2003-04	Ist	16.20	8.75	2291	3.10	2.55	5.65	262
				2004-05	IInd	16.20	10.51	2417	2.58	3.47	6.05	230
				2005-06	IIIrd	16.20	4.29	1371	4.31	12.02	16.33	320
				2006-07	Ivth	16.20	6.26	1512	2.04	13.06	15.10	242
				2007-08	Vth	16.09	7.50	1893	2.65	14.69	17.34	252
				2008-09	Current	16.20	10.72	1897	4.46	13.38	17.84	177

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
65	Nagyasakya	11.24	2400	2003-04	Ist	2.34	3.07	610	1.79	0.21	2.00	199
				2004-05	IInd	11.24	10.23	1112	0.01	1.55	1.56	109
				2005-06	IIIrd	3.99	6.18	886	2.52	8.97	11.49	143
				2006-07	Ivth	11.24	9.05	1265	1.37	0.00	1.37	140
				2007-08	Vth	11.24	9.03	1638	3.09	0.00	3.09	181
				2008-09	Current	11.24	11.55	1372	3.50	0.00	3.50	119
66	Alandi	27.46	6296	2003-04	Ist	27.46	17.62	2025	18.67	0.00	18.67	115
				2004-05	IInd	27.46	20.21	1940	15.90	0.00	15.90	96
				2005-06	IIIrd	27.46	19.71	2376	15.60	0.00	15.60	121
				2006-07	Ivth	27.46	20.64	2258	15.00	0.00	15.00	109
				2007-08	Vth	27.46	21.66	2288	15.44	0.00	15.44	106
				2008-09	Current	27.46	21.02	2173	1.21	0.00	1.21	103
67	Bhojapur	10.21	4500	2003-04	Ist	9.54	7.07	2357	3.36	0.00	3.36	333
				2004-05	IInd	10.21	8.43	1057	3.48	0.00	3.48	125
				2005-06	IIIrd	9.93	9.48	1028	2.45	0.64	3.09	108
				2006-07	Ivth	10.10	7.90	829	2.90	2.77	5.67	105
				2007-08	Vth	10.19	9.45	820	2.59	3.71	6.30	87
				2008-09	Current	10.11	16.65	982	0.04	0.00	0.04	59
68	Adhala	27.60	3914	2003-04	Ist	NA	22.02	2675	9.99	0.00	9.99	121
				2004-05	IInd	27.60	21.41	3475	10.50	0.00	10.50	162
				2005-06	IIIrd	27.60	25.52	3060	11.70	1.57	13.27	120
				2006-07	Ivth	27.60	24.47	2432	6.96	1.63	8.59	99
				2007-08	Vth	27.60	22.65	2306	9.62	0.02	9.64	102
				2008-09	Current	27.60	23.97	1752	0.98	0.00	0.98	73

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
69	Ghatshil Pargaon	8.50	1660	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.00	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	0.00	1.29	277	0.04	0.14	0.18	215
				2006-07	IVth	8.50	6.34	832	0.85	0.00	0.85	131
				2007-08	Vth	7.48	6.13	1117	0.55	0.14	0.69	182
				2008-09	Current	4.76	5.55	943	0.80	0.25	1.05	170
70	Mand Ohol	8.78	2266	2003-04	Ist	1.09	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	8.78	6.59	506	0.27	0.00	0.27	77
				2005-06	IIIrd	8.78	6.59	986	0.49	0.31	0.80	150
				2006-07	IVth	8.78	6.90	602	0.51	0.45	0.96	87
				2007-08	Vth	8.78	7.38	576	0.54	0.51	1.05	78
				2008-09	Current	8.78	6.60	500	0.40	1.51	1.91	76
71	Ekrukh	61.16	6944	2003-04	Ist	0.00	0.00	0	0.52	2.45	2.97	0
				2004-05	IInd	26.36	2.99	1427	2.49	0.00	2.49	477
				2005-06	IIIrd	27.49	4.55	654	1.05	10.51	11.56	144
				2006-07	IVth	12.98	2.89	482	2.51	33.82	36.33	167
				2007-08	Vth	0.79	0.31	63	0.57	6.00	6.57	203
				2008-09	Current	61.15	6.71	1018	0.64	5.42	6.06	152
72	Jawalgaon	25.21	6192	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	5.56	3.55	1240	1.21	0.00	1.21	349
				2005-06	IIIrd	19.11	12.48	1182	1.08	0.12	1.20	95
				2006-07	IVth	24.39	11.53	1339	2.50	1.54	4.04	116
				2007-08	Vth	17.80	13.38	2137	3.09	3.99	7.08	160
				2008-09	Current	25.21	11.81	1656	0.37	3.79	4.16	140

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
73	Hingani (p)	31.97	6592	2003-04	Ist	0.00	0.00	0	0.05	1.50	1.55	0
				2004-05	IInd	2.44	2.65	323	1.12	2.62	3.74	122
				2005-06	IIIrd	31.97	13.79	1409	0.62	4.96	5.58	102
				2006-07	Ivth	31.97	17.71	2518	3.33	1.48	4.81	142
				2007-08	Vth	31.97	21.77	3105	2.32	2.14	4.46	143
				2008-09	Current	31.97	10.93	1429	0.93	2.79	3.72	131
74	Budhihal	19.03	5578	2003-04	Ist	0.40	0.00	0	0.03	0.00	0.03	0
				2004-05	IInd	1.88	0.30	297	0.00	0.00	0.00	990
				2005-06	IIIrd	0.00	0.03	33	0.08	0.00	0.08	1100
				2006-07	Ivth	0.00	0.05	60	0.47	0.00	0.47	1111
				2007-08	Vth	0.00	1.87	606	1.82	0.00	1.82	325
				2008-09	Current	3.70	2.13	1061	1.60	0.27	1.87	498
75	Mangi	30.53	4646	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	2.00	1.40	487	0.92	0.00	0.92	349
				2005-06	IIIrd	14.11	12.42	1767	0.30	0.00	0.30	142
				2006-07	Ivth	29.94	20.76	3127	4.95	0.68	5.63	151
				2007-08	Vth	17.40	14.49	2026	6.07	7.06	13.13	140
				2008-09	Current	30.40	21.47	2997	0.49	3.19	3.68	140
76	Kasari	77.96	9995	2003-04	Ist	76.90	53.51	5835	14.32	0.00	14.32	109
				2004-05	IInd	76.90	22.25	6210	26.27	0.00	26.27	279
				2005-06	IIIrd	77.96	47.03	6476	19.77	2.30	22.07	138
				2006-07	Ivth	77.96	50.01	7063	19.81	3.81	23.62	141
				2007-08	Vth	77.96	65.10	7437	16.92	6.13	23.05	114
				2008-09	Current	77.96	73.33	7963	26.74	6.13	32.87	109

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
77	Patgaon	104.8	10000	2003-04	Ist	79.86	39.95	2602	15.62	0.00	15.62	65
				2004-05	IInd	79.86	46.37	2536	21.56	12.11	33.67	55
				2005-06	IIIrd	79.86	55.14	4717	43.77	15.83	59.60	86
				2006-07	Ivth	98.49	55.80	5170	14.18	5.25	19.43	93
				2007-08	Vth	104.77	53.40	5376	13.48	22.74	36.22	101
				2008-09	Current	104.77	67.93	5146	38.90	15.83	54.73	76
78	Jangamhatti	33.21	4457	2003-04	Ist	26.15	20.31	2923	10.25	13.14	23.39	144
				2004-05	IInd	26.15	28.02	2684	20.34	13.21	33.55	96
				2005-06	IIIrd	26.15	23.97	5080	0.60	13.82	14.42	212
				2006-07	Ivth	31.88	28.24	5454	5.00	16.52	21.52	193
				2007-08	Vth	26.87	26.74	4836	34.24	39.48	73.72	181
				2008-09	Current	33.21	33.21	4395	29.07	37.64	66.71	132
79	Kumbhi	76.5	9170	2003-04	Ist	28.54	19.17	2088	22.22	0.00	22.22	109
				2004-05	IInd	54.86	29.56	2518	24.77	0.00	24.77	85
				2005-06	IIIrd	60.18	27.70	4435	20.10	3.00	23.10	160
				2006-07	Ivth	60.58	37.79	4731	4.55	7.30	11.85	125
				2007-08	Vth	68.08	52.47	4268	3.96	13.00	16.96	81
				2008-09	Current	76.50	65.67	5659	9.15	38.77	47.92	86
80	Chikotra	43.05	6863	2003-04	Ist	31.17	8.86	1211	8.47	0.00	8.47	137
				2004-05	IInd	31.17	18.23	1166	7.37	0.00	7.37	64
				2005-06	IIIrd	37.32	21.48	3040	20.18	14.47	34.65	142
				2006-07	Ivth	37.31	24.93	3688	19.45	4.75	24.20	148
				2007-08	Vth	37.18	25.45	4085	17.36	0.89	18.25	161
				2008-09	Current	43.05	29.25	4221	16.00	4.50	20.50	144

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
81	Chitri	52.48	9160	2003-04	Ist	40.66	35.75	3584	34.69	17.53	52.22	100
				2004-05	IInd	52.36	45.49	7400	46.57	16.77	63.34	163
				2005-06	IIIrd	52.48	44.02	7372	5.31	18.93	24.24	167
				2006-07	Ivth	52.48	42.12	10578	12.58	19.91	32.49	251
				2007-08	Vth	52.48	42.50	9136	44.83	40.49	85.32	215
				2008-09	Current	52.48	49.28	10339	48.34	35.19	83.53	210
82	Kadavi	70.56	9908	2003-04	Ist	70.56	8.08	1333	3.45	0.00	3.45	165
				2004-05	IInd	70.56	18.98	1700	8.94	0.00	8.94	90
				2005-06	IIIrd	69.77	23.13	2491	4.83	1.50	6.33	108
				2006-07	Ivth	70.56	15.22	1698	5.01	0.00	5.01	112
				2007-08	Vth	70.56	22.98	2961	9.91	4.21	14.12	129
				2008-09	Current	70.56	22.93	2437	9.93	8.70	18.63	106
83	Vadiwale	30.39	4468	2003-04	Ist	30.39	33.36	4338	12.04	52.27	64.31	130
				2004-05	IInd	29.39	21.78	2501	8.12	54.40	62.52	115
				2005-06	IIIrd	30.39	24.02	3166	5.40	48.16	53.56	132
				2006-07	Ivth	30.39	21.33	2951	1.31	1.25	2.56	138
				2007-08	Vth	29.90	22.04	3411	8.00	59.21	67.21	155
				2008-09	Current	30.39	30.08	6194	8.97	158.27	167.24	206
84	Nher	11.79	2636	2003-04	Ist	1.83	0.26	40	0.00	0.01	0.01	154
				2004-05	IInd	11.79	5.12	1483	1.50	0.00	1.50	290
				2005-06	IIIrd	11.79	5.08	740	1.30	0.52	1.82	146
				2006-07	Ivth	11.79	4.26	735	2.14	0.39	2.53	173
				2007-08	Vth	11.79	5.62	803	2.85	0.07	2.92	143
				2008-09	Current	3.46	0.00	0	0.00	0.43	0.43	0

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
85	Ranand	6.42	1093	2003-04	Ist	3.85	1.11	167	0.33	0.00	0.33	150
				2004-05	IInd	6.42	1.27	214	0.40	0.00	0.40	169
				2005-06	IIIrd	4.98	2.38	259	1.17	0.00	1.17	109
				2006-07	Ivth	6.42	2.14	291	0.95	0.00	0.95	136
				2007-08	Vth	6.42	1.65	309	1.75	0.00	1.75	187
				2008-09	Current	6.42	2.37	427	0.80	0.00	0.80	180
86	Mhaswad	46.22	4049	2003-04	Ist	5.40	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	23.56	20.29	5804	2.92	0.00	2.92	286
				2005-06	IIIrd	8.35	6.66	2794	5.75	0.00	5.75	420
				2006-07	Ivth	14.41	12.08	2660	1.29	0.00	1.29	220
				2007-08	Vth	44.33	22.70	3357	6.32	0.00	6.32	148
				2008-09	Current	44.33	30.91	5479	6.38	0.00	6.38	177
87	Tisangi	24.46	4049	2003-04	Ist	1.21	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	24.46	17.18	2475	4.41	0.28	4.69	144
				2005-06	IIIrd	24.09	13.70	1869	6.00	5.55	11.55	136
				2006-07	Ivth	24.40	17.44	2406	7.56	5.38	12.94	138
				2007-08	Vth	24.46	15.23	1767	10.00	3.00	13.00	116
				2008-09	Current	24.46	15.19	1578	11.15	1.19	12.34	104
88	Khairy	13.74	2318	2003-04	Ist	0.59	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	4.94	1.98	1113	0.47	0.00	0.47	562
				2005-06	IIIrd	13.74	7.87	1246	0.68	0.00	0.68	158
				2006-07	Ivth	13.73	3.48	1123	2.16	0.09	2.25	322
				2007-08	Vth	13.74	8.51	1326	2.58	0.20	2.78	156
				2008-09	Current	12.64	5.70	768	4.14	0.26	4.40	135

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
89	Sina	52.30	8445	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	37.04	18.91	2276	3.41	0.30	3.71	120
				2005-06	IIIrd	9.46	11.82	948	0.79	0.33	1.12	80
				2006-07	Ivth	52.30	29.53	3107	5.27	0.61	5.88	105
				2007-08	Vth	52.30	46.08	3722	6.80	1.20	8.00	81
				2008-09	Current	52.30	45.71	4273	6.36	1.41	7.77	93
90	Wandri	35.94	4088	2003-04	Ist	35.94	19.31	700	1.30	0.00	1.30	36
				2004-05	IInd	35.94	20.01	789	1.30	0.00	1.30	39
				2005-06	IIIrd	33.94	24.60	800	0.50	0.00	0.50	33
				2006-07	Ivth	35.94	27.53	1000	2.00	0.00	2.00	36
				2007-08	Vth	33.16	26.56	620	1.96	0.00	1.96	23
				2008-09	Current	34.27	25.77	680	1.58	0.00	1.58	26
91	Natuwadi	27.23	2050	2003-04	Ist	27.23	8.26	160	0.66	0.00	0.66	19
				2004-05	IInd	27.23	23.25	180	0.95	4.56	5.51	8
				2005-06	IIIrd	26.69	0.30	14	0.46	0.00	0.46	47
				2006-07	Ivth	27.23	24.54	199	0.58	10.46	11.04	8
				2007-08	Vth	26.37	24.89	125	0.17	6.53	6.70	5
				2008-09	Current	26.33	21.97	72	0.54	4.57	5.11	3
92	Kurnoor	32.28	3644	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	19.94	18.64	1001	0.00	0.55	0.55	54
				2005-06	IIIrd	32.28	24.65	1834	9.59	27.48	37.07	74
				2006-07	Ivth	20.26	14.16	1362	9.16	26.53	35.69	96
				2007-08	Vth	32.28	22.11	1920	7.55	21.22	28.77	87
				2008-09	Current	32.28	19.99	1797	8.06	6.87	14.93	90

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
93	Khandala	5.24	830	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	5.24	5.24	440	0.00	0.00	0.00	84
				2005-06	IIIrd	4.44	2.77	451	1.41	0.00	1.41	163
				2006-07	Ivth	0.86	0.83	205	0.53	0.00	0.53	247
				2007-08	Vth	3.17	2.42	569	0.53	0.00	0.53	235
				2008-09	Current	5.24	2.83	535	1.51	0.00	1.51	189
94	Turori	6.2	830	2003-04	Ist	0.00	0.00	0	0.00	7.20	7.20	0
				2004-05	IInd	3.72	1.94	169	0.00	0.00	0.00	87
				2005-06	IIIrd	6.20	2.52	390	0.31	0.58	0.89	155
				2006-07	Ivth	4.61	2.20	360	0.55	3.33	3.88	164
				2007-08	Vth	6.20	2.20	488	0.55	3.33	3.88	222
				2008-09	Current	1.00	0.88	110	0.00	0.00	0.00	125
95	Jakapur	7.96	1584	2003-04	Ist	0.00	0.15	27	0.00	0.00	0.00	178
				2004-05	IInd	0.00	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	5.46	3.25	404	0.60	0.00	0.60	124
				2006-07	Ivth	1.81	1.39	185	0.47	0.00	0.47	133
				2007-08	Vth	2.42	1.59	302	0.47	0.00	0.47	190
				2008-09	Current	0.00	0.00	0	0.00	0.00	0.00	0
96	Mehakari	12.98	4048	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.00	1.00	173	0.00	0.00	0.00	173
				2005-06	IIIrd	0.00	0.00	0	0.00	0.00	0.00	0
				2006-07	Ivth	12.98	3.86	279	0.57	0.00	0.57	72
				2007-08	Vth	8.60	6.53	560	0.18	0.00	0.18	86
				2008-09	Current	8.60	2.22	215	0.97	0.00	0.97	97

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
97	Kadi	5.47	1084	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.00	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	0.00	0.00	0	0.00	0.00	0.00	0
				2006-07	Ivth	5.47	2.12	138	0.04	0.00	0.04	65
				2007-08	Vth	5.21	3.11	312	0.04	0.00	0.04	100
				2008-09	Current	5.21	3.60	277	1.31	0.00	1.31	77
98	Kada	8.56	1214	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	2.11	0.71	73	0.00	0.00	0.00	103
				2005-06	IIIrd	2.80	0.73	109	0.03	0.00	0.03	149
				2006-07	Ivth	8.55	1.70	176	0.03	0.34	0.37	104
				2007-08	Vth	8.55	1.87	170	0.01	1.06	1.07	91
				2008-09	Current	8.55	2.38	249	0.52	1.91	2.43	105
99	Galhati	13.84	2200	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	13.84	6.23	392	0.00	0.00	0.00	63
				2005-06	IIIrd	NA	3.77	424	0.35	0.00	0.35	112
				2006-07	Ivth	13.84	4.86	328	0.25	0.00	0.25	68
				2007-08	Vth	10.49	7.21	367	0.76	0.00	0.76	51
				2008-09	Current	7.90	5.90	411	1.40	0.00	1.40	70
100	Karpara	24.9	2151	2003-04	Ist	23.59	13.51	1228	2.79	0.00	2.79	91
				2004-05	IInd	3.32	0.51	55	0.05	0.00	0.05	108
				2005-06	IIIrd	24.76	12.20	1152	0.82	0.00	0.82	94
				2006-07	Ivth	24.83	6.93	816	0.79	2.49	3.28	118
				2007-08	Vth	14.26	9.35	789	0.80	0.00	0.80	84
				2008-09	Current	8.37	3.00	934	0.00	0.00	0.00	311

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
101	Masoli	27.13	2591	2003-04	Ist	27.13	19.23	2235	2.84	2.69	5.53	116
				2004-05	IInd	9.34	4.25	623	0.33	2.02	2.35	147
				2005-06	IIIrd	27.13	15.00	1706	0.25	2.00	2.25	114
				2006-07	Ivth	27.13	16.94	1776	2.02	2.31	4.33	105
				2007-08	Vth	24.50	17.73	1376	1.69	4.27	5.96	78
				2008-09	Current	8.99	6.90	737	1.00	10.00	11.00	107
102	Terna	19.66	1652	2003-04	Ist	0.91	0.00	0	0.00	13.06	13.06	0
				2004-05	IInd	8.69	0.33	285	0.00	8.06	8.06	861
				2005-06	IIIrd	19.39	6.58	921	0.79	6.15	6.94	140
				2006-07	Ivth	19.63	8.60	1032	2.49	9.00	11.49	120
				2007-08	Vth	19.39	6.88	1163	3.26	24.91	28.17	169
				2008-09	Current	19.66	7.64	1147	3.04	28.80	31.84	150
103	Rui	8.61	1650	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	1.90	1.01	498	0.00	0.00	0.00	494
				2005-06	IIIrd	7.04	1.59	208	0.05	0.75	0.80	130
				2006-07	Ivth	6.47	2.14	371	0.00	1.80	1.80	173
				2007-08	Vth	8.41	3.65	530	0.00	1.80	1.80	145
				2008-09	Current	8.41	1.51	583	0.07	0.00	0.07	386
104	Raigavan	11.26	1700	2003-04	Ist	3.74	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	1.47	0.23	36	0.00	0.12	0.12	157
				2005-06	IIIrd	9.56	5.00	552	1.32	0.00	1.32	110
				2006-07	Ivth	6.06	2.71	471	1.28	0.00	1.28	174
				2007-08	Vth	4.21	1.33	379	1.88	0.00	1.88	285
				2008-09	Current	11.26	4.08	566	2.20	0.00	2.20	139

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
105	Sukhna	18.49	2511	2003-04	Ist	NA	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	5.60	0.23	18	0.00	0.00	0.00	78
				2005-06	IIIrd	15.66	6.37	908	2.17	0.30	2.47	143
				2006-07	Ivth	18.49	8.57	1262	4.78	2.26	7.04	147
				2007-08	Vth	16.28	7.87	1852	7.75	9.00	16.75	235
				2008-09	Current	9.79	8.90	1198	3.20	9.60	12.80	135
106	Girja	21.25	3443	2003-04	Ist	NA	1.49	239	0.96	0.20	1.16	160
				2004-05	IInd	0.00	0.22	31	0.19	0.00	0.19	141
				2005-06	IIIrd	0.00	0.92	97	0.30	0.88	1.18	105
				2006-07	Ivth	16.77	5.68	852	0.00	0.69	0.69	150
				2007-08	Vth	11.91	5.54	1095	2.63	13.25	15.88	198
				2008-09	Current	15.60	12.10	1765	4.00	5.30	9.30	146
107	Lahuki	5.21	1092	2003-04	Ist	NA	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.00	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	1.96	0.26	36	0.03	0.00	0.03	137
				2006-07	Ivth	4.31	2.81	412	0.06	0.00	0.06	146
				2007-08	Vth	4.31	1.87	339	1.45	0.00	1.45	181
				2008-09	Current	4.31	1.20	479	1.50	3.00	4.50	399
												0
108	Dheku	11.53	2712	2003-04	Ist	NA	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	4.56	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	0.00	0.00	0	0.00	2.26	2.26	0
				2006-07	Ivth	10.13	2.86	631	0.01	0.00	0.01	221
				2007-08	Vth	5.85	1.62	566	1.02	0.02	1.04	349
				2008-09	Current	9.99	3.00	768	1.30	0.00	1.30	256

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
109	Kolhi	3.23	472	2003-04	Ist	NA	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.00	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	0.39	0.00	0	0.00	0.00	0.00	0
				2006-07	Ivth	2.84	1.81	235	0.00	3.39	3.39	130
				2007-08	Vth	1.14	0.18	85	0.01	1.08	1.09	472
				2008-09	Current	2.92	2.40	222	0.70	0.10	0.80	93
110	Ambadi	11.53	2147	2003-04	Ist	NA	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.99	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	0.00	0.00	0	0.00	0.75	0.75	0
				2006-07	Ivth	7.92	3.85	617	1.00	4.50	5.50	160
				2007-08	Vth	0.00	0.04	118	0.69	7.67	8.36	2950
				2008-09	Current	9.42	2.50	471	0.70	10.20	10.90	188
111	Khelna	11.07	2429	2003-04	Ist	NA	3.30	830	4.59	0.00	4.59	252
				2004-05	IInd	10.53	3.48	841	4.11	6.60	10.71	242
				2005-06	IIIrd	4.61	1.88	196	0.18	1.50	1.68	104
				2006-07	Ivth	11.07	3.27	887	2.85	4.65	7.50	271
				2007-08	Vth	3.87	0.36	54	0.72	3.60	4.32	150
				2008-09	Current	3.81	0.00	0	0.10	19.60	19.70	0
112	Gadadgad	4.64	1180	2003-04	Ist	NA	2.06	277	1.57	0.00	1.57	134
				2004-05	IInd	2.16	1.50	185	0.75	0.00	0.75	123
				2005-06	IIIrd	3.48	2.40	295	0.45	0.00	0.45	123
				2006-07	Ivth	3.61	1.79	432	3.89	0.00	3.89	241
				2007-08	Vth	3.69	1.55	249	0.35	0.00	0.35	161
				2008-09	Current	4.64	1.70	405	2.20	2.00	4.20	238

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
113	Ajantha Andhari	7.65	1576	2003-04	Ist	NA	3.88	678	2.58	0.00	2.58	175
				2004-05	IInd	1.29	0.00	0	0.00	0.43	0.43	0
				2005-06	IIIrd	1.20	0.25	19	0.03	3.30	3.33	76
				2006-07	Ivth	7.65	3.66	668	1.80	7.89	9.69	182
				2007-08	Vth	2.84	0.83	84	0.08	6.22	6.30	101
				2008-09	Current	1.08	0.10	60	25.00	2.00	27.00	600
114	Jui	6.03	2206	2003-04	Ist	NA	2.00	301	1.70	0.32	2.02	151
				2004-05	IInd	1.74	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	0.75	0.00	0	0.00	0.11	0.11	0
				2006-07	Ivth	6.03	1.89	303	1.28	0.75	2.03	160
				2007-08	Vth	4.92	2.48	497	1.59	1.46	3.05	200
				2008-09	Current	2.60	0.00	0	0.50	2.50	3.00	0
115	Jivrekha	6.13	1064	2003-04	Ist	NA	2.69	342	1.31	0.00	1.31	127
				2004-05	IInd	3.87	1.42	222	0.62	0.00	0.62	156
				2005-06	IIIrd	4.78	2.70	545	1.52	0.00	1.52	202
				2006-07	Ivth	6.13	3.45	583	1.97	0.00	1.97	169
				2007-08	Vth	1.77	0.85	122	0.47	0.76	1.23	144
				2008-09	Current	5.14	4.00	543	1.90	1.40	3.30	136
116	Dhamna	8.51	1280	2003-04	Ist	NA	1.78	268	0.92	0.00	0.92	151
				2004-05	IInd	3.67	1.38	237	0.92	0.00	0.92	172
				2005-06	IIIrd	0.00	0.00	0	0.00	0.00	0.00	0
				2006-07	Ivth	6.30	3.31	520	0.69	0.00	0.69	157
				2007-08	Vth	1.60	2.24	428	0.37	1.72	2.09	191
				2008-09	Current	0.00	0.50	146	0.10	0.30	0.40	292

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
117	Kalyan	12.22	2020	2003-04	Ist	NA	2.65	368	0.95	1.44	2.39	139
				2004-05	IInd	0.00	0.00	0	0.00	1.26	1.26	0
				2005-06	IIIrd	11.57	2.83	466	0.58	1.53	2.11	164
				2006-07	Ivth	12.22	3.52	526	1.58	0.00	1.58	149
				2007-08	Vth	6.40	1.17	523	2.62	6.45	9.07	447
				2008-09	Current	12.22	3.50	703	1.70	6.40	8.10	201
118	Kalyan Girja	8.47	1377	2003-04	Ist	NA	2.25	368	2.13	0.00	2.13	164
				2004-05	IInd	1.84	0.57	117	0.59	0.00	0.59	205
				2005-06	IIIrd	8.47	2.40	334	0.73	0.00	0.73	139
				2006-07	Ivth	8.47	4.20	481	3.42	0.00	3.42	115
				2007-08	Vth	5.37	2.09	402	1.64	0.00	1.64	192
				2008-09	Current	8.30	5.80	576	1.10	1.70	2.80	99
119	Sakol	10.95	2064	2003-04	Ist	NA	4.20	680	1.39	0.00	1.39	162
				2004-05	IInd	4.34	4.16	701	1.79	0.00	1.79	169
				2005-06	IIIrd	10.95	6.81	950	4.79	0.00	4.79	140
				2006-07	Ivth	10.95	5.49	1152	2.95	0.00	2.95	210
				2007-08	Vth	5.52	4.48	852	2.77	0.49	3.26	190
				2008-09	Current	8.34	4.85	970	4.10	0.00	4.10	200
120	Tawarja	20.34	3603	2003-04	Ist	NA	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	2.28	0.42	123	0.00	0.00	0.00	296
				2005-06	IIIrd	12.26	8.89	1123	2.26	1.96	4.22	126
				2006-07	Ivth	17.30	8.38	1216	2.86	5.49	8.35	145
				2007-08	Vth	11.55	7.89	1093	2.56	13.36	15.92	138
				2008-09	Current	18.42	8.87	674	3.38	19.80	23.18	76

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
121	Tiru	15.29	2348	2003-04	Ist	NA	3.75	470	1.35	3.50	4.85	125
				2004-05	IInd	8.03	4.76	823	2.53	0.00	2.53	173
				2005-06	IIIrd	15.29	6.91	1149	6.33	0.00	6.33	166
				2006-07	IVth	15.29	8.94	1160	3.08	0.00	3.08	130
				2007-08	Vth	3.18	8.08	1195	2.41	0.00	2.41	148
				2008-09	Current	11.00	5.59	1036	5.21	6.00	11.21	185
122	Gharni	22.46	2234	2003-04	Ist	NA	9.65	1068	6.18	3.50	9.68	111
				2004-05	IInd	22.46	10.71	1386	6.13	0.00	6.13	129
				2005-06	IIIrd	22.46	9.57	1326	6.69	2.53	9.22	139
				2006-07	IVth	22.46	12.90	1231	7.45	2.20	9.65	95
				2007-08	Vth	21.91	11.60	1440	5.34	3.00	8.34	124
				2008-09	Current	22.45	9.55	1236	5.60	1.50	7.10	129
123	Vati	8.27	1760	2003-04	Ist	NA	4.52	616	0.46	0.50	0.96	136
				2004-05	IInd	0.99	0.68	262	1.35	0.00	1.35	385
				2005-06	IIIrd	8.27	5.35	531	2.35	0.00	2.35	99
				2006-07	IVth	8.03	5.50	459	3.05	0.14	3.19	83
				2007-08	Vth	8.27	5.06	592	2.21	0.10	2.31	117
				2008-09	Current	8.27	4.08	641	1.93	3.22	5.15	157
124	Masalga	13.59	1364	2003-04	Ist	NA	0.10	14	0.45	0.00	0.45	140
				2004-05	IInd	0.00	0.00	0	0.06	0.00	0.06	0
				2005-06	IIIrd	4.76	0.52	78	0.71	0.00	0.71	151
				2006-07	IVth	9.64	2.81	80	0.25	0.00	0.25	28
				2007-08	Vth	5.59	0.58	73	0.28	0.00	0.28	127
					Current	3.18	0.40	76	0.95	0.00	0.95	190

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
125	Devarjan	10.68	1882	2003-04	Ist	NA	1.97	203	0.59	0.00	0.59	103
				2004-05	IInd	2.96	1.77	268	0.88	0.00	0.88	151
				2005-06	IIIrd	10.68	4.76	399	2.79	0.00	2.79	84
				2006-07	Ivth	10.68	6.26	649	3.06	0.35	3.41	104
				2007-08	Vth	3.98	3.50	627	2.48	0.00	2.48	179
				2008-09	Current	2.47	2.29	448	1.86	0.00	1.86	196
126	Kundlika	37.69	2964	2003-04	Ist	NA	2.23	211	0.40	6.00	6.40	95
				2004-05	IInd	34.26	6.10	802	0.36	3.83	4.19	131
				2005-06	IIIrd	37.69	10.65	1165	4.73	2.96	7.69	109
				2006-07	Ivth	37.69	15.10	1195	3.52	0.00	3.52	79
				2007-08	Vth	37.69	7.48	787	0.79	5.43	6.22	105
				2008-09	Current	37.69	8.27	1195	3.70	5.20	8.90	144
127	Wan (Beed)	19.34	5262	2003-04	Ist	NA	3.29	456	2.85	20.07	22.92	139
				2004-05	IInd	15.86	4.97	744	1.02	37.63	38.65	150
				2005-06	IIIrd	19.34	5.49	656	3.78	19.86	23.64	119
				2006-07	Ivth	19.34	6.22	682	1.91	16.30	18.21	110
				2007-08	Vth	19.34	4.69	476	1.57	4.11	5.68	101
				2008-09	Current	19.34	9.17	743	1.63	24.09	25.72	81
128	Kambli	3.1	972	2003-04	Ist	NA	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	2.42	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	0.00	0.00	0	0.00	0.00	0.00	0
				2006-07	Ivth	1.37	0.27	23	0.00	0.00	0.00	85
				2007-08	Vth	1.37	1.27	120	0.00	0.00	0.00	94
				2008-09	Current	1.37	1.04	128	0.56	0.00	0.56	123

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
129	Chandani	21.58	2024	2003-04	Ist	NA	0.00	0	0.00	0.05	0.05	0
				2004-05	IInd	0.00	0.38	65	0.00	0.00	0.00	171
				2005-06	IIIrd	15.16	7.65	1316	0.30	0.31	0.61	172
				2006-07	Ivth	17.78	1.00	1308	1.00	41.00	42.00	1308
				2007-08	Vth	13.66	13.95	1584	1.08	3.24	4.32	114
				2008-09	Current	16.18	12.47	1079	1.41	2.05	3.46	87
130	Khasapur	13.04	2146	2003-04	Ist	NA	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	2.69	1.87	130	0.00	0.00	0.00	70
				2005-06	IIIrd	13.04	6.82	1755	0.15	0.00	0.15	257
				2006-07	Ivth	13.04	8.92	1488	0.70	0.00	0.70	167
				2007-08	Vth	13.04	8.91	1576	0.91	2.10	3.01	177
				2008-09	Current	13.04	7.99	1377	1.00	0.00	1.00	172
131	Sakat	13.48	2355	2003-04	Ist	NA	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	7.24	5.06	1151	0.00	0.00	0.00	227
				2005-06	IIIrd	7.83	5.94	970	0.50	0.00	0.50	163
				2006-07	Ivth	7.24	5.40	790	0.72	0.00	0.72	146
				2007-08	Vth	6.96	4.45	870	1.16	0.00	1.16	195
				2008-09	Current	3.93	2.03	665	0.58	0.00	0.58	327
132	Rooty	6.57	1862	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.00	0.00	0	0.00	0.00	0.00	0
				2005-06	IIIrd	0.00	0.00	0	0.00	0.00	0.00	0
				2006-07	Ivth	6.50	2.73	95	0.03	1.00	1.03	35
				2007-08	Vth	6.57	3.13	151	0.09	1.06	1.15	48
				2008-09	Current	6.57	1.29	187	0.34	0.00	0.34	145

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
133	Talwar	3.23	668	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	2.15	1.35	158	0.00	0.00	0.00	117
				2005-06	IIIrd	0.00	0.16	24	0.09	0.00	0.09	148
				2006-07	Ivth	3.23	0.90	63	0.04	0.00	0.04	70
				2007-08	Vth	3.23	0.98	155	0.04	0.00	0.04	158
				2008-09	Current	3.23	1.30	140	0.26	0.00	0.26	108
134	Banganga	4.96	906	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.00	0.68	285	0.00	0.40	0.40	419
				2005-06	IIIrd	4.96	3.25	400	0.10	0.00	0.10	123
				2006-07	Ivth	4.96	2.52	365	0.46	0.00	0.46	145
				2007-08	Vth	3.99	2.43	430	0.47	0.00	0.47	177
				2008-09	Current	4.96	3.22	362	0.40	0.00	0.40	113
135	Khandeshwar	8.78	1471	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.00	1.05	187	0.00	0.00	0.00	178
				2005-06	IIIrd	0.00	3.43	665	0.50	0.00	0.50	194
				2006-07	Ivth	7.76	5.42	886	0.97	0.00	0.97	163
				2007-08	Vth	8.37	6.29	1047	1.30	0.00	1.30	166
				2008-09	Current	4.49	4.39	689	1.71	0.00	1.71	157
136	Ramganga	5.34	963	2003-04	Ist	0.00	0.00	0	0.00	0.00	0.00	0
				2004-05	IInd	0.00	1.48	392	0.00	0.00	0.00	265
				2005-06	IIIrd	5.33	3.69	489	0.10	0.00	0.10	133
				2006-07	Ivth	5.34	2.99	434	0.30	0.00	0.30	145
				2007-08	Vth	4.54	3.77	493	0.88	0.00	0.88	131
				2008-09	Current	5.33	1.39	439	0.53	0.00	0.53	317

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
137	Dongargaon (Nanded)	8.81	830	2003-04	Ist	NA	6.57	685	0.14	0.00	0.14	104
				2004-05	IInd	2.83	0.00	0	0.51	0.00	0.51	0
				2005-06	IIIrd	8.80	5.45	535	0.72	0.09	0.81	98
				2006-07	Ivth	8.47	5.43	609	0.71	0.00	0.71	112
				2007-08	Vth	8.47	5.38	609	0.00	0.00	0.00	113
				2008-09	Current	8.47	4.49	610	1.54	0.00	1.54	136
138	Loni	8.38	1377	2003-04	Ist	8.38	5.71	689	0.20	0.00	0.20	121
				2004-05	IInd	5.36	3.31	462	1.33	0.00	1.33	140
				2005-06	IIIrd	8.10	3.18	283	0.20	0.00	0.20	89
				2006-07	Ivth	8.21	4.80	482	0.01	0.00	0.01	100
				2007-08	Vth	8.12	4.41	558	1.55	0.00	1.55	127
				2008-09	Current	8.12	4.13	423	0.84	6.69	7.53	102
139	Nagzari	6.56	960	2003-04	Ist	6.54	3.80	552	0.33	3.76	4.09	145
				2004-05	IInd	3.51	1.27	400	0.58	6.21	6.79	315
				2005-06	IIIrd	6.39	2.86	377	0.32	2.00	2.32	132
				2006-07	Ivth	6.56	3.62	413	0.87	1.62	2.49	114
				2007-08	Vth	6.45	4.38	440	1.72	3.58	5.30	101
				2008-09	Current	6.45	4.19	403	1.61	6.69	8.30	96
140	Mahalingi	4.78	784	2003-04	Ist	4.51	3.29	620	0.23	0.00	0.23	188
				2004-05	IInd	0.00	0.00	0	0.12	0.00	0.12	0
				2005-06	IIIrd	4.78	4.18	719	1.10	0.00	1.10	172
				2006-07	Ivth	3.05	3.29	703	0.49	0.00	0.49	214
				2007-08	Vth	0.81	1.04	178	0.13	0.00	0.13	171
				2008-09	Current	1.29	1.18	176	0.00	0.00	0.00	149

Sr. No.	Project	Designed live storage in Mm^3	ICA in ha	Irrigation Year	Year status	Live Storage as on 15th oct	Water used for irrigation in Mm^3	Irrigated area in ha	Recovery Irrigation Rs. In lakhs	Recovery Non-Irrigation Rs. In lakhs	Total recovery Irrigation + Non irrigation in Lakhs	Annual Water supply ha/Mm^3.
1	2	3	4	5	6	7	8	9	10	11	12	13
141	Pethwadaj	9.04	1478	2003-04	I st	9.04	6.88	658	2.43	0.00	2.43	96
				2004-05	Ii nd	9.04	6.88	758	0.50	0.00	0.50	110
				2005-06	III rd	9.03	8.28	736	3.71	0.00	3.71	89
				2006-07	Iv th	9.04	8.07	916	2.71	0.00	2.71	113
				2007-08	V th	9.04	7.21	807	2.46	0.00	2.46	112
				2008-09	Current	2.86	0.29	46	0.53	0.00	0.53	159
142	Kudala	4.35	567	2003-04	I st	4.35	3.35	505	0.21	0.00	0.21	151
				2004-05	Ii nd	2.05	1.39	284	0.79	0.96	1.75	204
				2005-06	III rd	4.35	3.60	515	0.25	0.00	0.25	143
				2006-07	Iv th	4.35	3.14	685	1.27	0.00	1.27	218
				2007-08	V th	2.18	3.16	529	0.56	0.42	0.98	167
				2008-09	Current	4.29	3.77	484	1.76	5.66	7.42	128
143	Karadkhed	11.01	1780	2003-04	I st	11.01	6.90	578	2.24	3.76	6.00	84
				2004-05	Ii nd	6.59	2.43	521	0.03	12.33	12.36	214
				2005-06	III rd	11.01	3.96	445	0.95	3.25	4.20	112
				2006-07	Iv th	11.01	5.61	621	1.19	2.73	3.92	111
				2007-08	V th	7.91	3.35	557	1.24	5.95	7.19	166
				2008-09	Current	7.78	4.17	543	2.95	8.38	11.33	130
144	Kundrala	10.41	1012	2003-04	I st	10.16	7.06	1126	2.92	2.84	5.76	159
				2004-05	Ii nd	3.65	2.13	479	0.11	6.51	6.62	225
				2005-06	III rd	10.41	5.35	725	0.36	1.68	2.04	136
				2006-07	Iv th	10.41	6.93	1259	0.46	1.87	2.33	182
				2007-08	V th	5.31	2.23	372	0.71	2.68	3.39	167
				2008-09	Current	3.65	1.51	301	1.59	3.47	5.06	199

NOTE :

1 Change in col.No.3 of designed live storage in respective years if any is due to revision in designed live storage capicity

2 In col. No.8 of water used for irrigation is more than col.No. 7 of live storage as on 15th Oct. of respective year is due to water utilisation in kharif.

3 Col.No.9 of irrigated area is more than Col.No.4 of ICA is due to increase of area in kharif seasion.

4 Zero value in col. 13 due to non availability of water for irrigation.

Chapter 8

BENCHMARKING OF WATER AND LAND MANAGEMENT INSTITUTE (WALMI), AURANGABAD (2008 – 09)

8.0 INTRODUCTION

WALMI, Aurangabad (Maharashtra) is a premier training institute of its kind in India established on 1st October 1980 as an autonomous registered society under Water Resources Department, Government of Maharashtra for imparting the training in IWM.

8.1 Objectives

The main objectives of the institute are:

- To provide in-service training of interdisciplinary nature to staff engaged in Irrigation Water Management and Land Development in Water Resources and Agriculture Departments
- Action and adaptive research pertaining to Irrigation Project Commands.
- Providing consultancy services, production of training materials (in print and electronic media), conducting seminars / workshops and organizing farmers' training programmes

Training is imparted by highly qualified, experienced and well-trained faculty members. WALMI has five faculties:

- Faculty of Engineering
- Faculty of Agriculture
- Faculty of Science (Computer Applications & Hydraulics)
- Faculty of Social Sciences
- Faculty of Integrated Watershed Development & Management

An optimal mix of core faculty and senior field officers on deputation to WALMI constituting the faculty, is one of the vital factors of this institute's strength and performance.

8.2 BENCHMARKING OF WALMI

8.2.1 Performance Indicators

The benchmarking technique is introduced for the performance evaluation of the irrigation systems in the State of Maharashtra. Benchmarking is a continuous process of measuring one's own performance and practices against the best competitors and is a sequential exercise of learning from other's experience. The guidelines are available on the categories of performance indicators for Irrigation Systems. The benchmarking of WALMI, Aurangabad, which is a premier training institute in IWM is carried out by developing the performance indicators based on the activities of the institute. The performance is also compared with the requirement wherever possible.

WALMI, being a training institute, has developed its own performance indicators as below:

1) Institutional performance
2) Qualitative performance
3) Financial indicators
4) Environmental aspects

8.2.2 Institutional Performance

The institutional performance of the WALMI is assessed based on the following four indicators:

a) Strength of teaching staff

The strength of teaching staff is compared with the potential sanctioned positions and available positions over the period of last five years.

b) Annual training workload (trainee days)

The annual training workload is compared with the planned training workload and achievement for last five years.

c) Annual training workload of long term courses (Participants)

The number of participants actually participated in long term courses (25/21 week's duration) are compared with the potential strength of the long term courses for last five years.

d) Annual Farmers' training workload (Participants)

The number of participants actually participated in different farmer's training programmes are compared with the expected participants.

8.2.3 Qualitative Performance

The overall quality of institute's activities is assessed based on the following indicators:

a) End of Course evaluation (i) L.T.C. (ii) S.T.C.
b) Research activities
c) Revisions & Development of publications
d) Papers presented & published (state, national & international level)

8.2.4 Financial Indicators

This is assessed based on the actual expenses of the institute:

a) Cost of training per trainee day
b) Central Assistance for training programme

8.2.5 Environmental Aspects

Environmental indicators will give information about involvement of participants in the training activities to acquire the knowledge, skills and attitudes for their jobs. It will also indicate the conduciveness of environment in the institute.

a) Referencing WALMI Library
b) Visitors in WALMI

8.3 ASSESSMENT OF PERFORMANCE OF WALMI (YEAR 2004 – 2009)

(i) Strength of teaching staff

The strength of teaching staff is almost constant ranging in last five years and is ranging between 25 to 27 as against the sanctioned strength of 47. The existence of sizeable core faculty is one of the vital factors of this institute's strength and performance. (Fig.1)

(ii) Annual training workload (trainee days)

Achievement in last five years is more than the planned training workload. The average planning of the last eight years is about 30000. The actual achieved training workload is ranging in between 30000 – 34537. In almost all the years the achieved is more than the planned. (Fig.2)

(iii) Annual training workload of long term courses (participants)

The number of participants actually attended in LTC for all the years were more than the potential strength (Fig.3). This is because of efforts taken by the Institute and making it mandatory for all the nominated participants.

(iv) Annual Farmers' training workload (participants)

This indicator shows that the number of farmers participated in the courses are much higher than the expected participants (Fig.4). In all the years, the participation of farmers in the training programmes is increasing due to more thrust is given to farmers training programmes by the Institute.

(v) End of course evaluation

In the method of end of course evaluation, the trainee officers are asked to give rating for various questions related to training. The average rating of end course evaluation for long term courses and short term courses (having period more than 4 days) during the year is around four, which indicates that overall quality of training as excellent (Fig.5)

(vi) Research activities

This activity is now taken up as supplemental activities along with the training activities of the Institute. (Fig.6).

(vii) Revisions & Development of publications

This can not be assessed exactly on yearly basis. The fig.7 shows the actual status of this activity.

(viii) Papers / Articles presented & published (state, national & international level)

The numbers are in increasing order and are highest during the year 2008 – 09. The average publications of papers/articles published by the faculty are around 28 per year (Fig.8). The faculties are being motivated in this regard.

(ix) Cost of training per trainee day

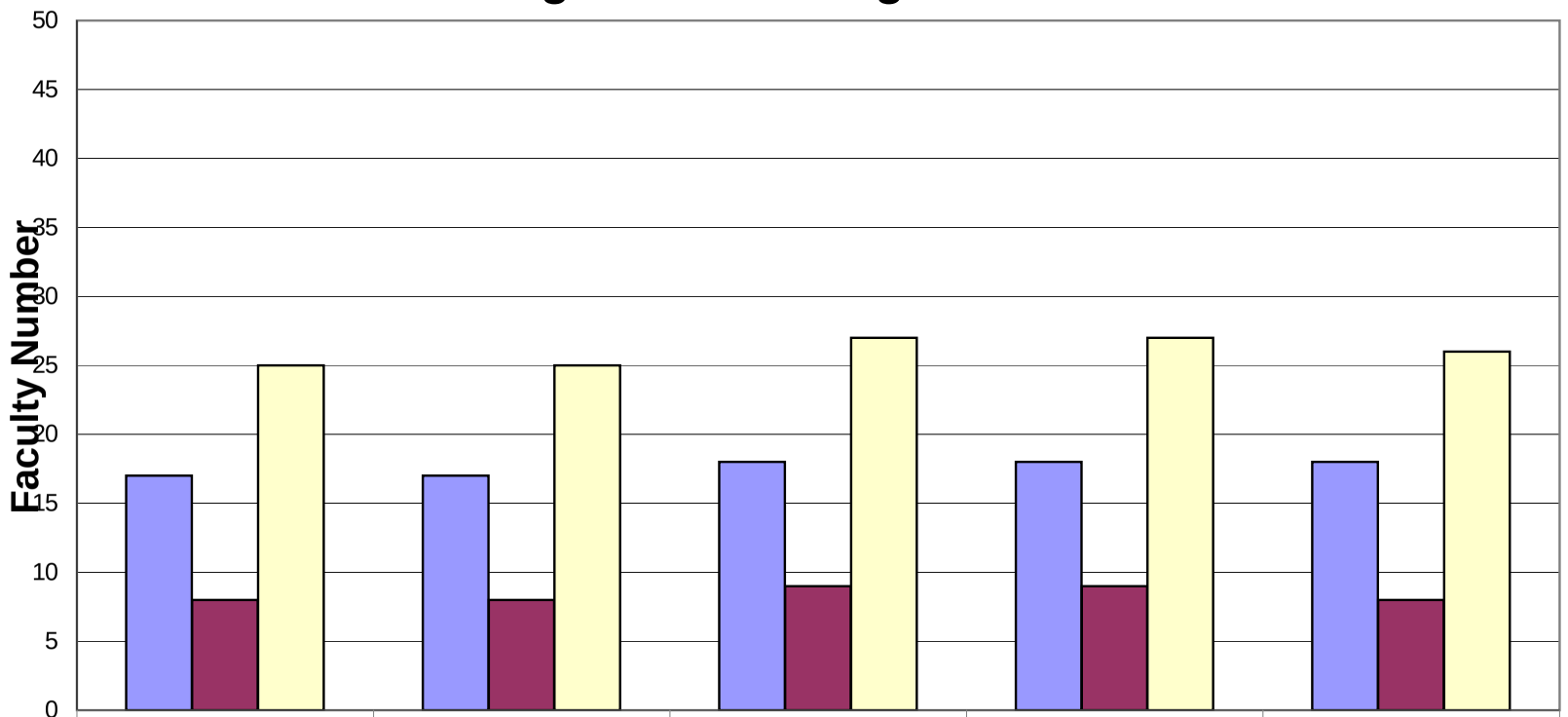
The cost of training per trainee day is different in the different years and depends upon the number of trainee days (annual training workload) and the budget allotment. (Fig.9). This includes the expenditure on administration and maintenance of institute's estate. The average cost of training in last five years is around Rs. 3,900 per trainee day.

(x) Referencing WALMI Library

This indicates that use of library is increasing among the faculties, training participants and visitors (Fig.10).

(xi) Visitors in WALMI

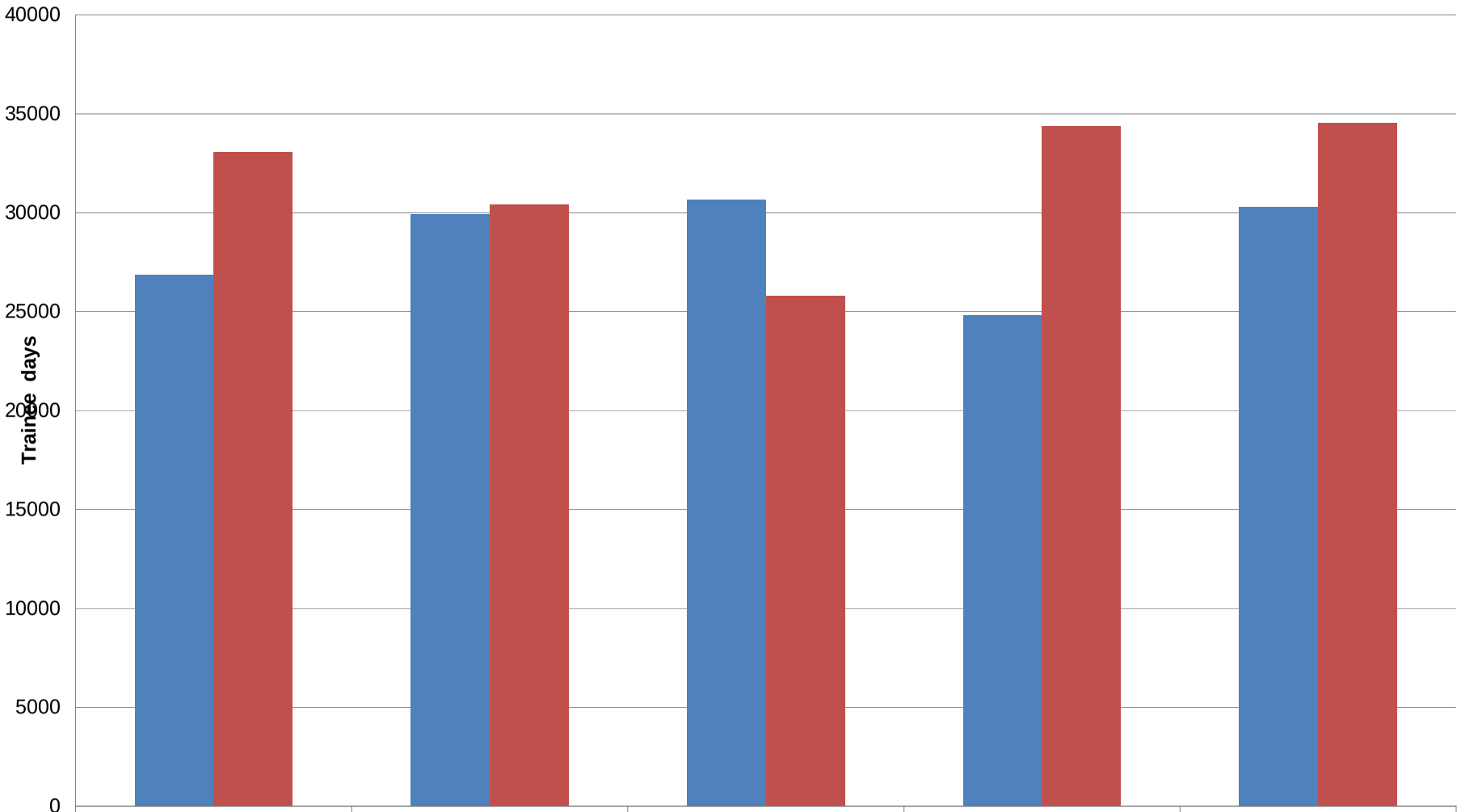
The visitors in WALMI are increasing year after year which is a good indicator for the capabilities of the WALMI (Fig.11).



	2004-05	2005-06	2006-07	2007-08	2008-09
Core Faculty	17	17	18	18	18
Deputationist	8	8	9	9	8
Total Faculty	25	25	27	27	26

Figure No 1

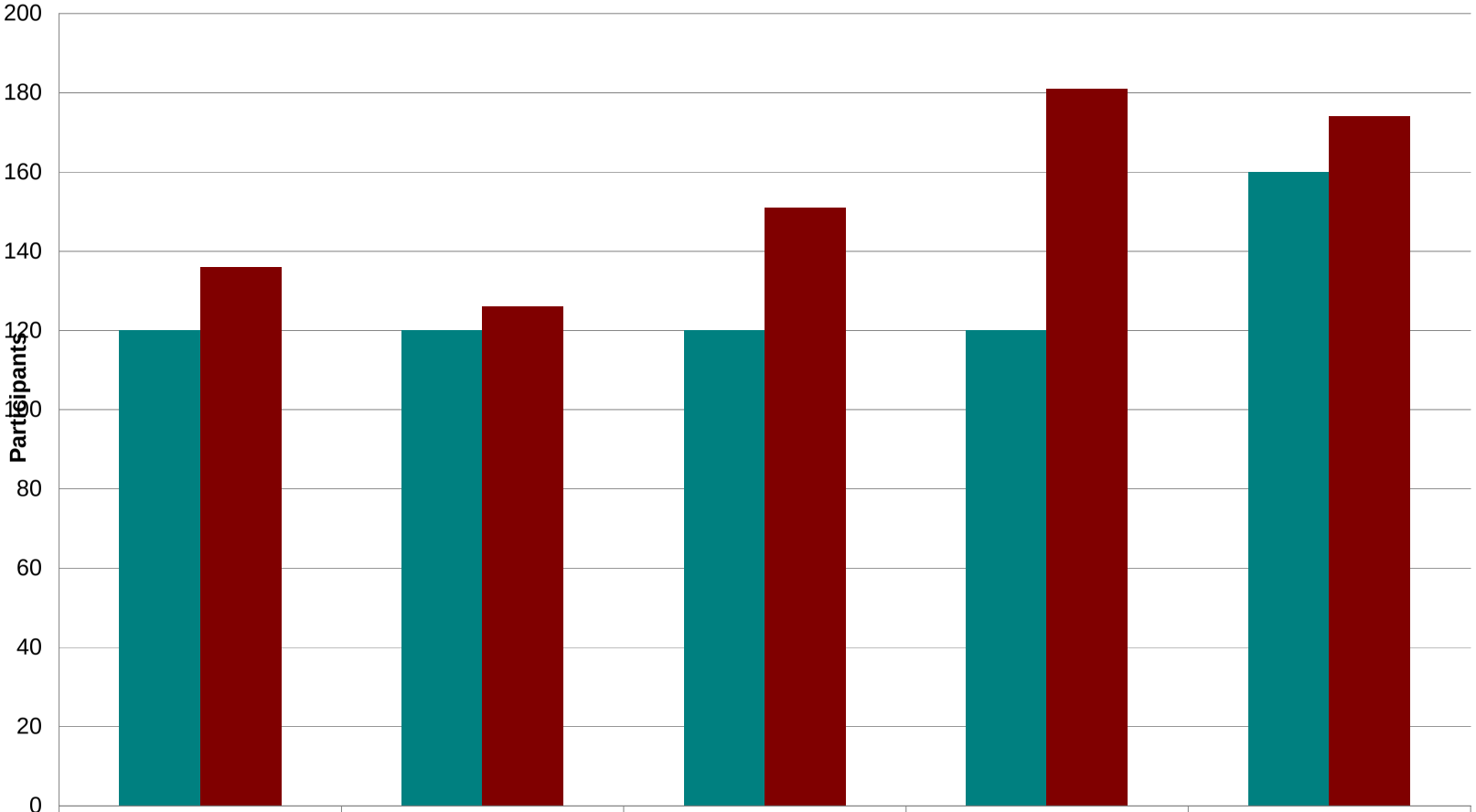
Annual Training Workload (Trainee days)



	2004-05	2005-06	2006-07	2007-08	2008-09
Planned	26834	29926	30630	24792	30302
Achieved	33039	30410	25786	34366	34537

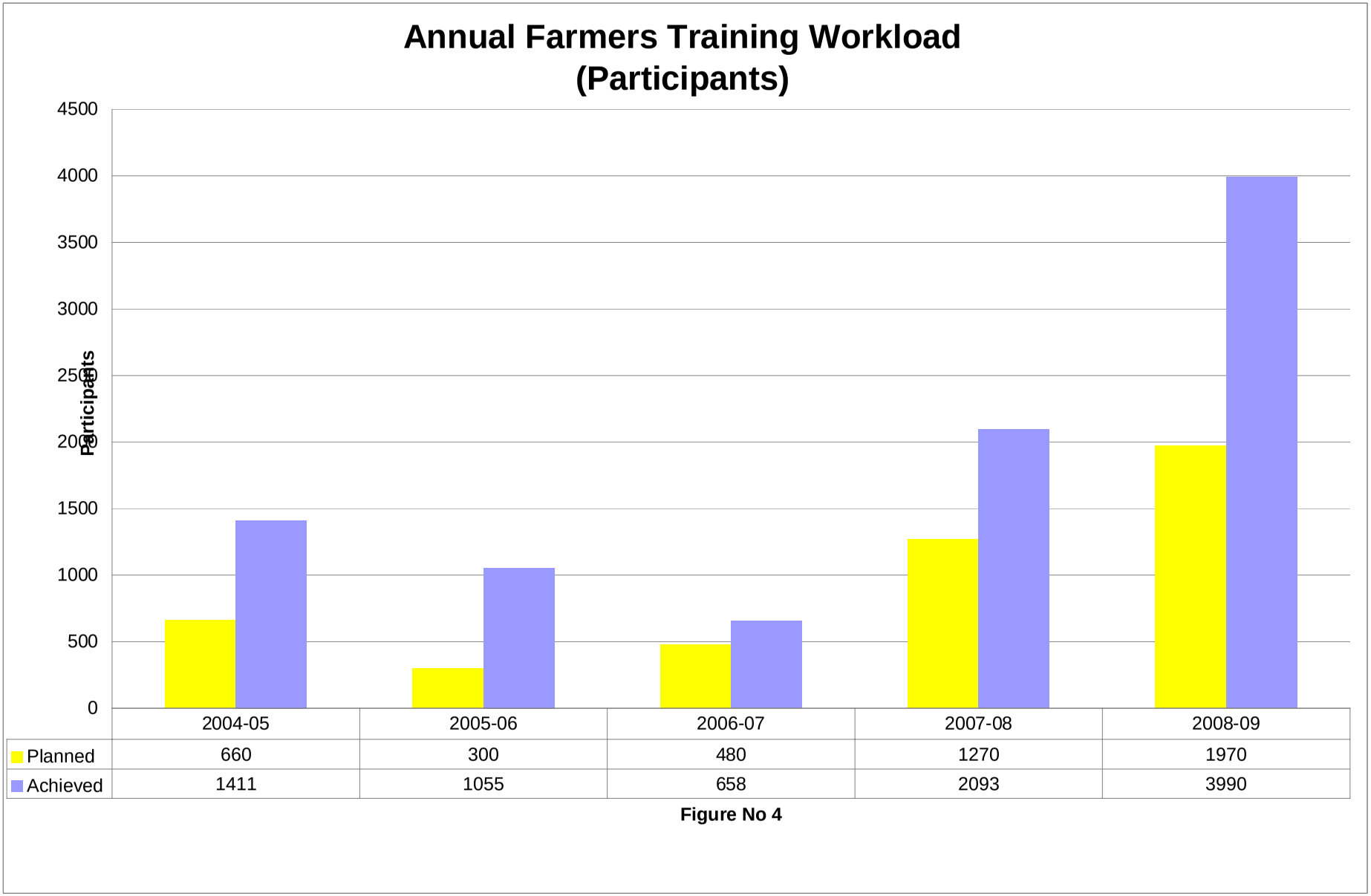
Figure No 2

Annual Training Workload of Long-term Courses(LTC) (Participants)



	2004-05	2005-06	2006-07	2007-08	2008-09
Planned	120	120	120	120	160
Achieved	136	126	151	181	174

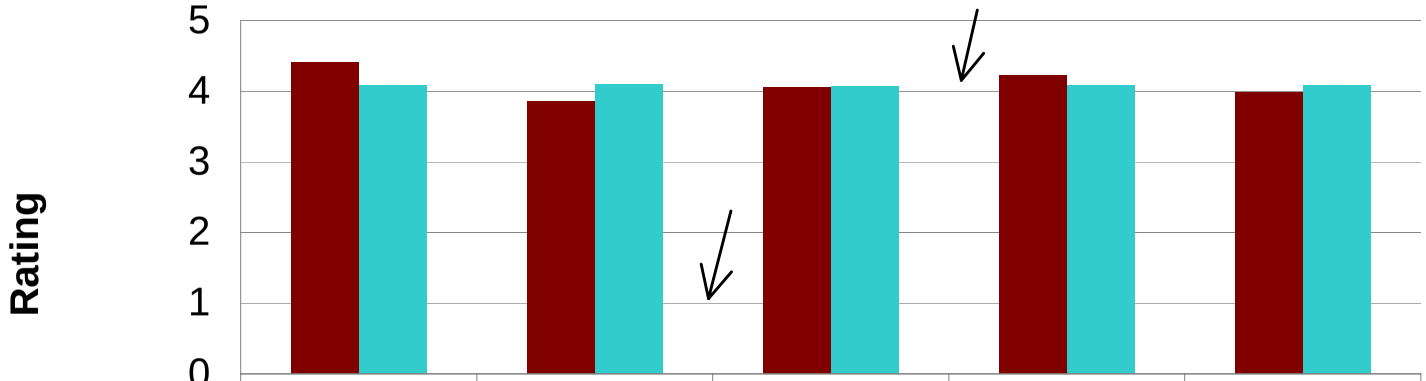
Figure No 3



	2004-05	2005-06	2006-07	2007-08	2008-09
Planned	660	300	480	1270	1970
Achieved	1411	1055	658	2093	3990

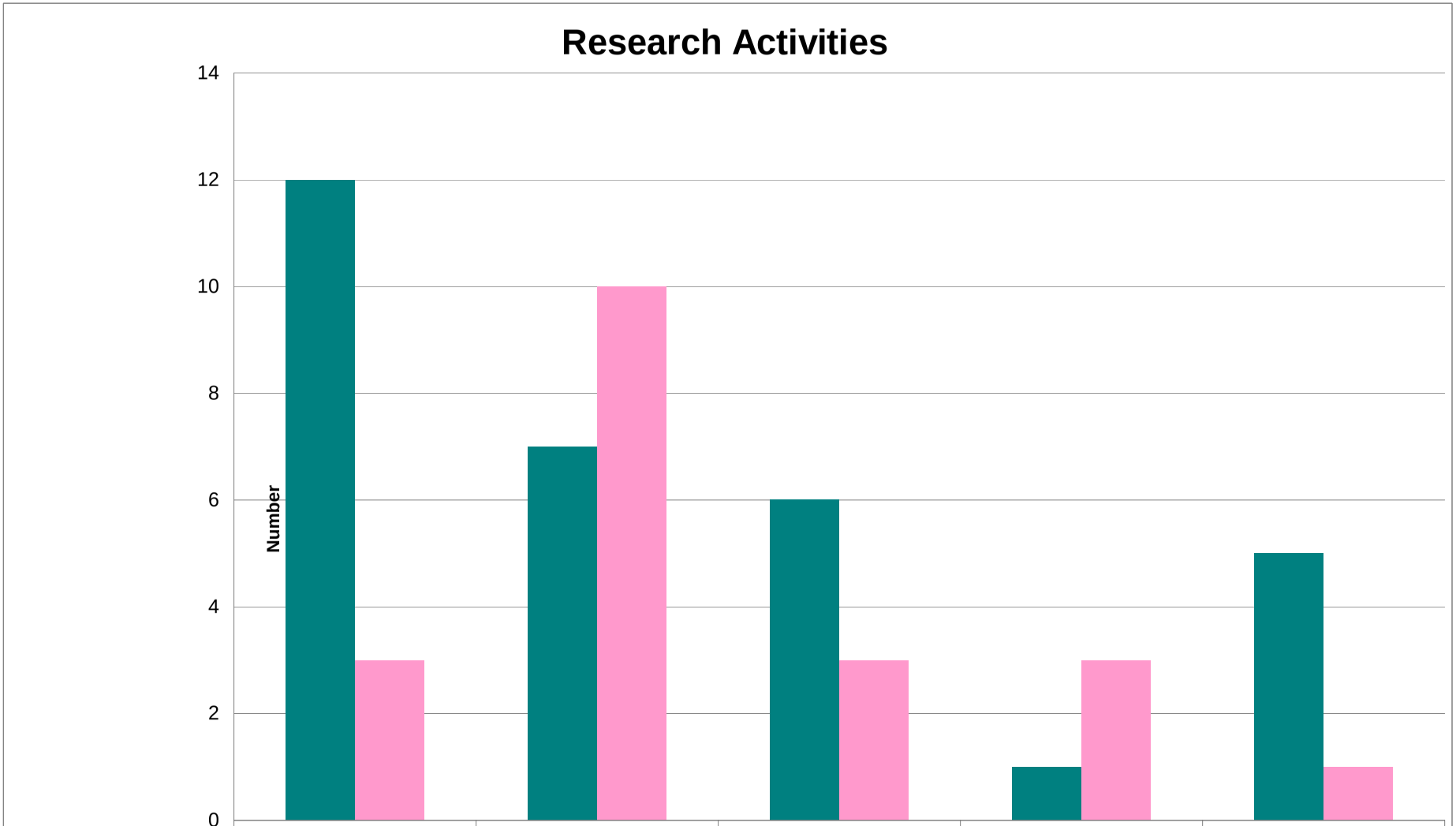
Figure No 4

End of Course Evaluation



	2004-05	2005-06	2006-07	2007-08	2008-09
Av. Rating for LTC	4.41	3.85	4.06	4.23	3.99
Av. Rating for STC	4.08	4.1	4.07	4.08	4.09

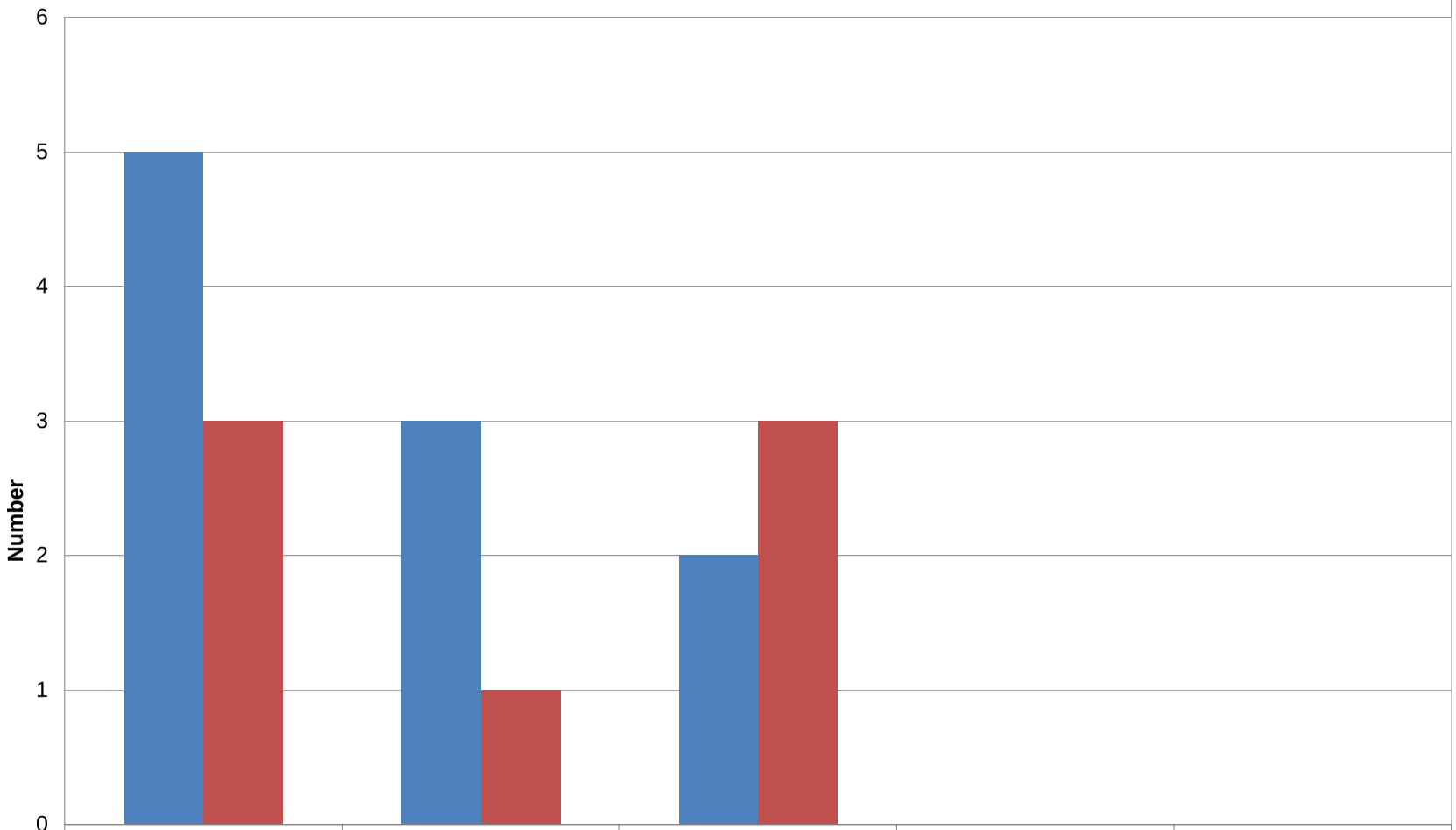
Figure No 5



	2004-05	2005-06	2006-07	2007-08	2008-09
Research Studies in hand	12	7	6	1	5
Research Studies completed	3	10	3	3	1

Figure No 6

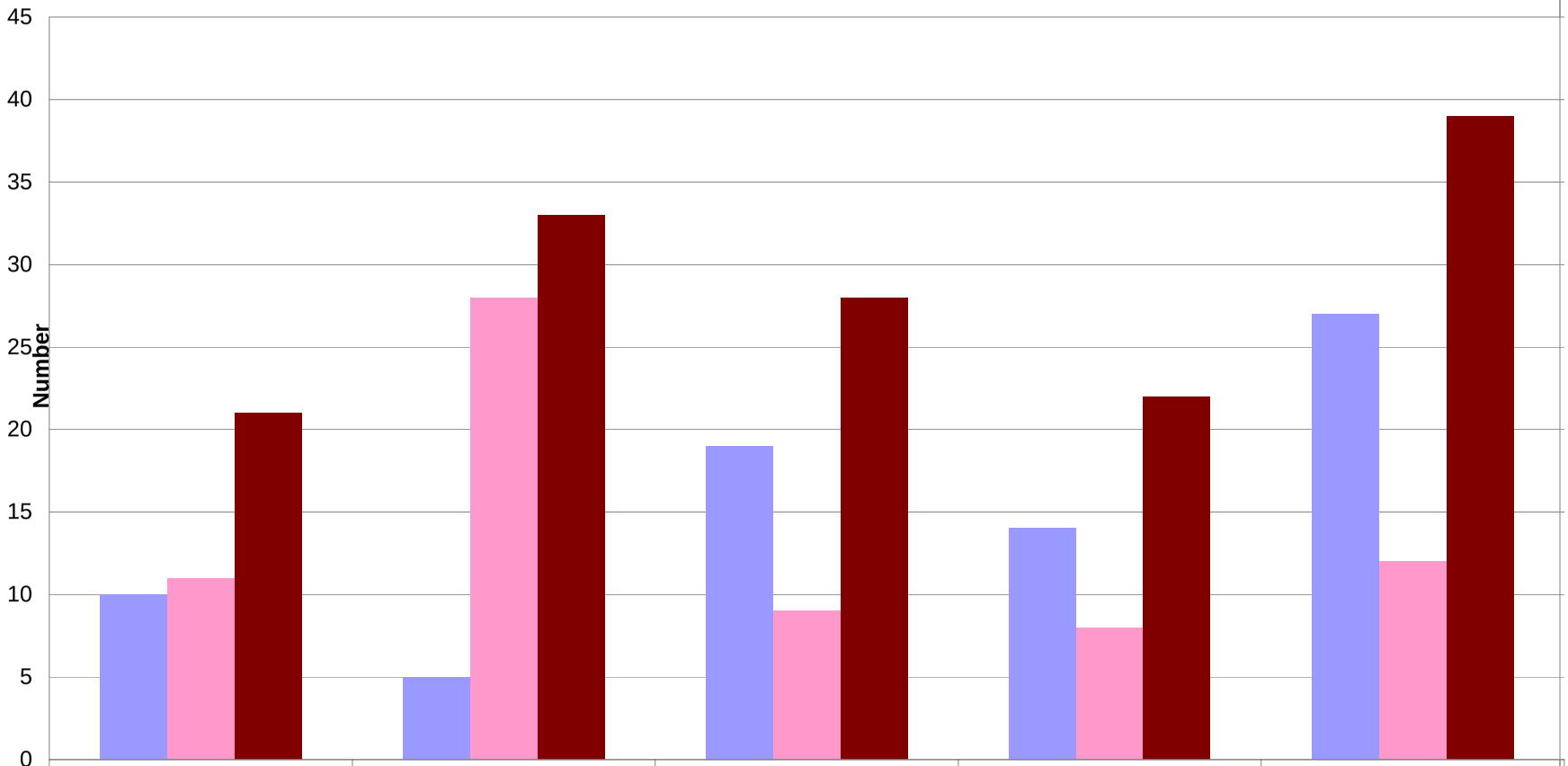
Revisions & Development of Publications



	2004-05	2005-06	2006-07	2007-08	2008-09
Revisions	5	3	2	0	0
New Publications	3	1	3	0	0

Figure No 7

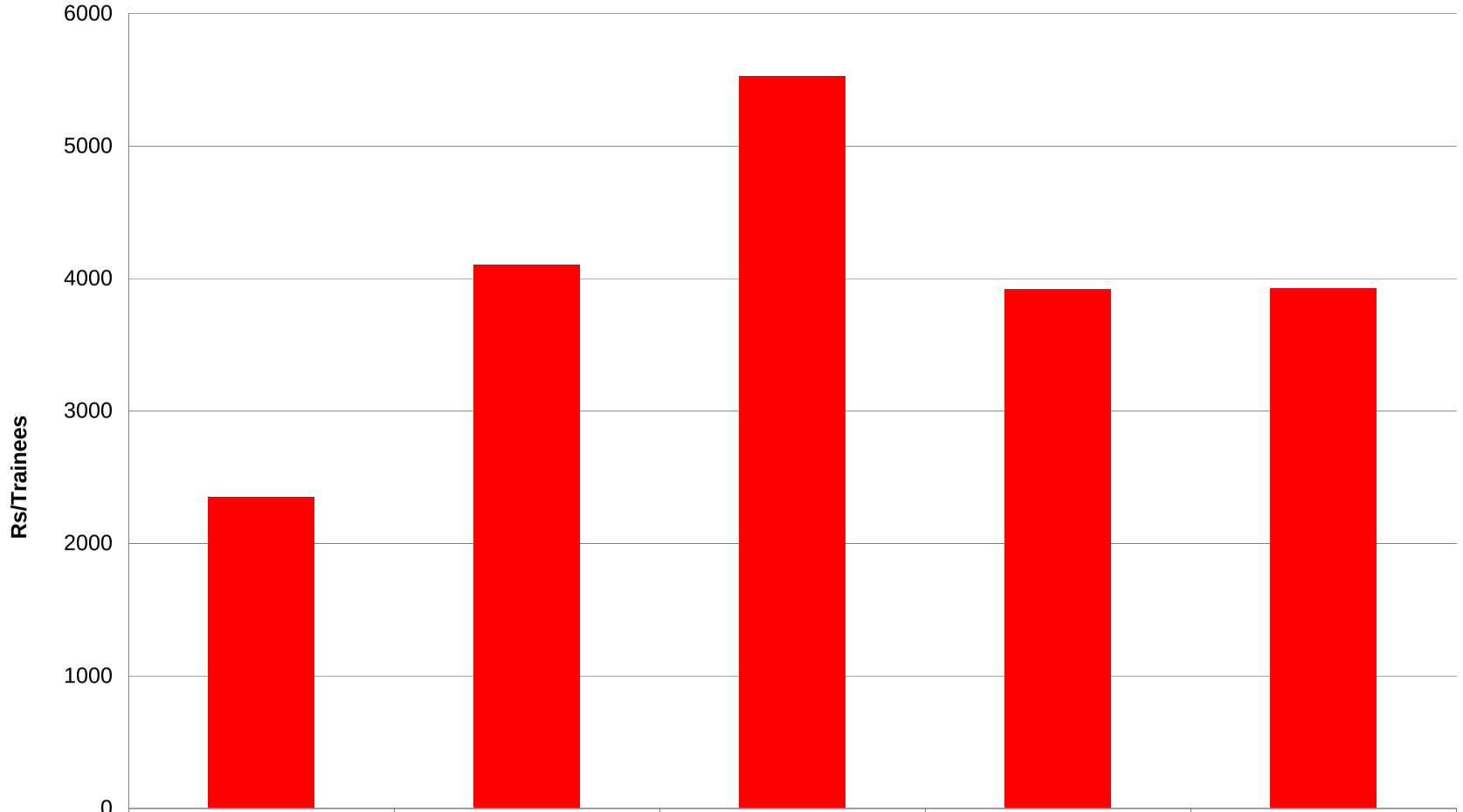
Papers / Articles presented & published (State/National & International Level)



	2004-05	2005-06	2006-07	2007-08	2008-09
Papers	10	5	19	14	27
Articles	11	28	9	8	12
Total	21	33	28	22	39

Figure No 8

Cost of Training per trainee day

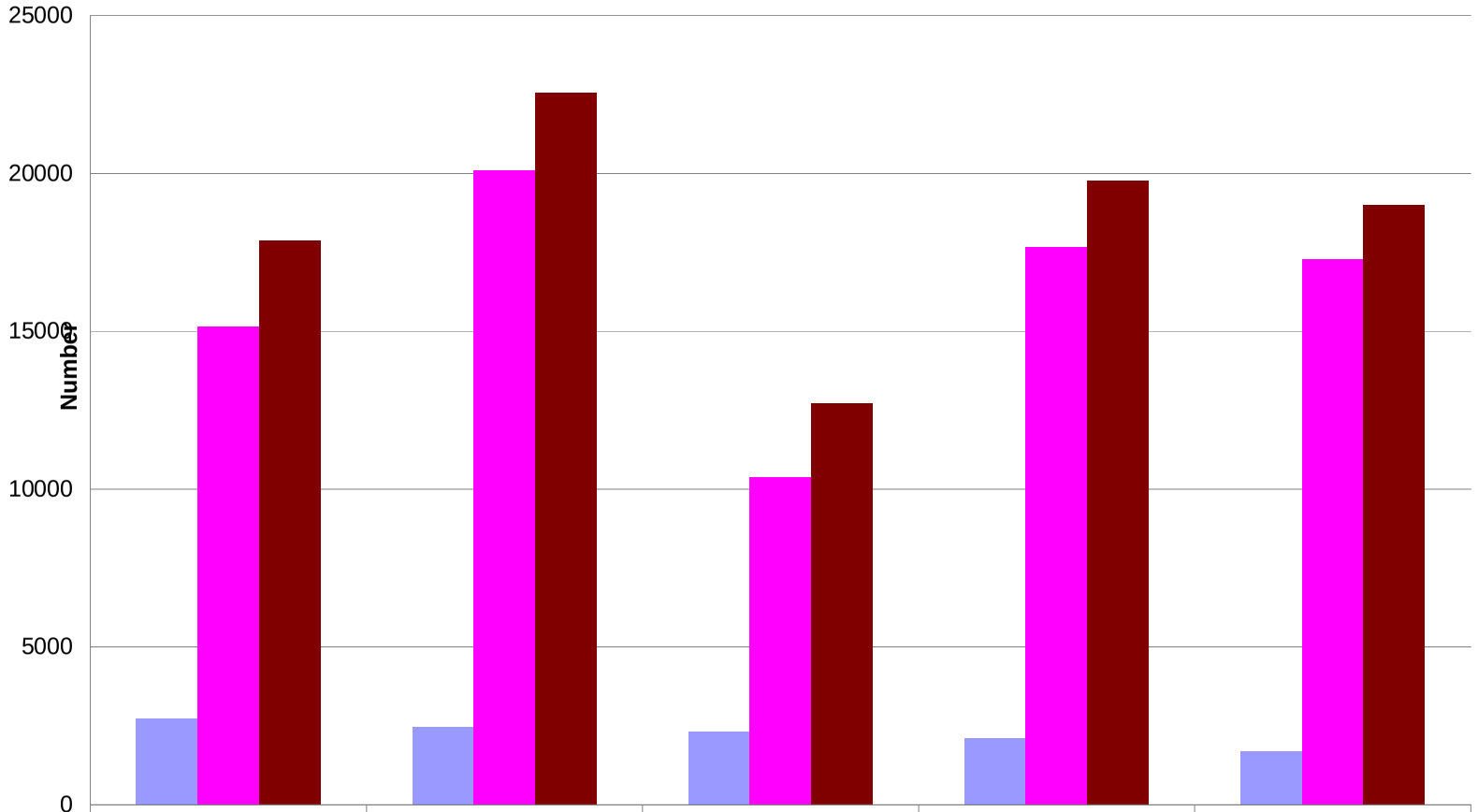


	2004-05	2005-06	2006-07	2007-08	2008-09
Rupees Per trainee day	2348	4102	5530	3920	3929

Figure No 9

(Note:- Trainee days of MWSIP training are not included for calculation of training cost)

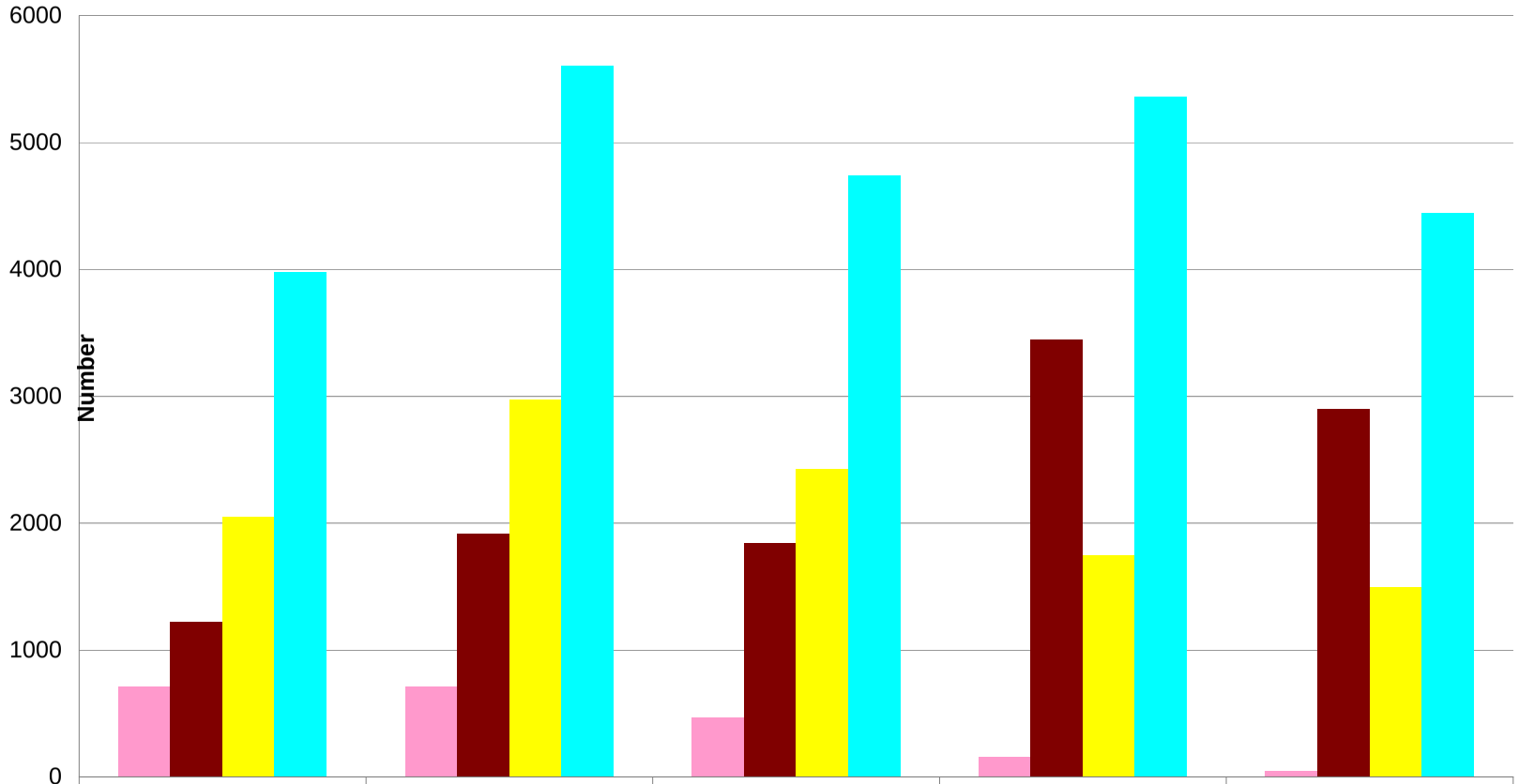
Referencing WALMI Library



	2004-05	2005-06	2006-07	2007-08	2008-09
Reading Material issued	2716	2479	2332	2113	1693
Reading material consulted	15148	20084	10374	17666	17292
Total	17864	22563	12706	19779	18985

Figure No 10

Visitors in WALMI



	2004-05	2005-06	2006-07	2007-08	2008-09
Officers & VIPs	710	711	465	160	45
Students	1220	1920	1845	3450	2900
Farmers	2050	2974	2430	1750	1500
Total	3980	5605	4740	5360	4445

Figure No 11

Appendix-I

Abstract of guidelines issued by GOM for Benchmarking of Irrigation Projects

Government of Maharashtra, Water Resources Department vide Letter No. CDA 1004/(369/2004) CAD (works) dated 08.11.2004 issued guidelines while preparing Benchmarking report for the year 2003-04. Subsequently, additional instructions for the year 2004-05 were issued vide letter No. CDA 1004/ (369/2004) CAD – works dated 2.9.2005. Following procedure is adopted for preparation of Benchmarking report (2008-09) based on guidelines.

1) Benchmarking is taken in hand after validation of data and linking it with water audit data and data submitted to Government for Irrigation Status Report 2008-09.

2) All Projects included in report for 2007-08 are considered for 2008-09.

3) Indicators No. IX Man days for O & M per unit area is deleted as per suggestion of core group.

4) In equity performance the head, middle and tail reaches are decided dividing the command area in to three equal parts.

5) Potential Utilised and Created is linked with availability of water. Effective potential of each project is decided based on availability of water for irrigation during the year.

6) Agricultural output is calculated at 1998-99 prices.

The five year average values from 2003-04 to 2006-07 and values for 2007-08 are considered for comparison, for all the indicators. Absurd (nil or very high values) are not considered while calculating the average.

Revenue means the actual recovery from Irrigation, non-irrigation water cess, fishery, galper, tourism etc.

Appendix-II

State target values for indicators 2008-09

Fixing Target Values:

The State targets set for indicators mentioned in Chapter IV were introduced from the year 2002-03 and are decided based on studies and past performance. It is obvious that project size, available water storage in reservoir and agro-climatic, geographical, social conditions are different for different regions. Therefore, there will be difference in performance of irrigation projects but to improve overall State performance and for simplicity, single target for each indicator for the State is defined. Performance of projects in a circle against each indicator is collective performance.

In 2003-04, the values of some of the indicators are revised and for financial indicator of output per unit irrigated area and output per unit irrigation water supply, fixed prices of 1998-99 are considered to obviate effect of price rise. Also, for better monitoring and looking to the number of projects, the analysis is carried out considering irrigation circle as a unit and projects therein within similar plan groups of sub-basins.

The State target values set for Indicator I, III & IV are different; for different categories of the projects viz. (a) major & medium, (b) minor. For other Indicators, the targets are uniform for all types of projects.

I) Annual Irrigation Water Supply per Unit- Irrigated Area:

Irrigation system performance in Rabi and Hot weather season is 150 ha/Mm^3 and 110 ha/Mm^3 respectively. As there are Rabi and Hot weather crops in most of the major and medium project, average Irrigation system performance is (150 +110)/2=130 ha/Mm^3

Thus the water requirement per unit area = 1000000/130 = 7692 m^3/ ha.

In case of minor project as there are no crops irrigated in Hot weather the water requirement per unit area = 1000000/150 = 6666.67 m^3 / ha. Say 6667 m^3 / ha.

Hence in broad sense the water requirement per unit area works out to 7692 m^3 per ha. in case of major and medium projects and 6667 m^3 per ha. in case of minor projects.

II) Potential Created and utilized:

Utilization of created potential depends upon availability of water for irrigation. This availability further depends upon available yield & extent of Non Irrigation uses. Therefore, percentage of water available in the reservoir that can be used for irrigation should be the target for the project. The availability of water in different reservoirs is taken from water audit data for the year 2008-09.

III) Output per unit area:

The target is decided based on five years experience in 2004-05. The same targets are used for 2008-09.

The category wise values for different plan groups are as follows.

Plan group	Major	Medium	Minor
Highly deficit	21000	23000	16000
Deficit	23000	25000	21000
Normal	26000	25000	21000
Surplus	25000	31000	27000
Abundant	32000	40000	36000

IV) Output per unit Water Supply:

Plan group	Major	Medium	Minor
Highly deficit	2.69	2.80	2.40
Deficit	2.99	3.15	3.15
Normal	3.38	3.15	3.15
Surplus	3.25	4.05	4.05
Abundant	4.16	5.40	5.40

V) Cost Recovery Ratio:

Target is same for all categories and it is 1.

VI) Total O & M Cost Per Unit Area:

Total O & M cost includes maintenance cost as well as operation cost of the irrigation system. M & R charges are considered as per Govt. norms and establishment charges are taken for staff working in a section office for irrigation water management.

	Major	Medium	Minor
M & R	200	150	100
Establishment charges	1050	1050	1050
Total	1250	1200	1150

VII) Total O & M Cost Per Unit Water Supplied:

Total O & M cost per unit water supplied for irrigation and non-irrigation use is considered as follows.

Major	Medium	Minor
(1250/7692) 0.16	(1200/7692) 0.16	(1150/6667) 0.17

VIII) Revenue Per Unit of Water Supplied:

The targets are fixed 10 percent more than O & M cost per unit of water supplied.

Major	Medium	Minor
0.18	0.18	0.19

The State targets for Revenue per unit of water supplied for irrigation is kept as Rs. 0.18/m^3, however, for NI use the target is Rs. 0.9/ m^3 as charges of NI use are higher than irrigation use.

IX) Mandays For O & M Per Unit Area:

The Indicator is deleted.

X) Land Damage Index:

There is no target for this indicator. However, the percentage of land damaged to total ICA of the project should be minimum for all the projects.

XI) Equity Performance (head, middle and tail)

The head, middle and tail reaches is decided based on dividing the command in to 3 equal parts.

XII-I) Assessment Recovery Ratio (Irrigation)

State target is 1

XII-NI) Assessment Recovery Ratio (Non-Irrigation)

State target is 1

Appendix-III

Overview of Projects selected for Benchmarking (Major Projects)

Plan Group /SB No	Circle/ Project	Avg. Annual Rainfall mm	Designed			Year of Commencement of Irrigation	Culturable Command Area Ha	Irrigable command area Ha	Live Storage observed on 15th October 2008	No. of villages in benefit zone	Avg. farm size Ha	Main crops	Area covered under WUA Ha	
			Live Storage Mm^3	Water use for Irrigation Mm^3	Water use for Non irrigation Mm^3								Proposed	Handed over
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Highly deficit														
	CADA Solapur													
18AA	Bhima	500	1517.20	1444.70	116.43	1977	198035	182683	1675.14	384	1 to 2.5	Sorghum, Wheat, Groundnut, Sugarcane	119609	27309
Deficit														
	AIC Akola													
10	Katepurna	950	86.35	49.45	32.65	1972	11187	8325	15.40	30	1.5 to 2	Wheat, Peas, Cotton, Sunflower.	11187	7166
10	Nalganga	737	69.32	53.21	6.51	1963	9165	8604	19.11	31	1 to 2	Gram, Wheat, Cotton	9165	7493
	CADA Aurangabad													
2	Jayakwadi (PLBC)	755	2171.00	1064.96	329.04	1975-76	183560	141640	2170.94	355	1.5 to 2	Cottton, Wheat, Sorghum, Sunflower	118070	47482
	CADA Beed													
2	Jayakwadi (PRBC)	700	2171.00	331.39	29.68	1976-77	53910	41682	0.00	99	1.57	Cotton,Wheat,Sorghum, Sugarcane		
2	Majalgaon	840	312.00	680.28	46.88	1989-90	64295	54737	312.00	132	1 to 2	Wheat, Sorghum, Cotton, Sugarcane	21929	10597
4	Manjra	685	173.32	185.64	85.67	1980-81	23690	18223	176.96	80	2.03	-do-	5147	3259
4	Lower Terna	710	113.95	62.50	21.05	1997-98	14513	11610	91.22	63	1 to 1.5	Sorghum, Wheat, Sunflower, Groundnut, Gram	ND	
	CADA Jalgaon													
11	Girna	743	525.06	549.66	0	1962-63	79293	69350	484.59	195	3	Sugarcane, Banana, Cotton, Wheat, Sorghum	15936	116
	CADA Nashik													
11	Chankapur	1067	76.85	146.59	0	1973	19173	14042	76.85	48	0.5	Bajri, Two seasonals, Paddy, Sorghum, Groundnut, Wheat, Gram	1861	0

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	NIC Nanded													
2	Vishnupuri	910	80.79	275.18	54.37	1990	37785	28340	80.02	46	2.06	-do-	1069	0
3	Purna	685	890.22	732.33	68.67	1968-69	78485	57988	267.05	232	1 to 2	Cottton, Wheat, Sorghum	24459	4486
4	Manar	850	138.21	198.06	5.94	1968	27745	23310	39.22	96	1.55	Wheat, Gram, Sugarcane, Cotton, Groundnut, Sorghum	4523	4523
	BIPC Buldhana													
10	Wan	891	81.96	78.57	20.08	1998-99	22525	15100	72.30	54	1.5	-do-	22525	11675
Normal														
	YIC Yavatmal													
6	Arunawati	913	169.92	121.65	15.62	1995	24135	20515	23.87	73	2 to 3	Cotton, Wheat, Sugarcane	24135	366
	AIC Akola													
6	Pus	945	91.26	100.35	19.06	1972	13678	8215	75.85	40	1.5 to 3	Sugarcane, Sorghum, Wheat, Gram, Cotton, Groundnut.	11814	0
	CADA Jalgaon													
13	Hatnur	743	255.00	500.12	90.53	1983	47360	37838	255.00	82	1.2	Sugarcane, Banana, Groundnut	7282	0
	CADA Nashik													
1	Bhandardara	3175	304.10	419.00	0	1926	63740	23077	328.10	110	4 to 5	Sorghum, Wheat, Grass, Maize, Sunflower, Sugarcane	9300	705
1	Mula	500	608.92	540.27	87.90	1972	138792	82920	608.92	160	4 to 5	.	91719	28668
1	Ozerkhed	746	60.32	31.59	2.19	1985	14856	10400	60.32	35	0.8	Wheat, Sorghum, Gram	7849	2143
1	Palkhed	661	21.40	82.90	46.85	1976	60704	43154	21.24	144	0.8	Gram, Sorghum	50345	14144
1	Waghad	964	72.20	36.53	3.50	1981	9642	6750	70.86	23	0.6	Paddy, Onion, Vegetables, Groundnut, Bajri, Wheat, Gram, Sorghum	9557	9429
1	Darna	550	202.43	135.73	66.67	1918	88822	33170	202.43	146	2	Sugarcane, Sorghum, Bajri, Wheat, Gram, Fruits	7906	6691
1	Gangapur	500	159.42	86.78	117.07	1954	21900	15960	158.54	92	1.3	-do-	3239	1834
1	Kadwa	533	52.91	61.96	8.46	1997	15523	10117	52.91	42	0.47	-do-	465	345

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	CADA Pune													
17	Kukadi (Complex)	790	864.39	951.29	0	1978	224699	156278	759.11	269	0.8 to 1	Wheat, Sorghum, Bajri, Vegetables, Sugarcane, Groundnut, Gram	57358	29369
17	Ghod	515	154.80	202.86	2.54	1965	41460	20500	154.80	54	1	Sugarcane, Sorghum, Bajri, Wheat, Grain	12155	301
	CIPC Chandrapur													
7	Bor	1327	127.42	109.29	6.35	1967	24055	13360	57.44	77	1.5 to 2	Cotton, Wheat	18169	10761
	NIC Nagpur													
7	Lower Wunna	1330	189.18	148.00	29	1991	21591	19500	126.84	109	2.5	Cotton, Wheat, Gram, Soybean, Sugarcane	17325	413
	NIC Nanded													
6	Upper Penganga	825	964.09	782.69	15.16	1984-85	139438	125495	411.27	356	1 to 2	Cottton, Wheat, Sorghum,	23589	7355
	PIC Pune													
17	Khadakwasla (Complex)	911	808.65	602.55	204	1970	83302	62146	800.57	96	0.5 to 5	Sorghum, Bajri, Maize, Wheat, Sugarcane	83302	3180
17	Pawana	2210	241.11	96.50	168.32	1975	7468	6365	241.22	30	0.5 to 2.5	Paddy, Sorghum, Bajri, Maize, Wheat, Sugarcane	ND	
18	Bhatghar Dam N.L.B.C.	1953	666.00	386.58	33.92	1893	68767	60656	665.57	87	1 to 2	Sorghum, Wheat, Bajri, Sugarcane	68767	1252
18	N.R.B.C. (Veer Dam)	1067	266.44	860.99	0	1938	181266	65506	266.44	214	1.7	Sugarcane, Sorghum, Bajri, Wheat, Other Perenials	181266	390
	UWPC Amravati													
7	Upper Wardha	840	548.14	302.78	99.72	1994-95	83300	75000	288.39	279	1.5	Cotton, Wheat, Hy. Jowar, Chilli, Groundnut	83300	340
Surplus														
	CADA Nagpur													
8	Bagh (Complex)	1325	268.96	214.44	0	1971	0	0	76.06	0	1 to 2	-do-	29703	3511
8	Pench	1138	1374.00	689.00	243	1976	126913	101200	658.17	407	1 to 2	Paddy, Cotton, Chilly, Wheat, Gram, Sunflower, Soybean	126913	11180
8	Itiadoh	1336	318.86	412.04	0	1971	22752	17500	51.75	100	1 to 2	Paddy	22752	2123
Abundant														
	CADA Pune													
15	Krishna	872	602.73	602.73	0	1978-85	81400	74000	602.73	146	1 to 2	Sugarcane, Sorghum, Wheat, Gram	30058	8243

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	CIPC Chandrapur													
9	Asolamendha	1147	56.38	52.00	0	1918	37945	9919	12.66	67	1.5 to 2	Paddy	10317	0
9	Dina	1315	67.54	55.94	0	1974	12494	7826	3.04	66	1.5 to 2	-do-	12494	0
	SIC Sangli													
15	Radhanagari	3638	219.97	203.87	24.35	1955	35422	26560	214.67	91	0.5 to 1.5	Sugercane, Paddy, Wheat, Vegetables	47288	366
15	Tulashi	1870	91.92	91.92	42.50	1978	5711	4720	91.92	23	0.5 to 2	-do-	4495	0
15	Warna	2092	779.35	578.05	6.46	1986-87	123463	96919	746.52	332	0.8	-do-	148972	0
15	Dudhganga	2636	679.11	622.11	57	1993-94	46976	38388	678.09	125	1 to 2	Sugarcane, Paddy, Wheat	61032	2000
	TIC Thane													
21	Surya	2286	285.31	145.42	31.06	1981-82	30547	14696	175.43	64	0.25	Paddy	400	0
21	Bhatsa	2589	942.10	511.86	389.03	1985-86	29378	23000	787.26	149	0.39	-do-	ND	
22	Kal-Amba	3020	528.13	156.41	54.70	1973-74	9558	7965	405.21	127	0.20	-do-	351	0
	ND= No Data													

Overview of Projects selected for Benchmarking (Medium Projects)															
Plan group/ SB No	Circle/ Project	Avg. Annual Rainfall (mm)	Designed Live Storage (Mm^3)	Designed Water use for Irrigation use (Mm^3)	Designed Water use for Non irrigation (Mm^3)	Year of Commencement of Irrigation	Culturable Command Area (ha)	Irrigable command area (ha)	Live Storage observed on 15th October 2008	Total No. of farmers	No. of villages in benefit zone	Avg. farm size (ha)	Main crops	Area covered under WUA (ha)	
														Proposed	Handed over
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Highly Deficit															
	CADA Beed														
19	Banganga	685	4.96	6.35	0.59	1975	964	906	4.96	545	5.00	1 to 3	Groundnut, Sorghum, Sunflower, Wheat	540	0
19	Chandani	770	21.58	20.59	3.11	1966	2891	2024	16.18	1716	10.00	2 to 3	Sorghum, Sunflower, Wheat, Pulses	300	0
19	Jakapur	770	7.96	7.43	0.00	1979	1600	1584	0.00	1500	4.00	2 to 3	-do-	No Data	No Data
19	Kada	589	8.56	8.38	0.18	1970	1804	1214	8.55	1407	5.00	1 to 1.5	Soghum, Wheat, Groundnut, Sugarcane, Maize, Sunflower	No Data	No Data
19	Kadi	589	5.47	5.47	0.00	1965	1190	1084	5.21	578	4.00	0.5 to 4	Soghum, Wheat, Groundnut, Sugarcane, Sunflower	No Data	No Data
19	Kambli	589	3.1	3.10	0.00	1958	1047	972	1.37	1013	5.00	1 to 1.5	Soghum, Wheat, Groundnut, Sugarcane, Maize, Sunflower	No Data	No Data
19	Khasapur	770	13.04	13.30	2.55	1954	3575	2146	13.04	1372	15.00	2 to 3	-do-	No Data	No Data
19	Khendeshwar	685	8.78	11.28	0.00	1981	1710	1471	4.49	810	10.00	1 to 3	Groundnut, Sorghum, Sunflower, Wheat	No Data	No Data
19	Khandala	770	5.24	5.24	0.00	1974	1328	830	5.24	1300	2.00	2 to 3	-do-	296	0
19	Kurnoor	770	32.28	32.18	4.81	1968	6414	3644	32.28	4331	9.00	2 to 3	Groundnut, Sugarcane, Sorghum, Sunflower, Wheat	628	270
19	Mehakari	589	12.98	12.98	0.00	1966	5007	4048	8.60	2780	8.00	1 to 1.5	Soghum, Wheat, Groundnut, Sugarcane, Maize, Sunflower	617	0
19	Ramganga	685	5.34	6.50	0.00	1977	1017	963	5.33	585	7.00	1 to 3	Groundnut, Sorghum, Sunflower, Wheat	1017	
19	Rooty	589	6.57	6.09	0.48	1938	1943	1862	9.88	1059	5.00	1 to 1.5	Sorghum, Wheat, Vegetables, Sugarcane	No Data	No Data
19	Sakat	770	13.48	15.17	0.00	1994	3140	2355	3.93	923	9.00	2 to 3	-do-	697	0
19	Talwar	589	3.23	3.23	0.00	1960	760	668	3.23	530	4.00	0.5 to 1.5	Soghum, Wheat, Groundnut, Sugarcane, Maize, Sunflower	No Data	No Data

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
19	Turori	770	6.2	5.73	1.70	1984	900	830	1.00	900	8.00	2 to 3	-do-	No Data	No Data
	CADA Solapur														
19A	Mangi	500	30.40	27.50	0	1966	4000	3117	17.40	1577	21	0.5 to 4	Sorghum, Groundnut. Sugarcane, Maize, Sunflower	931	
19	Ekrukh	500	61.15	43.21	15.95	1871	6858	2610	0.79	2000	11	1 to 1.5	Sorghum, Wheat, Vegetables, Sugarcane	No Data	No Data
18 AA	Buddhihal	500	27.95	15.08	0.00	1966	5448	4251	0.00	1883	8	0.5 to 1.5	Sorghum, Wheat, Groundnut, Sugarcane, Maize, Sunflower	5444	0
19	Hingni (P)	500	32.00	37.83	1.68	1977	6482	5629	32.00	5000	15	1 to 1.5	-do-	5714	2228
19	Javalgon	500	29.18	29.37	6.15	1997	5372	5341	17.80	4500	13	1 to 1.5	-do-	4635	1245
	PIC Pune														
19	Khairy	682	13.74	17.83	0	1989	2718	2318	12.64	1150	14	2	Sorghum, Bajri, Wheat, Groundnut	2318	0
16	Nher	508	11.79	11.79	0	1886	4324	2636	3.46	3440	18	1	Bajari, Sorghum, Wheat other Non Perennial	4324	0
19	Sina	562	52.3	67.09	0.2	1984	9677	8445	52.3	9500	26	1	Sorghum, Bajri, Wheat, Maize, Kadwal	8445	0
18	Mhaswad	533	46.21	46.21	0	1881	5804	4049	44.33	2500	11	1	Sorghum, Bajri, Groundnut	5804	0
18	Ranand	538	6.42	1.83	0	1953	3886	1093	6.42	1100	6		Kadwal, Wheat, Sorghum	3886	0
18	Tisangi	508	24.46	24.46	0	1965	5068	4049	24.46	2697	0	1	Sorghum, Bajri,	5132	0
Deficit															
	AIC Akola														
10	Dnyanganga	732	33.93	33.80	8.69	1971	4494	4249	20.10	2962	21	1.5 to 2	Wheat, Gram, Cotton	4494	158
10	Mas	696	22.04	21.48	8.09	1982	6107	4415	7.85	2900	22	2 to 3	-do-	6100	0
11	Morna	827	41.46	46.50	0.00	1972	6464	4633	8.65	2228	29	1 to 3	Wheat, Gram, Cotton, Hy.Jawar	6539	1935
11	Nirguna	812	28.85	34.50	0.00	1979	6377	5836	14.48	4574	20	1 to 2	Wheat, Gram, Cotton, Hy.Jawar, Groundnut	6377	2565
10	Paldhag	766	7.51	10.40	0.37	1978	3082	1932	7.56	1534	14	1 to 2	Wheat, Gram, Cotton	3032	563
10	Shahanur	1440	46.04	41.12	12.45	1990	9330	7466	32.93	7347	47	1.27	Cotton, Sorghum, Wheat, Gram, Orange	9330	0
10	Uma	818	11.68	10.23	0.92	1982	3007	2241	0.24	1996	21	1 to 3	Wheat, Gram, Cotton, Hy.Jawar	3007	267
	BIPC Buldhana														
10	Mun	761	36.83	45.10	0.00	1992-93	9735	7804	17.50	2782	32	2.5	Cotton, Chilly, Sunflower	9735	0
10	Torna	711	7.9	7.75	0.11	1994-95	1725	1465	6.91	753	7	2.5	-do-	1725	0
	CADA Aurangabad														
11	Ajintha Andhari	650	7.65	5.27	2.38	1984	1967	1578	1.08	500	3	3.93	-do-	294	0
3	Dhamna	677	8.51	8.34	0.15	1973	1682	1280	-1.32	510	8	2.5	-do-	696	0

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11	Gadadgad	840	4.64	3.97	0.67	1971	1448	1180	4.64	820	4	1.77	-do-	1449	1449
2	Galhati	598	13.84	7.08	4.34	1964	2812	2200	7.90	1200	12	1 to 2	Sorghum, Wheat, Cotton, Tur	No Data	No Data
3	Girija	762	21.25	14.66	6.57	1990	3443	3443	15.60	4447	10	0.77	-do-	2309	278
3	Jivrekha	668	6.13	6.14	0.00	1964	2589	1064	5.14	908	6	2.5	-do-	1318	0
3	Jui	647	6.03	6.22	2.00	1960	2636	2206	2.60	880	14	2.5	-do-	434	0
3	Kalyan	567	12.22	7.35	3.03	1986	2693	2020	12.22	800	9	3	-do-	850	0
3	Kalyan Girija	663	8.47	8.42	0.00	1972	1557	1377	8.30	420	9	3	Wheat, Sorghum, Sunflower	1655	0
3	Karpara	760	24.9	21.03	2.80	1974	2862	2151	8.37	1980	7	1.5	-do-	No Data	No Data
3	Khelna	650	11.07	4.74	6.33	1967	4935	2429	3.31	1210	11	4.08	-do-	590	0
3	Lahuki	688	5.31	3.72	1.59	1977	1323	1092	4.31	1384	4	0.96	-do-	484	0
2	Masoli	780	27.13	23.44	3.94	1982	3502	2591	8.99	2067	7	1.5	-do-	805	510
3	Sukhana	688	18.49	16.56	1.93	1968	3136	2511	9.79	1150	14	2.73	-do-	1735	0
	CADA Beed														
4	Devarjan	838	10.680	7.12	0.00	1997	2853	1882	2.47	920	7	2.04	Sorghum, Wheat, Gram, Sunflower	No Data	No Data
4	Gharni	716	22.460	23.78	0.00	1969	3542	2834	22.45	1347	14	2.10	Sugarcane, Groundnut, Sorghum, Cotton, Maize, Paddy, Vegetable, Wheat, Gram	3542	0
2	Kundlika	753	37.690	37.83	0.33	1988	3927	2964	37.69	1009	13	3.91	Sugarcane, Groundnut, Sorghum, Bajri, Cotton, Sunflower	287	287
4	Masalga	673	13.590	11.54	0.00	1996	1678	1364	3.18	790	11	1.73	Sorghum, Bajri, Cotton, Sunflower, Groundnut	1664	0
4	Raigavhvan	770	11.260	8.57	0.28	1992	2267	1700	11.26	1261	8	1.30	-do-	1370	0
4	Rui	770	8.610	5.80	1.72	1994	1893	1650	8.61	250	7	1.20	-do-	No Data	No Data
4	Sakol	850	10.950	8.40	0.00	1996	2174	2064	8.34	945	7	2.18	Sorghum, Chilli, Groundnut, Maize, Paddy, Vegetables, Wheat, Gram	No Data	No Data
4	Tavarja	744	20.340	10.98	3.92	1983	4907	3603	18.42	2105	19	1.72	Sorghum, Sunflower, Wheat	No Data	No Data
4	Terna	770	19.663	10.84	4.81	1964	1928	1652	19.66	1469	9	1.50	Sugarcane	100	0
4	Tiru	684	15.290	21.19	0.00	1978	2654	2348	11.00	1741	14	1.40	Sorghum, Chilli, Groundnut, Maize, Paddy, Vegetables, Wheat, Gram	2625	2625
4	Vhati	880	8.270	9.93	0.00	1983	1809	1760	8.27	829	7	2.15	Sorghum, Chilli, Groundnut, Maize, Paddy, Vegetables, Wheat, Gram, Fodder	1005	0

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Wan	533	19.34	19.31	7.64	1967	7125	5262	19.34	4630	22	1.54	Sorghum, Wheat, Sunflower, Cotton, Groundnut	265	0
	CADA Jalgaon														
11	Agnawati	743	2.76	2.90	0.58	1987	960	605	2.76	375	3	0.75	-do-	480	0
13 AA	Bhokarbari	694	6.54	8.15	0.00	1993-94	1790	1205	3.14	603	5	1.5	-do-	No Data	No Data
13 AA	Bori	694	25.15	31.30	7.08	1985-76	6504	4553	25.15	2277	15	2	-do-	839	0
13 AA	Burai	500	14.21	19.23*	0.87	1984-85	2981	2760	14.21	2524	5	1	Wheat, Cotton, Gram, Bajri, Sorghum, Onion, Maize	1297	155
13 AA	Kanoli	660	8.45	10.50	0.00	1974-75	1620	1363	8.45	1500	8	1 to 2	Wheat, Cotton, Gram, Bajri, Sorghum	449	0
11	Hiwara	810	9.6	12.30	0.00	1997	2923	2231	9.60	608	3	0.8	-do-	1580	0
11	Manyad	750	40.27	45.30	0.00	1973-74	6500	4864	40.55	4245	12	2	Sugarcane, Banana, Cotton	1908	0
13 AA	Rangavali	1055	12.89	23.05*	0.00	1983-84	5130	3134	12.89	1400	21	2 to 2.5	Sorghum, Wheat, Cotton, Vegetables	1261	0
13 AA	Tondapur	763	4.64	4.77	0.85	1998	1597	1060	0.98	712	2	0.8	-do-	380	0
	CADA Nashik														
4	G.Pargaon	685	8.5	12.36	0.00	1984	2142	1660	4.76	1792	15	3 to 4	-do-	747	0
11	Haranbari	795	33.02	47.66	0.00	1988-89	12966	9726	33.02	11150	55	0.5	Paddy, Sorghum, Groundnut, Wheat, Gram, Sugarcane	632	491
11	Kelzar	687	16.2	16.51	0.00	1988-89	5583	3394	16.22	2594	19	0.5	Bajri, Two seasonals, Paddy, Sorghum, Groundnut, Wheat, Gram	630	630
11	Nagya Sakya	528	11.24	13.72	0.00	1992.93	2400	2400	11.24	2125	11	0.5	Paddy, Sorghum, Groundnut, Wheat, Gram, Sugarcane	0	0
	NIC Nanded														
4	Karadkhed	650	11.01	11.34	6.56	1976	2510	1780	7.78	1298	11	1.93	-do-	1652	1652
2	Kudala	700	4.35	5.54	1.38	1974	676	567	4.29	428	5	1.23	-do-	No Data	No Data
4	Kundrala	630	10.41	12.81	4.21	1981	1265	1012	3.65	784	7	1.61	Wheat, Gram, Sugarcane, Cotton, Groundnut, Sorghum	1277	1277
4	Mahalingi	775	4.78	4.06	1.68	1980	1015	784	1.29	568	6	1.8	-do-	1449	784
4	Pethwadaj	850	9.04	13.52	1.31	1977	1970	1478	2.86	1985	13	1	-do-	No Data	No Data
Normal															
	YIC Yevatmal														
6	Adan	798	67.25	69.67	11.14	1979	10067	7804	3.81	14000	32	0.56	Cotton, Tur, Sugarcane, Groundnut	10067	0
7	Nawargaon	1067	12.47	13.28	2.71	1999	2574	2056	12.34	2680	15	0.56	-do-	2574	0

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	AIC Akola														
6	Borgaon	988	6.61	10.86	0.35	1992	3028	2271	1.69	980	16	1.5 to 3	Groundnut, Cotton, Sorghum, Wheat, Gram, Pulses	3028	3028
6	Ekburji	986	11.97	9.08	0.76	1964	2625	2429	9.29	1700	11	1 to 2	Wheat, Gram	2625	0
6	Koradi	660	20.7	15.12	0.00	1981	5067	4061	1.90	4125	26	1 to 2	Cotton, Sorghum, Wheat, Groundnut	5067	127
6	Lower Pus	852	59.63	70.50	2.42	1990	7606	6600	54.34	1653	29	2 to 4	Sugarcane, Cotton, Sorghum, Wheat, Gram, Pulses, Vegetables	6740	0
6	Saikheda	1098	27.18	24.77	4.38	1972	3895	3116	27.18	1132	18	1.5 to 3	Cotton, Sorghum, Wheat, Gram, Pulses, Vegetables	3239	0
10	Sonal	860	16.92	17.95	0.00	1981	3496	2447	0.00	2347	46	1 to 2	Hy. Jawar, Sunflower, Cotton, Wheat, Gram	3293	764
	CADA Aurangabad														
1	Ambadi	650	9.42	6.92	2.50	1979	2375	2147	11.43	1050	10	2.26	-do-	1467	0
1	Dheku	600	11.53	6.55	5.60	1961	3564	2712	9.99	1725	15	2.07	-do-	580	0
1	Kolhi	600	3.23	2.63	0.60	1967	1056	472	2.92	350	4	3.02	-do-	472	0
	CADA Jalgaon														
13 A	Abhora	750	6.02	7.13	0.00	1985	1403	1115	6.02	450	2	0.8	-do-	580	0
13 A	Aner	970	59.21	79*	8.50	1976	9201	7180	59.21	3402	10	0.5	Wheat, Groundnut, Cotton	2154	0
13 A	Karvand	960	21.39	21.39	0.62	1968	7027	4534	18.04	2200	14	0.4	-do-	1899	0
13 A	Malangaon	780	11.32	15.02	0.00	1972	2674	1587	11.33	2675	15	0.5	-do-	647	0
12	Panzara	780	35.63	72.66*	0.71	1976	7328	6868	35.63	6500	25	0.8	Maize, Bajra, Wheat	1231	0
13 A	Suki	774	39.85	45.47	0.00	1985	8647	5128	39.85	1467	8	0.9	Groundnut, Pulses, Sorghum, Cotton	5124	3639
	CADA Nagpur														
7	Wunna	1100	21.64	9.49	11.55	1968	2000	1214	12.39	279	10	1.33	Wheat, Cotton, Orange, Gram, Vegetables	2000	0
	CADA Nashik														
1	Adhala	500	27.6	38.74	0.00	1977	6427	3914	27.60	3646	16	3 to 4	Sorghum, Wheat, Grass, Bajri, Groundnut, Maize	1512	0
1	Alandi	614	27.46	21.00	5.67	1985	7408	6296	27.46	2000	18	3	Vegetables, Grapes, Sorghum, Sugarcane, Wheat, Gram	1837	0
1	Bhojapur	393	10.22	8.15	2.55	1973	4580	4500	10.11	4000	24	1.7	Bajri, Wheat, Sorghum, Gram	500	0
1	Mand Ohol	600	8.78	13.16	0.00	1983	2833	2266	8.78	2830	15	3 to 4	Sorghum, Wheat, Grass, Maize, Sunflower, Sugarcane	2427	0

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	CIPC Chandrapur														
7	Amalnalla	1218	24.48	19.52	0.00	1981	4710	2962	16.24	1280	22	1.5 to 2	Wheat, Cotton, Gram	3771	0
7	Labhansarad	1103	7.35	5.87	0.00	1987	2024	2024	7.35	725	11	1.5 to 2	Wheat, Cotton,	2024	0
7	Panchdhara	1103	10.39	8.43	0.00	1976	2262	1822	9.82	1375	14	1.5 to 2	Cotton, Wheat	2667	1974
7	Pothral	1100	34.72	34.72	0.00	1984	10910	8948	50.03	1821	33	1.5 to 2	-do-	10910	0
	NIC Nanded														
6	Loni	1150	8.38	9.51	0.91	1981	1835	1377	8.12	1788	7	1.02	-do-	No Data	No Data
6	Dongargaon	1150	8.81	11.55	0.00	1983	1008	830	8.47	561	5	1.8	-do-	1008	1008
6	Nagzari	1150	6.56	6.18	2.92	1983	1260	960	6.45	269	6	4.68	-do-	665	0
	PIC Pune														
17	Vadiwale	2845	30.39	22.18	0	1990	5564	5000	30.39	4415	26	0.15 to 1	Paddy, Wheat	5564	0
Surplus															
	CADA Nagpur														
8	Bageda	1146	4.535	4.11	0.00	1974	1887	1798	0.13	1296	10	0.85	Paddy	2566	679
8	Betekar Bothali	1186	3.666	3.67	0.00	1989	1266	1315	0.00	672	4	0.75	-do-	1266	0
8	Bodalkasa	1281	19.73	16.45	2.73	1917	14665	4047	1.75	6283	36	0.21	-do-	9839	0
8	Chandpur	1200	28.87	28.87	0.00	1916	10117	6271	0.10	8274	40	0.9	-do-	10117	617
8	Chorkhamara	1267	22.04	20.80	0.00	1917	13246	4047	0.98	1210	25	0.35	-do-	13246	0
8	Chulband	1384	21.46	16.82	0.00	1976	3378	3167	2.63	2929	21	1.1	-do-	3378	0
8	Kanholibara	1004	20.49	22.03	4.73	1976	4815	3371	18.00	1217	22	3	HW Groundnut, Cotton, Soybean, Wheat, Gram, Vegetables	6025	0
8	Kesarnala	979	3.93	4.28	0.00	1976	937	780	0.63	126	7	1.6	-do-	937	0
8	Khairbanda	870	16.48	12.22	0.00	1915	11271	6109	1.23	6400	31		-do-	112267	0
8	Khekranala	963	23.81	29.54	0.00	1987	3810	2610	8.68	1829	14	1.5	Cotton, Wheat, Gram, Orange, Sugarcane, HW Groundnut, Soybean, Vegetables.	3144	0
8	Kolar	978	31.32	41.23	1.21	1984	8088	5940	17.65	2829	43	2.1	-do-	8088	0
8	Makardhokada-Saiki	963	25.9	27.37	1.45	1980-81	5835	5477	4.08	2625	29	1.33	Paddy, Cotton, Chillies, Wheat, Sorghum, Gram, Soybean, Vegetables	3512	0
8	Managadh	1609	7.05	7.83	0.00	1970	3390	1700	4.04	1006	11	0.35	-do-	3390	0
8	Mordham	1016	4.95	4.91	0.05	No data	1423	1315	0.93	406	8	2.1	Orange, Wheat, Gram, Vegetables, Cotton	1423	0
8	Pandharabodi	1290	13.14	14.51	2.15	1974-75	1044	862	3.33	754	12	2.18	Paddy, Chillies, Wheat, Gram, Soybean, Sunflower.	1030	0
8	Rengepar	1138	3.57	5.86	0.00	1977	1305	870	0.65	1044	7	0.75	-do-	1305	0
8	Sangrampur	1281	3.868	8.87	0.46	1969	1536	1094	0.16	1409	7		-do-	1194	0
8	Sorna	1255	5.733	5.73	0.00	1972	1553	933	0.00	943	8	0.75	-do-	1553	0
8	Umari	1064	5.14	5.85	0.00	1971-72	1802	1195	4.76	749	8	2	Wheat, Cotton, Orange, Gram, Vegetables, Groundnut	1902	0

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8	Chandrabhaga	1016	8.262	8.25	0.02	1974-75	3181	2604	0.73	106	15	2.1	Orange, Wheat, Gram, Vegetable, Cotton	3181	0

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	CIPC Chandrapur														
8	Chandai	1205	21.58	9.28	0.00	1983	2565	2056	13.66	1.12	14	1.5 to 2	-do-	2565	0
8	Chargaon	1285	19.87	11.98	0.00	1983	1946	1500	8.80	8.799	12	1.5 to 2	Paddy, Wheat	884	0
Abundant															
	CIPC Chandrapur														
7	Dongargaon(Wardha)	1100	4.44	3.17	0.00	1974	972	631	4.39	328	9	1.5 to 2	-do-	608	608
9	Ghorazari	1285	43.16	35.00	0.00	1923	12868	3846	2.77	7181	65	1.5 to 2	Paddy	4961	0
9	Naleshwar	1147	10.23	4.29	0.00	1922	5035	1888	0.97	3097	23	1.5 to 2	-do-	2329	0
	KIC Ratnagiri														
23	Natuwadi	3632	27.230	27.23	0.00	1984	2139	2050	26.33	3629	18	0.02 to 0.05	Paddy, Groundnut, Pulses, Mango	2050	0
	SIC Sangli														
15	Chikotra	1074	43.06	43.05	0.00	2001	6833	5630	37.18	1326	27	1 to 2	Sugercane, Paddy, Wheat, Vegetables	6833	0
15	Chitri	1524	52.73	64.45	0.00	2001-02	9160	5850	52.73	2590	54	0.55	-do-	9160	0
15	Jangamhatti	2190	33.21	26.37	6.84	1996-97	4450	3700	26.87	8000	10	0.1	Sugercane, Maize,Chilly Wheat,Potato, GrouNo Datanut	4457	0
15	Kadavi	3418	70.56	70.56	0.00	2001	9908	9219	70.56	2211	52	0.8	-do-	9908	0
15	Kasari	4560	77.96	61.57	0.00	1989	9995	5458	77.96	3197	61	1 to 1.5	Sugercane, Paddy, Wheat	9995	0
15	Kumbhi	4985	76.5	74.81	1.68	2001	9170	8711	68.08	1773	51	0.10 to 1	Sugercane, Wheat, Groundnut, Sunflower	9170	0
15	Patgaon	3486	104.77	78.58	26.19	1996	10000	8100	104.77	3525	44	1 to 2	Sugercane, Paddy, Wheat	10000	0
	TIC Thane														
21	Rajanala	339.140	32.00	0.00	1958-59	3050	2542	0.00	35	0.20	Paddy	400			
21	Wandri	2540	35.938	35.94	0.00	1984.85	3066	2044	33.16	1526	17	0.25	-do-	No Data	No Data

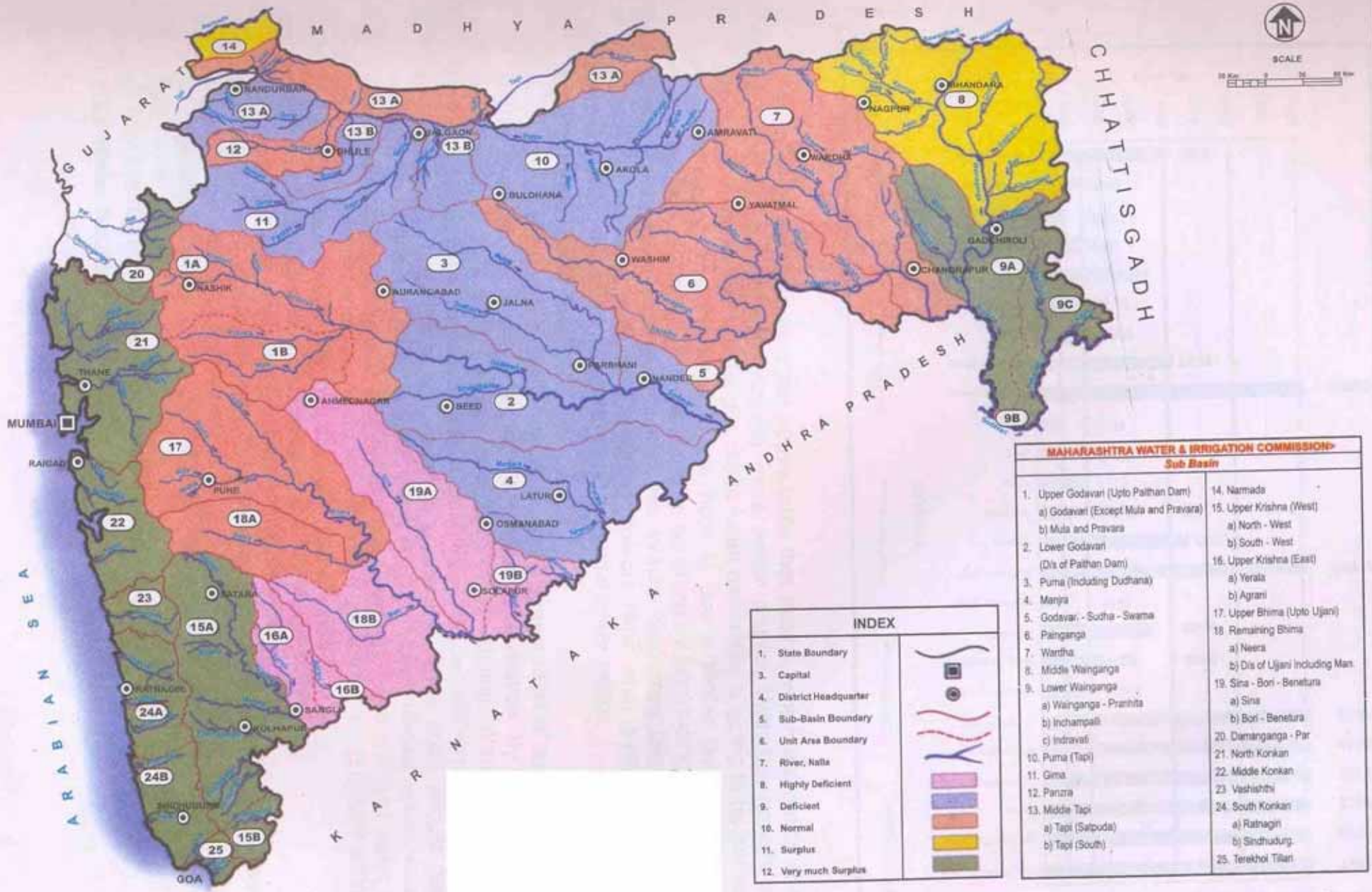
Overview of Projects selected for Benchmarking (Minor Projects)													
Plan Group/ SB No	Circle/ Project	Avg. Annual Rainfall (mm)	Designed Live Storage (Mm^3)	Designed Water use for Irrigation (Mm3)	Designed Water use for Non irrigation (Mm3)	Year of Commencement of Irrigation	Culturable Command Area (ha)	Irrigable command area (ha)	Live Storage observed on 15th October 2008	No. of villages in benefit zone	Avg. farm size (ha)	Main crops	Area handed over to WUA (ha)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Highly Deficit													
	CADA Beed												
19	Bagalwadi	685	1.33	1.65	0	1971	441	340	1.33	3	1 to 3	Sorghum, Groundnut. Wheat Sunflower	0
19	Incharna	589	1.93	1.93	0	1971	615	555	1.93	7	0.5 to 4	Sorghum, Groundnut, Sugarcane, Maize Sunflower	No Data
19	Kini	589	1.24	1.24	0	1967	385	380	1.24	3	0.5 to 4	Sorghum, Groundnut, Sugarcane, Maize Sunflower	No Data
19	Titraj	685	1.14	1.47	0	1985	367	275	1.14	3	1 to 3	Sorghum, Groundnut. Wheat Sunflower	No Data
	Cada Solapur												
19	Pathari	500	11.62	10.63	0.99	1905	1012	647	11.62	7	0.5 to 4	Sorghum, Groundnut. Sugarcane, Wheat, Sunflower	0
18 AA	Padawalkar wadi	500	2.12	2.12	0.00	1973	458	352	0.24	2	1 to 1.5	-do-	458
	PIC Pune												
19A	Chincholi patil	500	2.17	2.17	0	1977	569	455	2.17	3	0.83	Sorghum, Grain, Sunflowar, Maze	0
Deficit													
	AIC Akola												
3	Ancharwadi-1	737	2.34	2.66	0	1985	607	370	0.25	2	1 to 2	Wheat, Gram, Cotton	No Data
10	Jamwadi	1196	2.16	2.16	0	1978	580	406	1.45	4	1 to 2	Wheat, Gram, Cotton, Sorghum	0
10	Mozari	695	2.93	2.35	0	1977	675	475	0.00	2	1 to 2	Wheat, Gram, Cotton, Hy.Jawar.	928
10	Shekdari	911	4.56	4.88	0	1981	1975	1331	1.17	7	1.2	Cotton, Sorghum, Wheat, Gram, Orange.	1208
10	Vyaghra	747	7.14	7.86	1.35	1991-92	1993	1615	2.19	8	1.5	Cotton, Chilly, Sunflower	40

1	2	3	4	5	6	7	8	9	10	11	12	13	14
	BIPC Buldhana												
10	Adol	850	11.89	7.06	2.45	1991-92	1506	1585	3.22	10	3.0	-do-	329
10	Brahamanwada	753	6.18	6.08	0.00	1995-96	1495	1196	2.93	4	3.0	Cotton, Chilly, Sunflower	0
3	Kardi	766	4.89	5.52	0.00	1991-92	1197	958	0.00	8	1.5	Cotton, Chilly, Sunflower	40
3	Masural	776	8.25	7.88	2.92	1990-91	841	734	1.00	5	1.0	Cotton, Chilly, Sunflower	0
3	Mohagavan	800	5.86	4.14	0.52	1998-99	1048	706	0.34	5	3.0	Cotton, Chilly, Sunflower	190
4	Sawakhed Bhoi	66	3.7	2.61	0	1988-99	589	445	3.78	7	3.0	Cotton, Chilly, Sunflower	589
4	Shivan kd.	793	4.18	2.58	0	1995-96	712	605	0.33	6	2.0	-do-	0
3	Vidrupa	590	3.41	0.00	0.00	1990-91	1020	840	3.41	6	1.5	Cotton, Chilly, Sunflower	0
10	Vishwamitri	772	10.01	13.91	1.25	1993-94	1882	1392	7.37	7	3.0	-do-	0
	CADA Aurangabad												
2	Tandulwadi	653	1.994	1.99	0.00	1972	566	474	1.99	3	1.15	Wheat, Sorghum, Cotton, Gram Groundnut	No Data
	CADA Beed												
4	Bhutekarwadi	855	2.870	3.37	0	1969	1013	809	2.87	4	1.90	Sorghum, Chilli, Maize, Vegetables, Wheat, Cotton	809
4	Dhanori	770	1.389	1.41	0	1974	467	343	0.35	1	1.10	Sugarcane	No Data
4	Hiwarsinga	675	1.280	1.27	0	1989	299	257	0.86	1	1.16	Sorghum, Bajri, Cotton, Sunflower, Groundnut	No Data
	CADA Jalgaon												
11	Bambrud	743	2.18	1.97	0	1975	579	461	0.00	1	0.8	-do-	No Data
11	Chavdi	482	4.38	4.38	0	1972	388	323	2.04	2	1 to 2	Wheat, Gram, Onion, Groundnut	323
11	Dudhkheda	6350	3.366	3.37	0	1972	480	303	3.37	4	0.4	Wheat, Cotton, Gram	0
11	Galan	743	1.87	2.01	0	1968	425	340	1.87	1	0.75	Cotton, Groundnut	No Data
11	Hatgaon-1	743	1.4	1.52	0	1974-75	441	267	1.26	1	1.5	Cotton, Vegetables	No Data
11	Kunzar-2	743	1.01	1.21	0	1991-92	223	178	0.45	1	1.5	-do-	0
11	Waghala-1	743	1.21	1.21	0	1976-77	313	223	1.10	1	1.5	-do-	No Data
11	Wakdi	743	0.98	0.93	0	1975	228	183	0.49	1	0.8	-do-	No Data

1	2	3	4	5	6	7	8	9	10	11	12	13	14
	CADA Nashik												
4	Kuttarwadi	618	1.46	2.12	0	1993	370	297	1.46	2	2 to 3	Sorghum, Wheat, Grass, Bajri, Groundnut, Maize,	No Data
	NIC Nanded												
4	B.Hipperga	850	2.05	2.93	0	1973	481	481	2.05	3	2.09	-do-	No Data
4	Daryapur	875	1.028	1.57	0	1973	230	222	0.00	3	1.35	-do-	230
2	Koshtewadi	850	0.77	1.05	0	1966	190	190	0.38	1	1.05		No Data
4	Panshewadi	850	1.58	2.02	0	1975	320	263	1.58	3	1.16	-do-	No Data
3	Purjal	830	2.656	2.66	0	1975	631	558	0.00	4	0.9		601
4	Wasur	830	0.88	1.18	0	1971	213	171	0.39	2	3.32	Wheat, Gram, Sugarcane, Cotton, Groundnut, Sorghum	213
Normal													
	YIC Yavatmal												
6	Majara	924	3.23	2.50	0	1994	1425	1269	3.23	6	2.5 to 3	Cotton, Tur, Wheat	0
	AIC Akola												
6	Singdoh	714	1.22	1.22	0	1976	246	`	0.07	3	1 to 2	Wheat, Gram, Cotton, Hy. Jawar.	0
	CADA Nashik												
1	Mahirawani	600	2.52	2.52	0	1974	949	576	2.52	9		Wheat, Gram Kh.Vegetables	No Data
	PIC Pune												
17	Rahu	364	9.79	9.79	0	1993	2300	1887	9.79	5	0.5 to 5	Sorghum, Bajri, Wheat, Maize, Vegetables, Paddy, Sugarcane	No Data
18	Tambve	500	4.85	4.85	0	1968	1354	750	4.85	7	0.4	Bajri, Sorghum, Kadwal	No Data
	CIPC Chandrapur												
7	Bhatala	1175	1.55	1.40	0	No Data	415	350	1.55	3	1.5 to 2	Paddy, Wheat	0
7	Ashti	1100	1.62	1.36	0	1965	455	364	0.72	4	1.5 to 2	Wheat, Cotton, Gram	No Data
	NIC Nanded												
6	Hirdi	82	1.34	1.34	0	1983	353	283	1.34	2	0.9	-do-	No Data
6	Nichpur	1150	2.2	2.26	0.32	1973	525	385	2.15	2	4.77	Wheat, Gram, Sugarcane, Cotton, Groundnut, Sorghum	No Data
6	Pimprala	750	2.43	3.39	0	1968	749	672	1.39	5	2.2	-do-	0
6	Pota	650	1.67	2.13	0	1972	718	432	0.07	4	3.43	-do-	No Data
6	Sawana	804	2.154	1.65	0.51	1979	431	410	1.88	3	1	-do-	431
5	Amthana	755	1.16	1.47	0	1966	413	344	0.00	4	2.9	-do-	No Data

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Surplus													
	CADA Nagpur												
8	Bhadbhadya	1284	2.89	2.85	0.19	1975	800	674	1.84	3	1.11	Paddy	No Data
8	Urkudapar	1214	4.75	4.75	0	1980	1265	1012	1.76	6	2	Paddy, Chilly, Wheat, Gram	No Data
8	Wani	1190	2.021	1.98	0	1983	526	405	1.15	5	5	-do-	No Data
8	Wahi	1267	2.03	2.88	0	1992	442	402	1.07	5	0.85	-do-	No Data
Abundant													
	CIPC Chandrapur												
9	Lagam	1283	3.42	3.41	0	No Data	344	315	3.42	4	1.5 to 2	Paddy,	No Data
	KIC Ratnagiri												
23	Shirwal	3800	3.680	2.35	0	1979	421	200	3.68	2	0.15 to 0.05	Coconut, Arecanut, Pepper, Spices, Paddy	0
	NKIPC Thane												
21	Dhasai	2200	4.478	4.20	0	1984-85	457	340	4.47	6	0.5	Paddy, Vegetables & fruits	No Data
22	Panchanadi	3320	1.46	1.46	0	1984-85	114	91	1.46	3	0.2	Beetlenut, Coconut, Paddy	No Data
	SIC Sangli												
15	Benikre	1400	1.784	1.78	0	1990	358	286	1.78	1	1.5 to 2	Sorghum, Groundnut, Wheat	No Data
	CADA Pune												
15	Thoseghar	1158	1.84	1.84	0	1996	306	270	1.81	2	0.1	Paddy, Sorghum	0
	TIC Thane												
21	Bhoj	2472	2.400	1.62	0	1974	216	135	2.13	3	0.35	-do-	160
22	Kalote Mokashi	3623	4.190	4.19	0	1976-77	126	105	4.19	4	0.20	Paddy	105
21	Khandpe	2377	2.000	2.00	0	1985	202	120	2.00	2	0.40	-do-	120
22	Kondgaon	3872	3.641	3.64	0	1979-80	212	188	3.64	5	NA	-do-	0
21	Mohknurd	3070	4.740	4.74	0	1975	213	173	4.74	5	0.35	-do-	0
22	Pabhre	3429	1.787	1.79	0	1978-79	174	133	1.79	3	0.20	-do-	0
	Note: Necessary changes for some projects in sub-basin, Plan group and type are incorporated in the above overview.												

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



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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 (Tapi)
11. Girna
12. Panzra
13. Middle Tapi
    a) Tapi (Satpuda)
    b) Tapi (South)
14. Narmada
15. Upper Krishna (West)
    a) North - West
    b) South - West
16. Upper Krishna (East)
    a) Yerala
    b) Agrani
17. Upper Bhima (Upto Ujjani)
18. Remaining Bhima
    a) Neera
    b) D/s of Ujjani including Man
19. Sina - Bori - Benetura
    a) Sina
    b) Bori - Benetura
20. Damanganga - Par
21. North Konkan
22. Middle Konkan
23. Vashishthi
24. South Konkan
    a) Ratnagiri
    b) Sindhudurg
25. Terekhol Tillari

Appendix-IV

River Basins & Agro- Climatic zones of Maharashtra

River Basins

The State is mainly covered by the basins of Krishna, Godavari and Tapi except the west-flowing rivers of Konkan strip. A small portion on north comes under Narmada basin. There are in all 380 rivers in the State and their total length is 19269 km. Most of the land is undulating and hilly. Comparatively, continuously hilly plateau lands are very few. Because of this, flow canal systems in Maharashtra are very expensive, though there are large numbers of suitable sites for building water storage reservoirs.

Number of rivers originates from Sahyadri at about 500 to 700 m elevation and flow westward to Arabian Sea through the Konkan strip. Damanganga, Surya, Vaitarna, Ulhas, Karla, Kundalika, Kal, Savitri, Vashishthi, Shastri, Gad, Karli, Tillari and Terekhol are the prominent rivers. These rivers are of shorter length holding fair amount of water during monsoon but run totally dry during summer. The natural calamities such as land erosion, salt water intrusion, land subsistence etc. are often inflicted upon Konkan.

Tapi and Narmada are the two west-flowing rivers coming from Madhya Pradesh and flowing down to Gujarat State through Maharashtra. Narmada forms 54 km long common boundary of the State along northern border. Total length of Tapi in Maharashtra is 208 km. These rivers and tributaries have rendered the land of Khandesh[1] fertile.

Wainganga flows in north-south direction. The length of Waiganga in Maharashtra is 476 km. Godavari is the principal east-flowing and longest river in Maharashtra (968 km).

South-east flowing Bhima and mainly north-south flowing Krishna are the major rivers of South Maharashtra. The length of Bhima in Maharashtra is 451 km. It joins Krishna on the Karnataka-Andhra Pradesh boundary near Raichur.

Krishna rises near Mahabaleshwar. Krishna is 282 km long in the State.

Basin-wise water availability – (Maharashtra – India)

Sr. No	Basin	Geographical Area (Mha)	Culturable Area (Mha)	Average Annual Availability (BCM)	75% Dependable Yield (BCM)	Permissible Use As Per Tribunal Award (BCM)
1	Godavari	15.430	11.256	50.880	37.300	34.185
2	Tapi	5.120	3.731	9.118	6.977	5.415
3	Narmada	0.160	0.064	0.580	0.315	0.308
4	Krishna	7.010	5.627	34.032	28.371	16.818
5	West flowing Rivers	3.160	1.864	69.210	58.599	69.210
	Total:	30.88	22.542	163.820	131.562	125.936

Sub-basin wise planning

As per the recommendations laid down in the National Water Policy – 2002 and Maharashtra Water and Irrigation Commission's Report, the State Water Policy has been adopted by GOM in 2003.

The objectives of the Maharashtra State Water Policy are to ensure the sustainable development and optimal use and management of the State's water resources, to provide the greatest economic and social benefit for the people of the State of Maharashtra and to maintain important ecological values within rivers and adjoining lands.

The Maharashtra State Water Policy mentions that -

'To adopt an integrated and multi-sectoral approach to the water resources planning, development and management on a sustainable basis taking river basin/sub basin as a unit.'

The water resources of the State shall be planned, developed, managed with a river basin/ sub basin as a unit, adopting multicultural approach and treating surface and sub-surface water with unitary approach.'

The geographical area of the State is 308 lakh ha and cultivable area is 225 lakh ha. This geographical area is divided mainly into five major river basins of Godavari, Krishna, Tapi, Narmada and basin groups in Konkan. There are 22 narrow basins of west flowing rivers in Konkan.

The Maharashtra Water and Irrigation Commission has proposed delineation of five river basins basically into 25 distinct sub basins for planning of water resources development in the State. The categorisation 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 draining area.

The sub basins are as follows:

Sr. No.	River Basin	Names of Sub basins	Abbreviated name	Categorisation for planning on the basis of availability of natural water
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

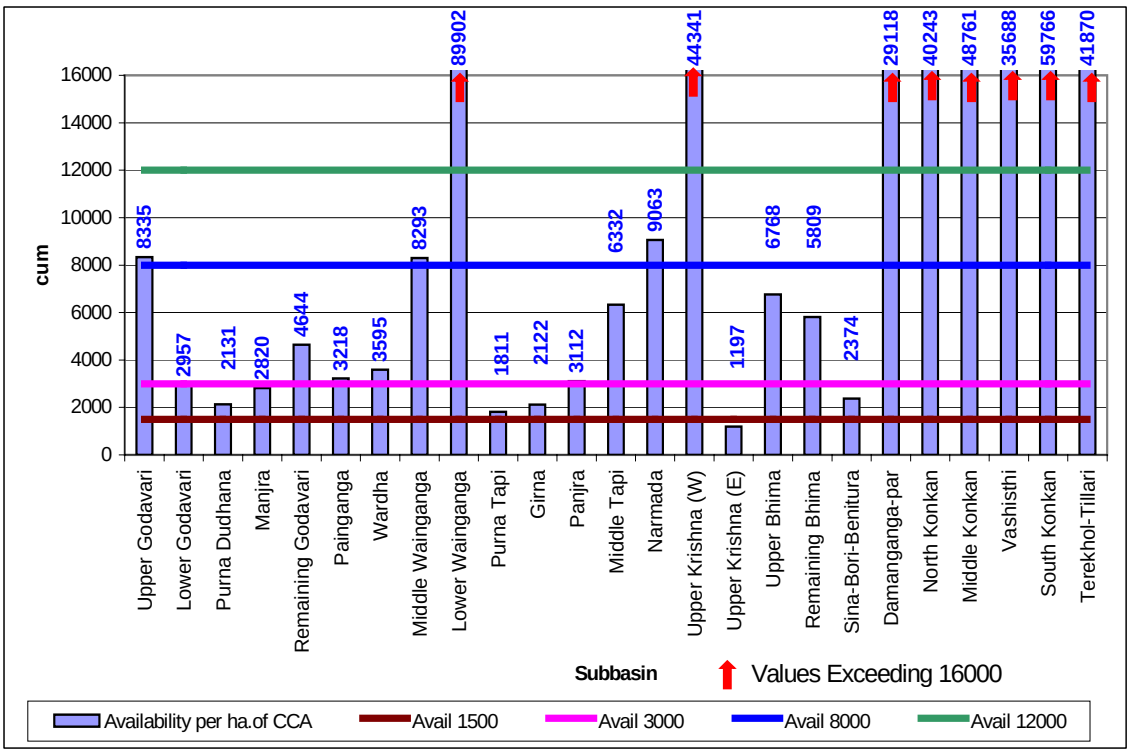
Sr. No.	River Basin	Names of Sub basins	Abbreviated name	Categorisation for planning on the basis of availability of natural water
		11) Girna	Girna	Deficit
		12) Panzara	Panzara	Normal
		13) Middle Tapi	Middle Tapi	Deficit
III	Narmada	14) Narmada	Narmada	Surplus
IV	Krishna	15) Upper Krishna (West)	Upper 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	Sina-Bori-Benetura	Highly Deficit
V	West Flowing	20) Damanganga-Par	Damanganga-Par	Abundant
	Rivers in	21) North Konkan	North Konkan	Abundant
	Konkan	22) Middle Konkan	Middle Konkan	Abundant
		23) Vashishthi	Vashishthi	Abundant
		24) South Konkan	South Konkan	Abundant
		25) Terekhol – Tillari	Terekhol – Tillari	Abundant

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

Sr. No.	Plan Group	Per ha availability (m^3)	Percent of cultivable area of State
i)	Highly Deficit Area	Below 1500	13
ii)	Deficit area	1501-3000	32
iii)	Normal area	3001-8000	34
iv)	Surplus area	8001-12000	06
v)	Abundant area	Above 12000	15

A graph showing basin wise availability of water is appended herewith.

The performance of a circle (herein called service provider) very much depends upon the availability of water, which in turn is governed by the type of sub-basin in which the project is located. 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.



Climate

Maharashtra is having mostly a seasonal climate. Four distinct seasons are noticeable in a year viz. (1) Monsoon: The rains start with the south - west winds. Mainly it rains during the four months from June to September, but it often extends up to October. (2) Post-monsoon season: October to mid December is a fair weather season with meagre rains. These are the initial months of the post-monsoon, *Rabi* crops and the condition of later depends upon the weather during these months. (3) Winter: It is generally a period of two or two-and-a-half months, from mid-December until end of February. Most of the *Rabi* crops are harvested during these months. (4) Summer: It lasts for at least three months - March to May.

There is considerable variation in weather and rainfall among the five different geographical regions of Maharashtra.

1 The coastal districts of Konkan experience heavy rains but mild winter. The weather, however, is mostly humid throughout the year.

The maximum and minimum temperatures here range between 27^0C and 40^0C and 14^0C to 27^0C respectively. The relative humidity is 81% to 95% during June to August while 30% to 65% during January - February.

2 The western parts of Nashik, Pune, Satara and Kolhapur districts show a steep reduction in rainfall from the mountainous regions towards the East. The maximum temperature ranges between 26^0C to 39^0C and the minimum temperature between 8^0C to 23^0C. The relative humidity is 81% to 99 % in August and only 20% to 39% in March.

3 The eastern part of the above four districts together with Ahmednagar, Sangli, Solapur, Aurangabad, Jalna, Beed and Osmanabad districts fall under the rain

shadow of Sahyadri Mountains and therefore the beginning and end of the rainy season is quite uncertain in these parts. The rainfall is also meagre. The climate is extreme. The summer temperature is high (maximum temperature 36^0C to 41^0C) but winter temperature is low (minimum temperature. 10^0C to 16^0C). The relative humidity in August is between 82% to 84% but only 19% to 26% in April. The rainfall increases as we go towards east viz. Parbhani, Nanded and Yavatmal. Many a times the eastern winds during the end of monsoon cause precipitation here.

4 Likewise the Tapi basin, the southern parts of Satpuda ranges and Dhule-Jalgaon districts towards west is low rainfall part like that of rain shadow region. But towards east Buldhana, Akola and Amravati districts experience a heavy rainfall. Summer temperature in this region is quite high (39^0C to 43^0C) and minimum winter temperature is found to be 12^0C to 15^0C. Relative humidity between May to August is 82% to 87% whereas in March-April it is 12% to 31%.

5 The Wainganga basin on east of Maharashtra and the hilly region still farther east is, on the whole, a zone having good rainfall, but as it is some what low lying area, the climate is even more extreme. The summer temperature is very high (39^0C to 45^0C) while it is cooler in winter as compared to other regions (12^0C to14^0C).

Rainfall

Maharashtra gets rain both from the south-west and the north-east monsoon winds. The proportion of the rainfall derived from the north-east monsoon increases towards east.

The average rainfall of the State is approximately 1360 mm. nearly 88% of the total average rainfall occurs between June to September, while nearly 8% occurs between October to December and 4% after December. There is a considerable variation in the reliability of the rains in different parts of the State.

The steep decline in the rainfall to east of Sahyadri is strikingly noticeable. In the 30 to 50 km wide belt the average rainfall is observed to be less than 650 mm (as low as only 500 mm at some places). Thereafter, the rainfall increases steadily towards east and the average rainfall in the easternmost districts is observed to be 1400 mm.

The pre-monsoon rain during March to May is maximum in Western Maharashtra (5%) while in Marathwada it is 4%, in Vidarbha it is 3% and the minimum is in Konkan (1%).

The number of average annual rainy days is maximum 95 in Konkan, 55 in Vidarbha, 51 in Western Maharashtra and the minimum 46 in Marathwada.

Out of the total cultivable land in Maharashtra about 53% is under *Kharif* and about 30% is under *Rabi* crops. These mostly comprise of food grains and oilseeds. The rainfall during June to September affects both the *Kharif* and the *Rabi* crops. That is why the regularity of rainfall during this period is of importance. But it is seen that there is considerable fluctuation in the number of rainy days as well as the amount of rainfall from year to year. The fluctuation in rainfall is observed to be 25%, 40% and between 20% to 30% in Konkan, Central Maharashtra and Vidarbha respectively. Crop management on fields during this period thereby becomes quite difficult.

Appendix-V

Abstract of Water Rates for Irrigation Domestic and Industrial Use for the year 2008-09

	Irrigation	**Rate** Rs./ha (From 1/7/2004)
1	**Flow Irrigation**	
	Crops	
A	**Kharif**	
	Seasonals & paddy (Agreement)	238
	Groundnut, Hy. Seeds etc.	476
B	**Rabi**	
	Seasonals (except Wheat and Groundnut)	358
	Wheat	476
	Cotton,Groundnut,Paddy etc.	724
C	**Hot Weather**	
	Ground Nut	1438
	Seasonals	724
D	**Two Seasonals**	
	Kharif and Rabi	357
	Rabbi & Hot Weather	605
E	**Perenial**	
	Sugarcane,Banana	6298
2	**Lift Irrigation (water lifted from)**	
A	**Canal**	
	Kharif Crops	85
	Rabi Crops	120
	Hot Weather Crops	240
	Perenial (Sugarcane, Banana)	1810
	Other Perenial Crops	1200
B	**Reservoir**	
	Kharif Crops	40
	Rabi Crops	60
	Hot Weather Crops	120
	Perenial	910
	Other Perenial	605
C	**River**	
	Kharif Crops	35
	Rabi Crops	35
	Hot Weather Crops	60
	Perenial	450
	Other Perenial	310
3	**Lift Irrigation (Volumetric basis)**	Rs/Thousand m^3
	From canal at minor head	
A	Kharif	47.60
B	Rabi	71.40
C	Hot Weather	144.80
D	If water users contributed for construction (Royalty) for all seasons	23.80

	Non Irrigation water rates	
1	**Domestic Supply**	
A	From reservoirs,	1.50
B	canals and rivers downstream of dams	5.80
C	In case Capital Investment is done by user or contributed in proportion of water use	1.30
2	**Industrial Supply**	
A	For Colddrinks, breverages, mineral water etc. From reservoirs,	170.00
B	For Colddrinks,breverages,mineral water etc from canals and rivers downstream of dams	410.00
C	In case Capital Investment is done by user or contributed in proportion of water use	60.00
3	**Other use**	Rs/10000 Litre.
A	From reservoirs	33.00
B	Canals and rivers downstream of dams	82.00
C	In case Capital Investment is done by user or contributed in proportion of water use	12.00

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