

MTP- Presentation
“Drinking Water Security”
A
Conceptual Framework for
Policy Assessment tool of Rural Drinking Water
Supply Schemes at Taluka level

*Under Guidance
of*
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Background

- * extensive field work by CTARA, IITB in the recent past
 - spanning SVS, MVS, GP level etc.
- * GW both in the small and regional
- * need felt to understand the state and its capacity
 - policy and progress
- * Developing Standard Knowledge Products- to work at Government-People interface

Objectives

Objectives of the study are –

- To understand the evolution of policies and programmes in RDWS at macro level.
- To understand the implementation process and administrative capacity at district level.
- Develop a framework for Assessment and Evaluation of RDWS at Taluka level as a Standard Knowledge Product
 1. To assess the impact of population size of habitations with respect to drinking water.
 2. To assess prime source of drinking water during monsoon and non-monsoon seasons.
 3. To assess the effect of source of water (Surface/ground) on drinking water security.
 4. To assess the perception/awareness among people about supply driven/ demand

Methodology

❑ Literature Survey-

- Various Guidelines from-
 - MDWS, NRDWP(National Rural Drinking Water Programme),
- Various Reports and Surveys-
 - World Bank, GOI, Planning Commission. Census Data, NRDWP Data

In MDWS, more Stress on target numbers, MDG Goals , service ladder , demand driven and quality where as in literature community involvement seems to be cure for all.

❑ Data Collection-(Quantitative as well as qualitative)

- Secondary Data access from IMIS, GoI. ZP(RWSD).
- Field Visits, Interviews with villagers, baseline survey of existing assets.(30 habitations in Shahapur)
- Case Study methods.(6 habitations in Gujarat)

RWS- National Level

- With 80 crores people, over an area comprised of about 16 lakhs habitations in the country, Rural Drinking Water Sector poses a great infrastructural challenge to any State machinery.
- spent an estimated amount of Rs. 1,10,000 crore in the rural drinking water sector which has resulted into 78% fully covered habitations in the country and (as on 01/04/2012, IMIS)

- **Brief History-**

- 1944

Bhor Committee, recommends the provision of safe water supply to cover 90 per cent of India's population in a timeframe of 40 years.

- 1972-73

Introduction of the Accelerated Rural Water Supply Program (ARWSP) by Gol, to assist states to accelerate coverage of drinking water supply.
Identification of problem villages based on norms

- 1999

Formation of separate Department of Drinking Water Supply in the Ministry of Rural Development, Govt. of India

Brief history- cont..

- 2002

Scaling up of sector reform initiated in the form of Swajaldhara programme. Demand driven approach, greater role of PRIs/VWSC. Introduction of public contribution, O&M became responsibility of VWSC.

- 2009

National Rural Drinking Water Programme launched from 1/4/2009 by modifying the earlier Accelerated Rural Water Supply Programme and subsuming earlier sub Missions, Miscellaneous Schemes and mainstreaming Swajaldhara principles.

- 2010

Department of Drinking Water Supply renamed as Department of Drinking Water and Sanitation, upgraded as Ministry of Drinking Water and Sanitation in 2011.

NRDWP(National Rural Drinking Water Program)

- In 2009 , a further modification of ARWSP, Swajaldhara. It coincides with Bharat Nirman, another programme of GoI to build rural infrastructure.
- The key principles of NRDWP are the same as of Swajaldhara principles. Apart from this, NRDWP has more emphasized on sustainability, multiple water sources/conjunctive GW/SW and rain water harvesting etc.

Key Features:

- Modifications in principle: Water as a public good that everyone can demand.
- Modification in norms: Shift from a fixed minimum quantity per capita per day to the concept of drinking water security with basic unit being changed to household.
- VWSCs role: Major role in planning and implementation.
• e.g., communities have to prepare and implement the village water security plans, apart from O&M of the schemes.
- Use of multiple sources: Advocates for use of surface water in case of high development of ground water, reliance on multiple water sources.
- Management Information System (MIS) Activities

RDWS- Maharashtra

Maharashtra, the third largest and the second most populous state in India. Situated in western region of country bordering to Arabian sea, Gujrat, Madhya Pradesh, Chhatisgarh Andhra Pradesh and Goa. Wealthiest state in the country and has witnessed a significant increase in the level of urbanisation during last four decades.

The state is classified into six revenue divisions

Year	Population (million)			Decadal Growth Rate
	Rural	Urban	Total	
1971	34.7	15.7	50.4	27.45
1981	40.8	22.0	62.8	24.54
1991	48.4	30.5	78.9	25.73
2001	55.8	41.1	96.9	22.73
2011	61.5	50.8	112.4	15.99



Institutional Structure in RWS

Ministry of Water Supply and Sanitation (Department of Water Supply and Sanitation)

- created in 1996 , for WATSAN in both urban and rural areas. setting the policies for the State.
- nodal agency to coordinate with the Central Government and other key institutions.

The Ministry is headed by the Minister of Water Supply and Sanitation and is supported by the State Minister for Water Supply and Sanitation. The Secretary heads the Water Supply and Sanitation Department (WSSD)

The WSSD is supported by two technical wings,

- Maharashtra Jeevan Pradhikaran (MJP) &
- Groundwater and Survey Development Agency (GSDA).

Brief History of Programs

Same as central. Some programmes which were implemented at state level-

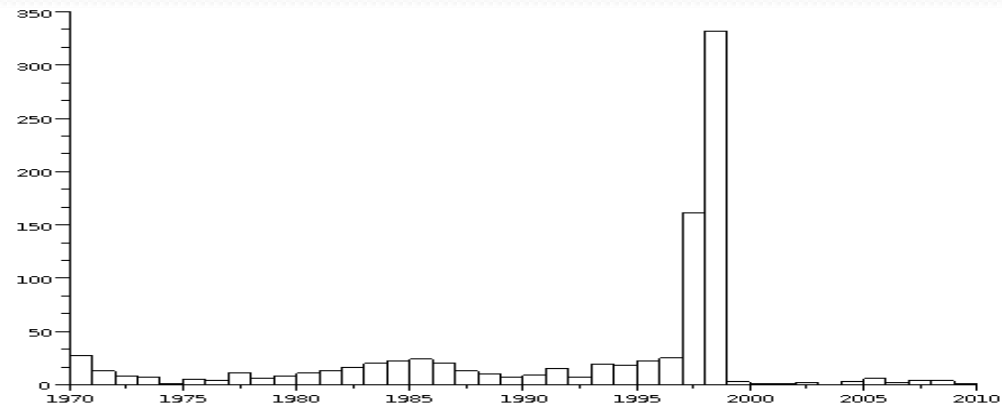
- ***MAHARASHTRA RURAL WATER SUPPLY AND ENVIRONMENTAL SANITATION PROJECT (First World Bank Project)***

First World Bank project with a cost of Rs. 504.25 crores implemented during the period 1991 to 1998 consisting of 17 single village schemes and 47 multi-village schemes in 560 villages of 10 districts.

- ***Maharashtra Rural Water Supply and Sanitation Project (funded by the British Department for International Development (DFID))***

Ten years (1990-2000) project costing 74.3 crores. The output was 3 regional schemes in 3 districts. Big focus on RRWS. At that time government had decided to make Maharashtra “Tanker Free”. Twenty One out of 32 districts were declared tanker free by 2000

The adjoining figure shows number of RRWS sanctioned per year. We can see spikes during 1995-2000.



Recent Developments

Under NRDWP it was proposed to form WSSO (Water and Sanitation Support Organisation). Initially, in Maharashtra development regarding setting up of WSSO was very slow, it was finally established in March, 2012.

The Structure is like



*Similarly at block level, Resource Centre (BRC) in each block. It would provide support in terms of awareness generation, motivation, mobilisation, training and handholding to village communities, GPs and VWSCs

Key Concepts and issues emerged-Centre Vs State

Centrally Sponsored Schemes- issues

- ❖ Growing Centralization
- ❖ Lack of flexibility in CSS schemes
- ❖ Adverse implication of counterpart funding of CSS on State finances
- ❖ Negligence of State priorities
- ❖ External Factors influence

Plan	GBS	No. of Schemes	CSS	% CSS to GBS	Central Assistance to States and UTs	% of Central Assistance to GBS
Ninth Plan	3,16,286	360	99,001.68	31.30	1,38,394	43.75
Tenth Plan	594,649.00	155	229,763.14	38.64	2,03,117.00	34.15
Eleventh Plan	15,88,273.24	147	660,506.00	41.59	3,97,418.93	25.02

Key Concepts and issues emerged-RDWS

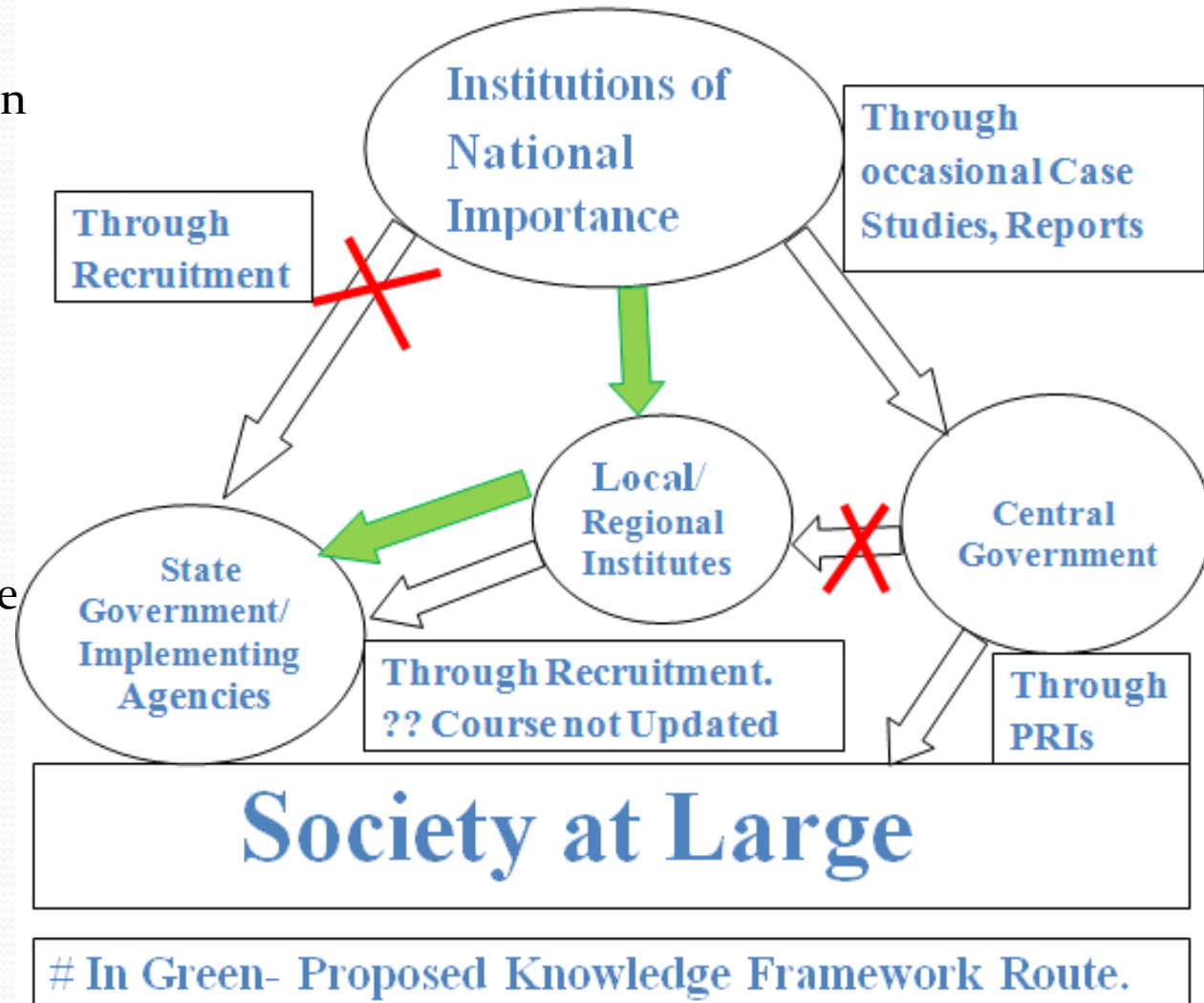
- ❖ **Coverage- A Normative Concept**
- ❖ Supply Driven/Demand Driven (Swajal Dhara Principles)
 - *Demand Expression: VWSC*
 - *People's Participation=Public Contribution:*
 - *Source Sustainability*
- ❖ Ignorance of Technical Nature of RDWS-
 - Different Failure modes
- ❖ **Absence of Assessment, Evaluation and Monitoring Protocols**
- ❖ **Scope for Academia engagement.**

Role for Knowledge Institutions

Standard Knowledge Products. Like-

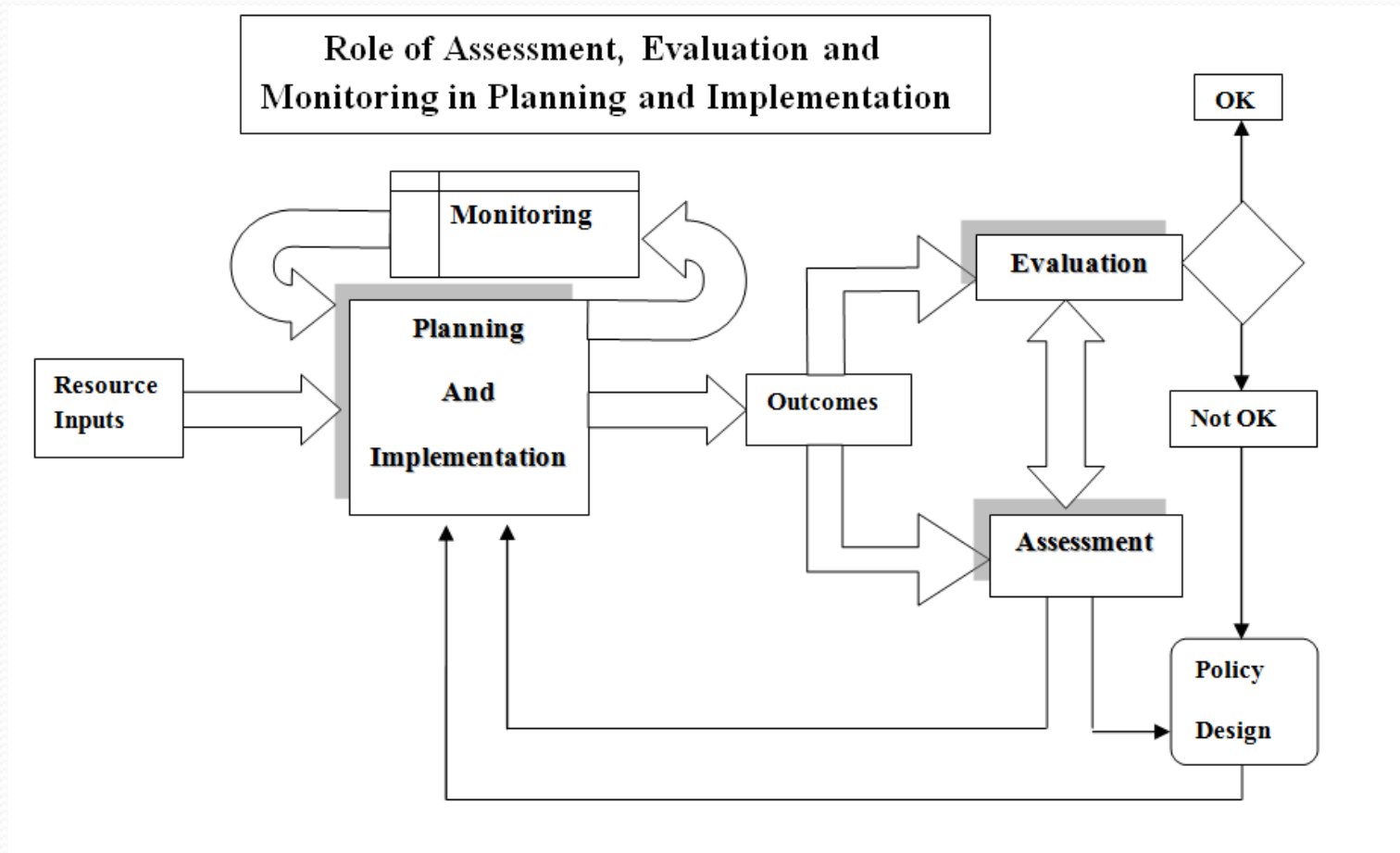
- ✓ Assessment and Evaluation
 - ✓ Monitoring Protocols
- Specific to RDWS Sector- Like-
- ✓ Analysis of PWS schemes, failure modes
 - ✓ Optimization of Tanker schedules
 - ✓ Yield test, Source Strengthening, GW Recharge options etc.

- ❖ These products should be Cost effective.
- ❖ suitable for execution by regional institutions after training.



Assessment and Evaluation-

A Standard Knowledge Product



Assessment and Evaluation

- Difference between assessment and evaluation is loosely defined, are used interchangeably.
- a key difference may be *Assessment* typically focuses on assessing a situation or context within a area, whereas the latter tend to focus on projects, programs
- A number of types or variants of these studies. two broader categories:
 - (a) Based on objectives:- Impact Assessment, Risk assessment, Need Assessment
 - (b) Based on time, infrastructure required:- Census, Survey, Participatory, Rapid.
- Type of study largely depends on like, objectives or goals, time, cost etc. i.e.
 - if the objective is just to get some numbers or percentage quantitative methods are preferred. They use complex statistical social science research methods and structured questionnaire.
they require large infrastructure and high cost.
 - In contrast to this, The qualitative method investigates the why and how of decision making, not just what, where, when. Over the last two decades it has become popular in social science research. It requires less time, infrastructure and cost than to the quantitative counterpart.

Assessment and Evaluation

Rapid Appraisal Process:

“intensive, team-based qualitative inquiry using triangulation, iterative data analysis and additional data collection to quickly develop a preliminary understanding of a situation from the insider's perspective” [Bebe, 2001]

Methods: *Mixed methods:*

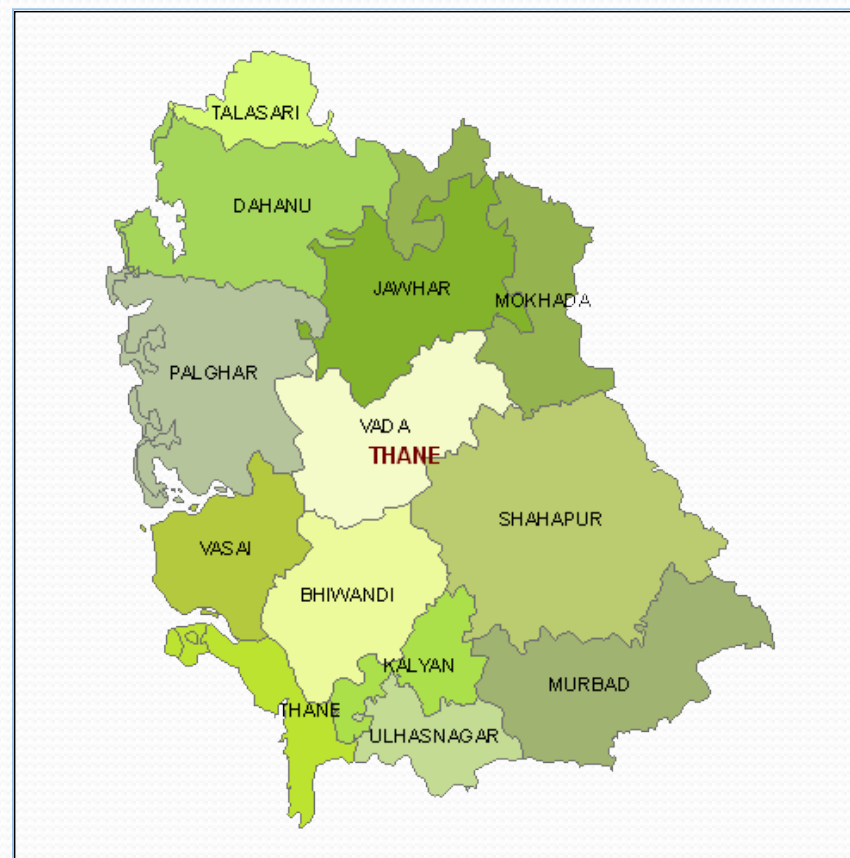
Quantitative approaches include: Quantitative surveys, Review of existing data sets

Qualitative approaches usually include: Key informant interviews, Focus groups, Naturalistic observations, Record reviews

- **Process: Participatory, Team based, Iterative:**
- The framework for *Rapid Assessment and Evaluation* at taluka level was set up with above lying principles using mixed methods.
- It has two steps-
 - Secondary Data Analysis at district level
 - Primary data collection and analysis at Taluka level

Understanding The district- Step One (TAEP)

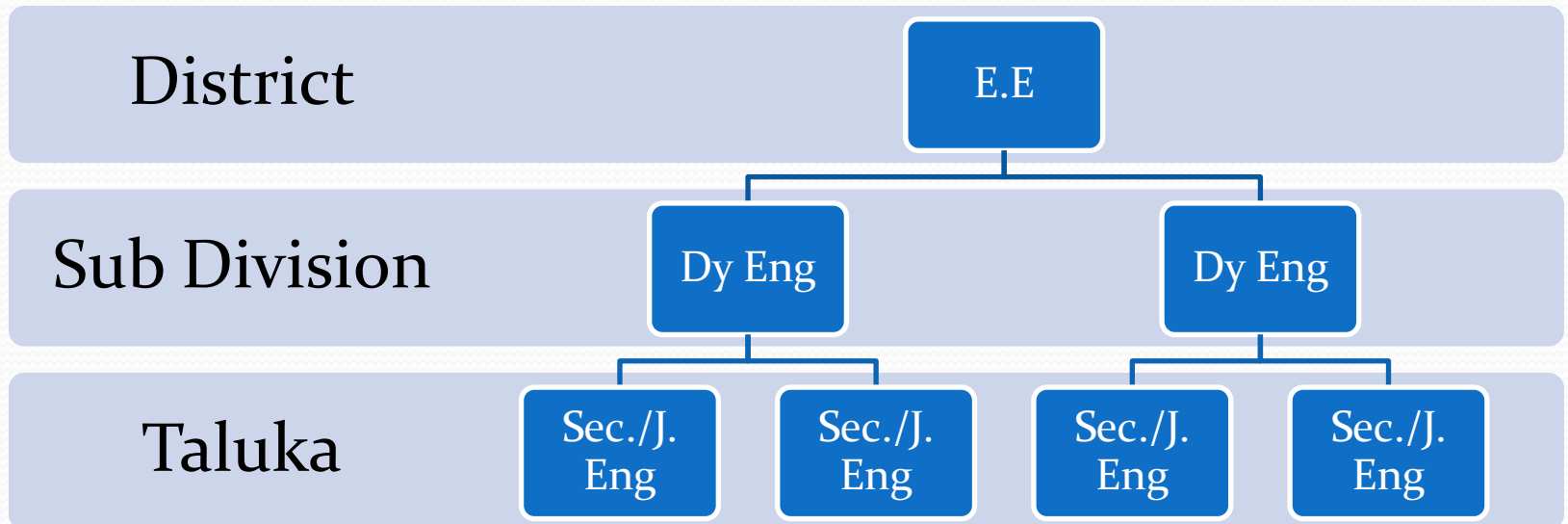
Location	18°42' N - 20°20' N 72°45' E - 73°48' E
Population	Rural-8,503,094 Urban- 2,551,037 Total-11,054,131
No of Taluka	13
No of GP/Vill/Habs	974/1769/6680
No of SC/ST GP/Vill/Habs	728/1255/ 4689



Institutions in Rural Drinking Water Supply:

In Thane district, rural drinking water supply is taken care by three departments. Each department has definite roles and responsibilities. These three departments are-

- I) Department of Rural Water Supply (ZP)
- II) Maharashtra Jeevan Pradhikaran (MJP)
- III) Groundwater Survey and Development Agency (GSDA)



RWS, ZP(Thane)

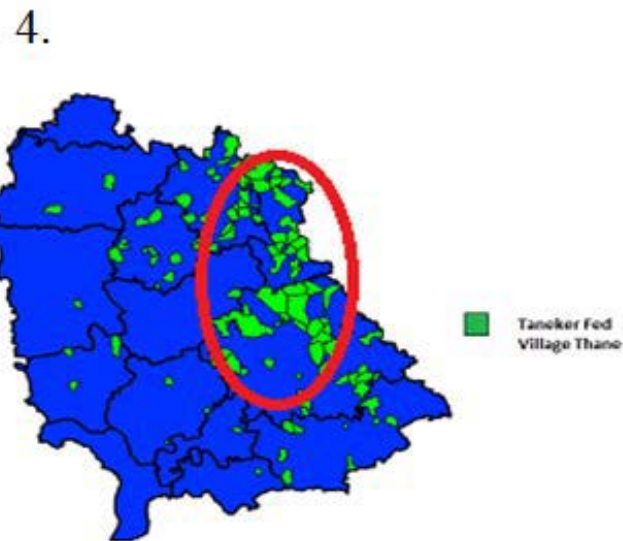
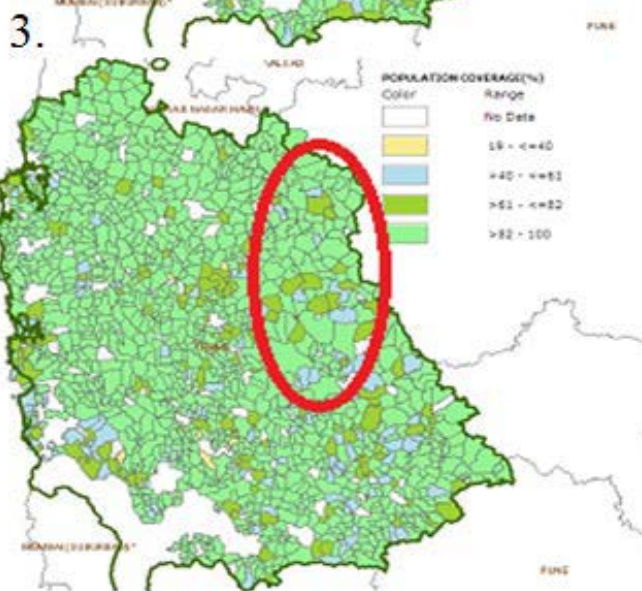
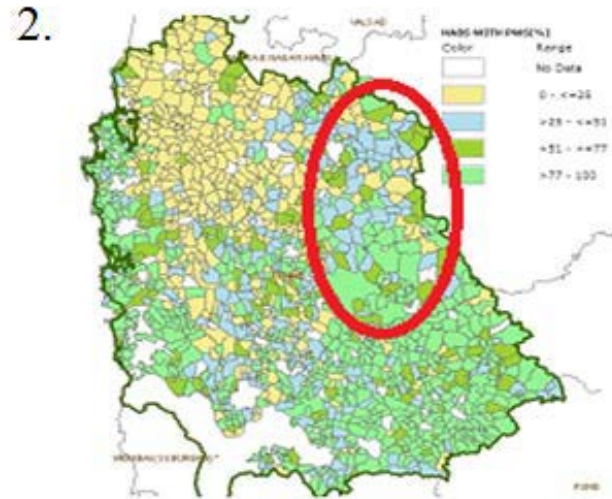
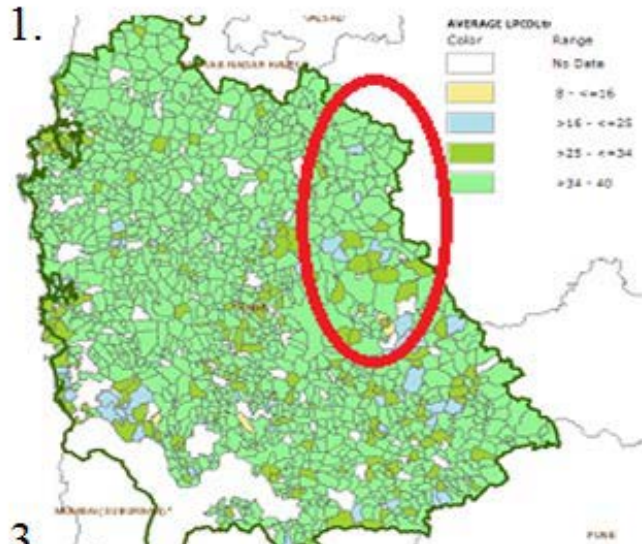
Sr.No	Head/Sub-division	Taluka	Number of Engineers (Executive Engineer + Deputy Engineer)	Number of Engineers (Sectional Engineers+ Junior Engineers)		
				Sanctioned	Occupied	Vaccant
1	Head Office(Thane)	N.A.	1+1*	6	5	1
2	Ambernath Sub-division	Ambernath	1	6	4	2
3	Kalyan Sub-division	Kalyan	1	6	5	1
4	Bhiwandi Sub-division	1.Bhiwandi 2.Vasai 3.Wada	1	6	6	0
5	Shahpur Sub-division	1. Shahpur 2.Murbad	0**	6	6	0
6	Palghar Sub-division	Palghar	1	6	5	1
7	Dahanu Sub-division	1. Dahanu 2.Talasari	1	6	5	1
8	Jawahar Sub-division	1. Jawahar 2. Mokhada 3.VikramGad	1	6	6	0
	Total	13	8	48	42	6

Key Data Sets Used

Datasets Used-

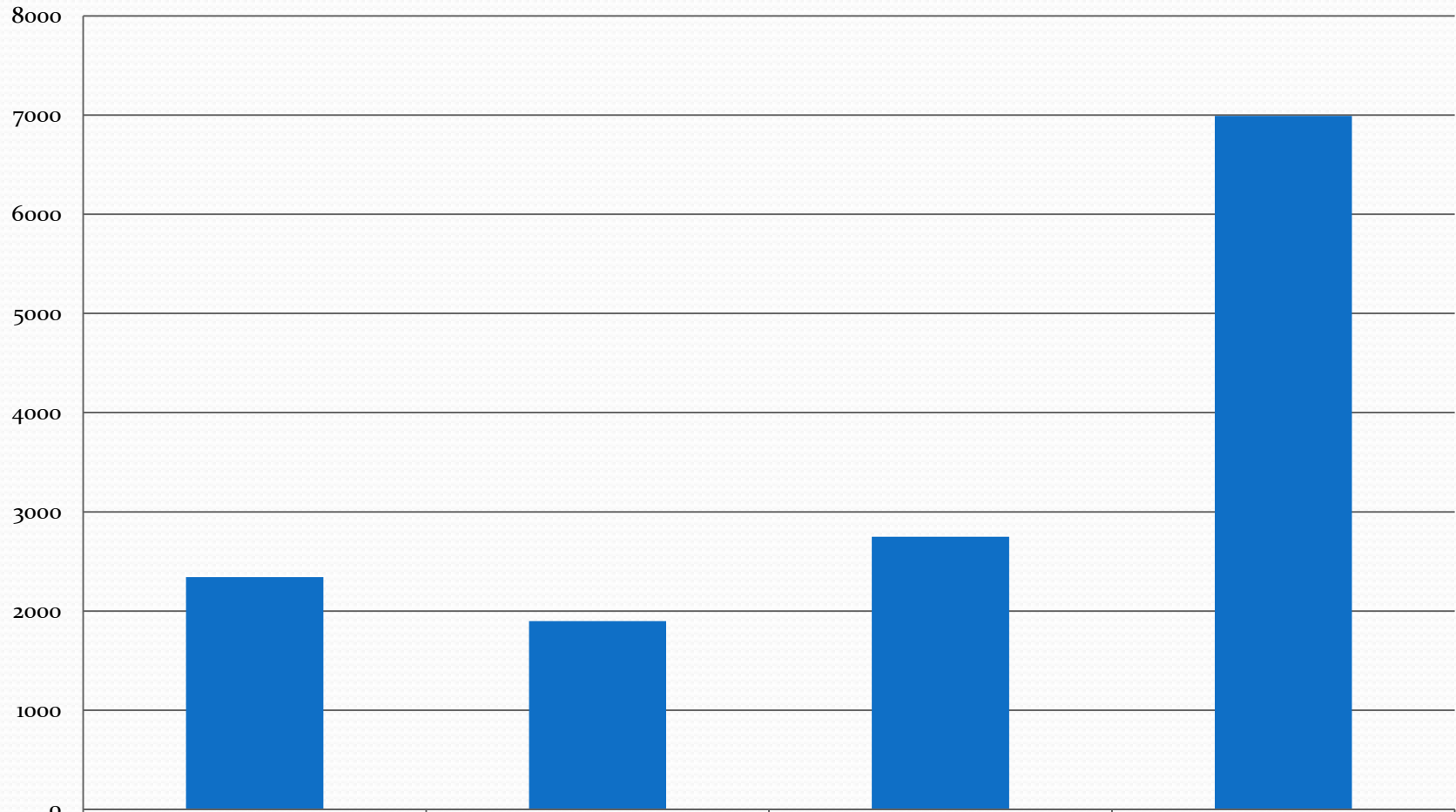
- *i. Annual Action Plan (for three consecutive years,i.e. 2010-11, 11-12, 12-13)*
- *ii. Scheme details: (A List of all the sanctioned schemes in the district, as on 13.06.2012)*
- *iii. IMIS database: (An online system managed by DDWS, GoI)*

Present Situation- Coverage



Schemes Details

Number of Sanctioned Schemes



■ Number of Schemes	2343	1898	2750	6991
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Schemes Details-

Number of schemes per taluka with the year of sanctioning

Sr.No	Taluka	Habitations	Population	Total PWS	Sanctioned in 12-13	2011-12	2010-11	2009-10	2008-09	sanctioned in last 5 yrs
1	AMBARNATH	137	105020	117	10	9	8	2	15	44
2	BHIWANDI	572	388725	215	25	15	3	1	53	97
3	DAHANU	1044	334745	31	4	4	0	0	2	10
4	JAWHAR	358	116815	155	4	40	20		27	91
5	KALYAN	176	257503	151	11	13	5	5	14	48
6	MOKHADA	234	79006	138	10	85	4	0	10	109
7	MURBAD	478	199610	460	11	76	2	1	91	181
8	PALGHAR	992	456134	187	13	10	1	0	40	64
9	SHAHAPUR	661	292305	428	16	115	18	1	99	249
10	TALASARI	249	137042	10	1	1	0	0	1	3
11	VASAI	483	370523	48	1	1	0	0	8	10
12	VIKRAMGAD	540	118102	94	14	23	0	0	3	40
13	WADA	756	159905	309	30	23	0	0	14	67
Total		6680	3015435	2343	150	415	61	10	377	1013

Growth Of Coverage

Population wise Coverage of Habitation									
Details	Total Habs	100% Pop. Coverage	0 To 99% Pop. Coverage	0 % Pop. Coverage	0 To 25% Pop. Coverage	26 To 50% Pop. Coverage	51 To 75% Pop. Coverage	76 To 99% Pop. Coverage	Total Not Covered
All Habs (As on 1/04/09)	6537	4212	2325	2325	0	0	0	0	2325
All Habs (As on 1/04/10)	6673	5013	1660	0	1	838	821	0	1660
All Habs (As on 1/04/11)	6673	5376	1297	0	17	250	1022	8	1297
All Habs (As on 1/04/12) Tentative	6680	5731	949	0	24	195	720	10	949

Coverage- Story with a gap

	Total Habitations Taken in hand			Total Achieved Habitations(repo rted as FC)	Number of Scemes that were Sanctioned in those achieved habitation				Number of Schemes Actually Physically or financially completed			
	Total	Target	Non-Target		Total	PWSS	DugWell	BWHP	Total	PWSS	DugWell	BWHP
2010-11	1660	567	1093	508	421	205	215	1	89	33	56	0
2011-12	1297	530	767	482	252	150	101	1	23	4	19	0

Financial Analysis							(All costs in Lakhs)
	Habitations Reported FC	Total Schemes Sanctioned	Total sanctioned Cost	Total Fund Required in the year	Total expenditure in the year	% of required fund expended	
2010-11	508	421	5870.86	1558.28	242.32	15.55	
2011-12	482	252	8992.56	1945.012	295.07	15.17	

Summary of Findings

- Coverage is not clearly defined. Mismatch between covered and tanker-fed habitations.
- ZP school schemes are taken for coverage consideration.
- Reporting errors. Completion dates have issues.
- Schemes are not reported as whether functioning or not.
- Formulation of AAP, Target vs Achievement is confusing.
- Financial Allocations are very complex.

TAEP- Step two

SHAHAPUR-

- 1) Highest number PWS schemes in the district.
- Two big reservoirs, dependence on surface/ground water expected.
- 2) It has around 30% urban to rural population, not as high as *Talasari* or as low as *Mokhada*.
- 3) It has also a good mix of Tribal-to- (C) population.
- Thus, in many ways it is a good repres



SHAHAPUR- RDWS

As per dated	Total Habitations	No. Of Habitations with population coverage						
		0	> 0 and < 25%	>= 25 and < 50%	>= 50 and < 75%	>=75 and < 100%	< 100%	100%
01-04-2009	625	295	0	0	0	0	295	330
01-04-2010	657	0	1	144	123	0	268	389
01-04-2011	657	0	1	76	105	0	182	475
01-04-2012	661	0	3	85	50	0	138	523

Taluka	Habs	Population	Total PWS	Sanctioned in 12-13	2011-12	2010-11	2009-10	2008-09	Sanctioned in last 5 yrs
SHAHAPUR	661	292305	428	16	115	18	1	99	249

Sampling

- Stratified Sampling-

1	2	3	4	5	6	7	8	9	10	11
Population Group	Number of individuals in that group	% of Total	SC	ST	GEN	SC-ST Fraction (SC+ST/Total)	Total number of habitations	% of Total	PC	PC/Total
<500	88572	38.17	1879	50443	36250	0.66	482	77.24	90	0.19
500-1000	72678	31.32	2284	20691	49703	0.33	101	16.19	25	0.25
1000-1500	27929	12.04	601	5912	21416	0.24	23	3.69	9	0.39
1500-2000	13548	5.84	319	1260	11969	0.12	8	1.28	2	0.25
>2000	29335	12.64	1993	3292	24050	0.18	10	1.60	2	0.20
Total	232062	100.00	7076	81598	143388	0.31	624*	100	128	0.21

* The total number of habitations does not match with number of habitations in Shahapur as there were number of habitations having less than 10 persons in the list, which were insignificant and were removed as noise.

Second Level- Purposeful Sampling

Panchayat Name	Village Name	Habitation Name	Cov erage	Population	AAP 2010-11	AAP 2011-12	AAP 2012-13
DOLKHANB	DOLKHAMB	DOLKHANB	FC	1486	0	0	0
ATGAON	ATGAON	AGREEPADA	FC	1385	0	0	0
BHAVSE	TANASA	TANSA	FC	1344	0	0	0
BIRWADI	BIRWADI	PALHERI	FC	1250	0	0	0
SURLAMBE	SARALAMBE	SURLAMBE	FC	1238	0	0	0
DAHAGAON	DAHAGAON	DAHAGAON	FC	1151	0	0	0
SHERE	SHERE	SHERE	FC	1087	0	0	0
SATHGAON	SATGAON	SATHGAON	FC	1031	0	0	0
AJNUP	AJNUP	AJNUP	FC	1004	0	0	0
VEHLOLI (AN)	VEHLOLI	VEHLOLI (AN)	FC	1483	1	0	0
BHATSAI	BHATSAI	BHATSAI	PC	1467	0	0	1
NANDVAL	NANDVAL	MOREPADA	PC	1298	0	0	1
LAHE	LAHE	LAHE	PC	1135	0	0	1
ATGAON	ATGAON	ATGAON	FC	1210	0	1	0
KHARIWALI (S0)	KHARIVALI (SO)	KHARIWALI (SO)	FC	1269	1	1	0
CHIKHALGAON	CHIKHALGAON	CHIKHALGAON	FC	1219	1	1	0
AWARE	AWARE	AWARE	FC	1061	1	1	0
GEGAON	NANDVAL	NANDVAL	PC	1280	0	1	1
GEGAON	GEGAON	GEGAON	PC	1009	0	1	1
MALEGAON	NARAYANGAON	NARANGAON	PC	1359	1	1	1
KOTHALE	KOTHALE	KOTHALE	PC	1067	1	1	1
AWARE	KAMBARE	KAMBARE	PC	1048	1	1	1
VELUK	VELUK	VELUK	PC	1048	1	1	1

Sampling...cont

After second level of sampling, for each habitation, 2-3 habitations were chosen randomly from lower strata in the Gram Panchayat of those bigger habitations, to compare it with bigger habitation. Characteristic of final sample is shown in the table

Sr No	Particulars	Original (Excluding extra large habitations)	Sample Set
1	Total Number Of Habitations	601	30 (5% of total)
2	Total Population	1,89,179	15,674 (8% of total)
3	PC/ Total habitations	0.20	0.33
4	(SC+ST)/Total population	0.43	0.46

Data Collection

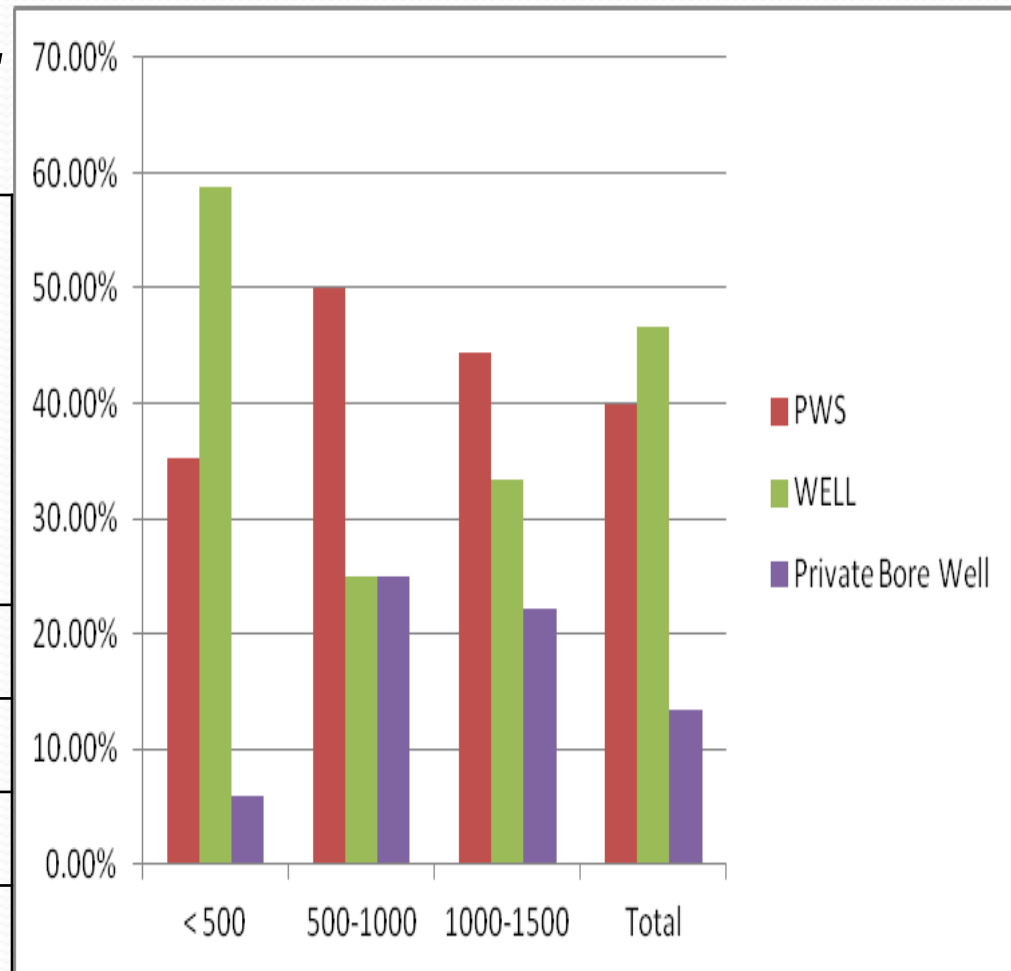
Tools Used:-

- ✓ *Google Maps*
- ✓ *IMIS database, MDWS (GoI)*
- ✓ *Structured and Semi-Structured Questionnaire*
- ✓ *Key Informant*
- ✓ *Focussed Group Discussion*
- ✓ *Household Interview*
- ✓ *Transect Walk*

Results: Primary Source of Drinking Water-

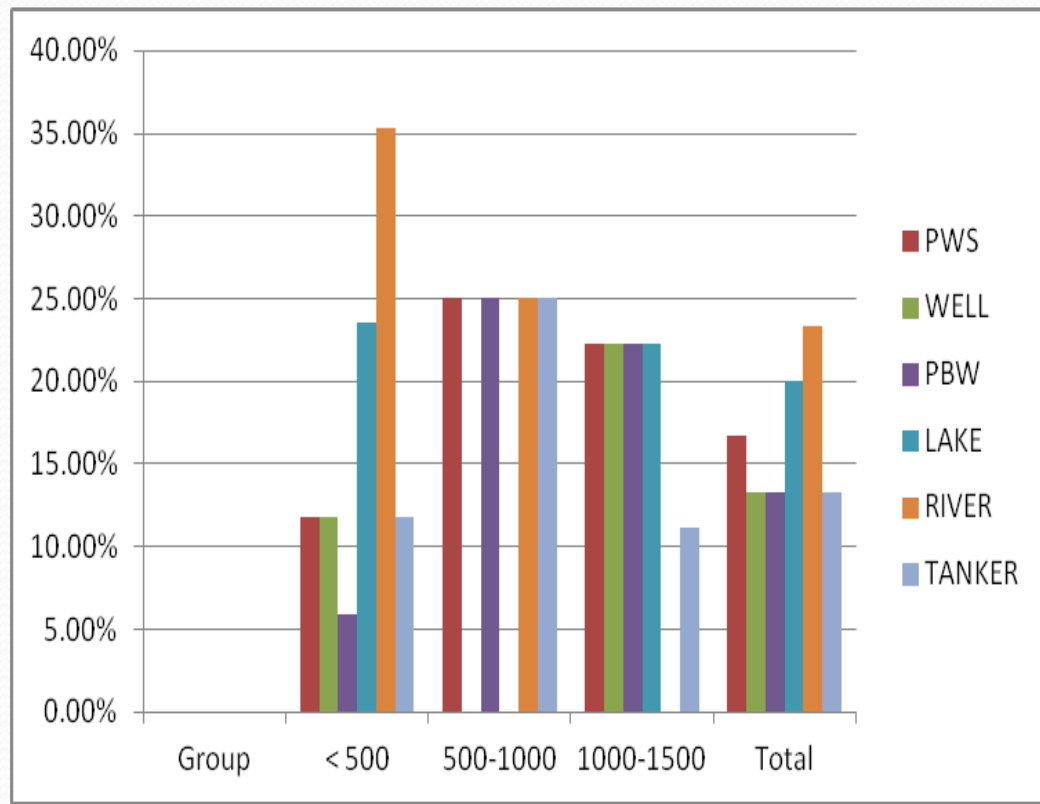
Primary Source of
Drinking Water-
During Normal days of year

Sr No	Total No of habitations	PWS	WELL	Private Bore Well
1	17	6	10	1
2	4	2	1	1
3	9	4	3	2
4	30	12	14	4



Results: Primary Source of Drinking Water-

Primary Source of Drinking water during dry days of year

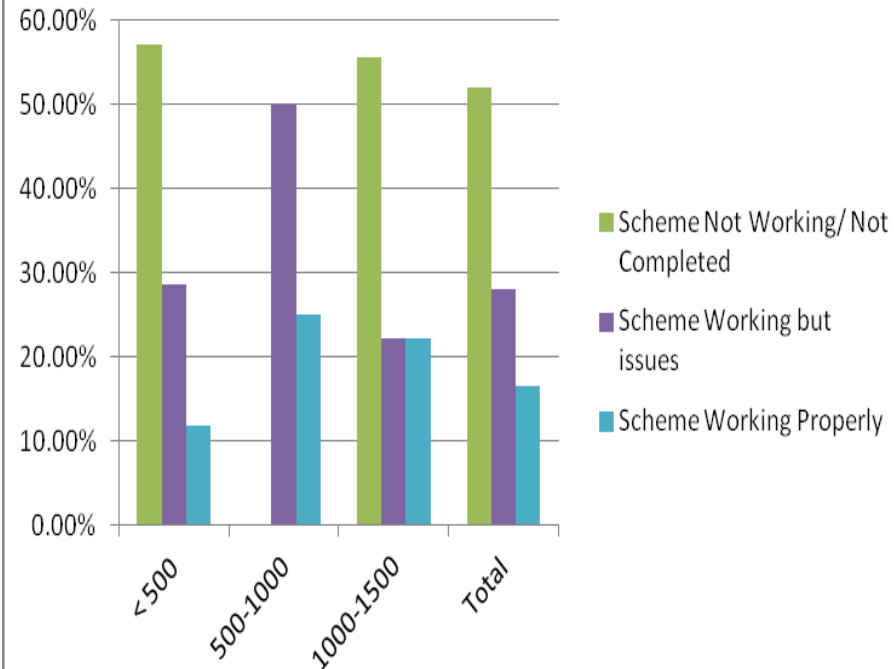
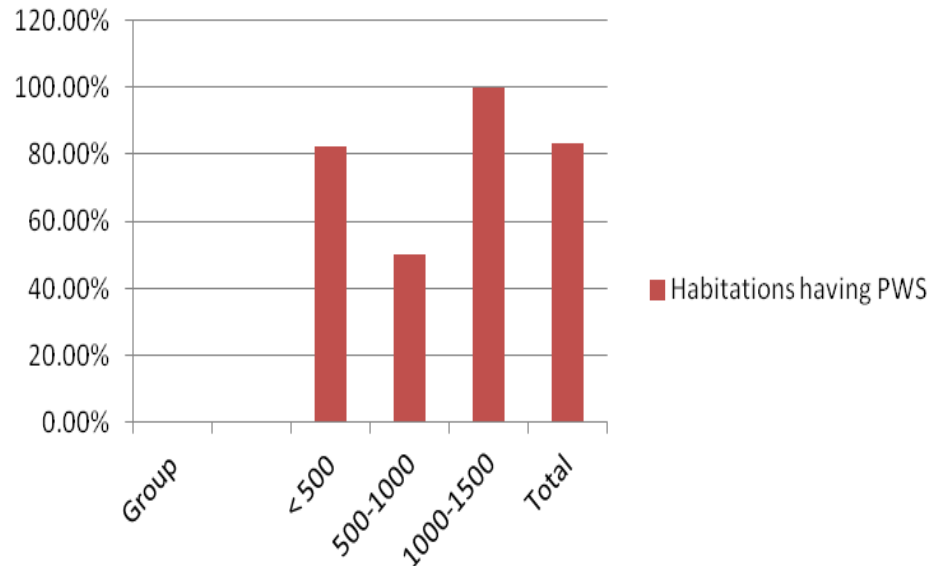


Sr No	Population Group	Total No of habitations	PWS	WELL	PBW	LAKE	RIVER	TANKER
1	< 500	17	2	2	1	4	6	2
2	500-1000	4	1	0	1	0	1	1
3	1000-1500	9	2	2	2	2	0	1
4	Total	30	5	4	4	6	8	4

Results: Status of PWS Schemes

Sr No	Population Group	Total No of habitations	Habitations having PWS	Scheme Working/ Completed	Not Not	Scheme Working but issues	Scheme Working properly
1	< 500	17	14	8		4	2
2	500-1000	4	2	0		1	1
3	1000-1500	9	9	5		2	2
4	Total	30	25	13		7	5

Habitations having PWS



Results: Status of working PWS Schemes and their sources

Sr No	Population Group	Total No of habitations	Habitations having working PWS	Scheme Working but issues		Scheme Working Properly	
				GW	SW	GW	SW
1	< 500	17	6	2	2	0	2
2	500-1000	4	2	1	0	1	0
3	1000-1500	9	4	1	1	0	2
4	Total	30	12	4	3	1	4

Discussion

- Assessment and Evaluation found number of schemes non-functional
- Coverage is somewhat misleading. If temporal changes are taken in account, it can be very small
- **More:**
- During the assessment we also found that the awareness among people about demand driven approach is not there. In only few instances VWSC were found.
- Nowhere the idea of public contribution was there among the people.
- There is also confusion about water tariff among the people. They usually think local tax levied by GP to be water tariff for scheme.

GUJARAT-WASMO Study

- Water And Sanitation Management Organization(WASMO)

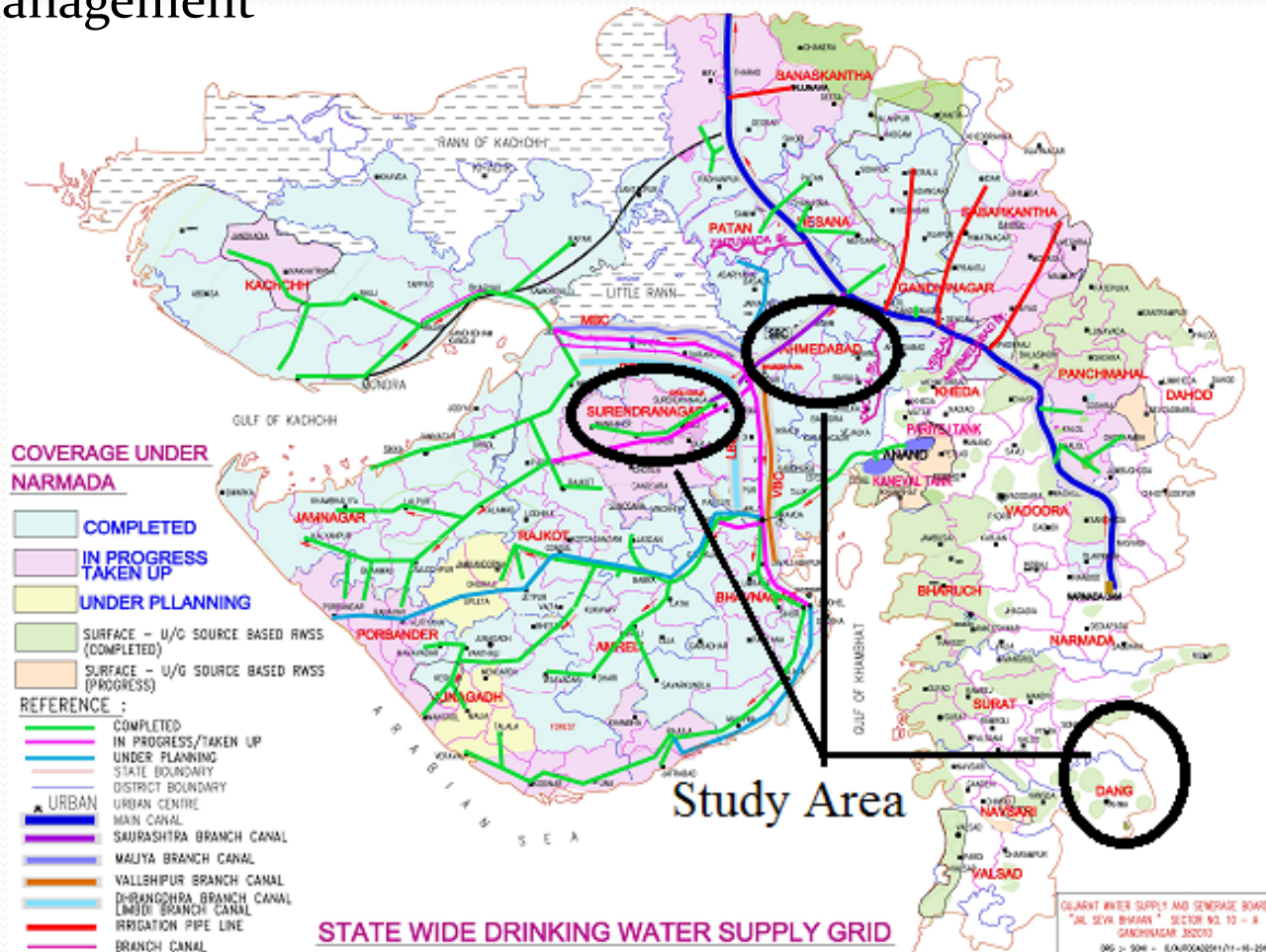
- Implementing Agency for Rural Water Piped Water Schemes

- Source taken Care by GWSSB via wide Water Supply Grid
- RWS heavily funded compared to Maharashtra.

- Study done via Case-Study Mode.

- Located three different

area to understand different factors governing RWS and working of WASMO



Important Parameters Observed

Name of the village	Junapadar	Melaj	Adalsar	Jamvali	Khirmani/ Kunda
Parameters					
VWSC Resolution	Passed	Passed	Passed	Passed	Passed
PRA Activity	Conducted	Conducted	Conducted	Conducted	Conducted
Technical Survey	Conducted	Conducted	Conducted	Conducted	Conducted
Rough Map	Prepared	Prepared	Prepared	Prepared	Prepared
Technical Design Estimation	Prepared	Prepared	Prepared	Prepared	Prepared
MoU	Signed	Signed	Signed	Signed	Signed
Capital Contribution Register	Not Maintained	Not Maintained	Maintained	Maintained	Maintained
Bank Account slips	Produced	Produced	Produced	Produced	Produced
Hydro Geologist Report	Not Required	Not Required	Not Required	Not Prepared	Prepared
Material Testing Report	Not Tested	Not Tested	Tested	Tested	Not Tested
Field Visit Reports	Maintained	Maintained	Maintained	Not Maintained	Not Maintained

Observations

Procedures of WASMO

- ✓ **Planning in participatory mode:** The WASMO officials maintain continuous communication with Sarpanch and VWSC members of the village.
- ✓ **Accountability through Institutional set-ups:** WASMO has emphasized in formation of VWSC in all the villages before sanction of the scheme
- ✓ **Transparency while execution of scheme:** In the case study of six villages it is found that WASMO has allocated all the funds of the scheme through the bank account of Pani Samiti.
- ✓ **Proper documentation:** The precise documentation was done of all reports of each scheme in all District offices by WASMO.
- ✓ **Decisions for better planning:** The WASMO officials have emphasized on better selection of source, which would be sustainable to run the scheme.
- ✓ **Proper Technical Survey-** To ensure no last end pressure issues.
- ✓ **Quality Control-** Proper Lab testing of construction materials. Quality of Water always checked.

Conclusions and Future Work

1. Disconnect between policy, implementation and outcomes.
 - center-state issue and practice, more stress on achieving number targets.
 - absence of intermediate district/regional centers with R&D mandates
 - absence long-term planning and dealing hard/exceptional cases
 - best practices like, yield test, conjunctive use of water are absent.
2. For Maharashtra--
 - complex AAP , goal setting. AAP formulation, addressing demand not clear.
 - mismatch between coverage, tanker situation and ground reality
 - need to revamp BRC , make it closer to implementation agency as in WASMO.
3. Assessment study revealed-
 - Difference between coverage reported and ground reality.
 - Large number of non-functioning schemes.
 - Absence of IEC, people not aware of Supply driven/Demand driven change
4. Design of Assessment and Evaluation: Guidelines and issues for design:
 - should be cost effective
 - can use mix of qualitative and quantitative methods
 - suitable for execution by regional institutions after training, 3rd party agencies.
 - Lead to possibly better outcomes

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*Some
Pics*

