

Presentation from the
**Workshop on
Innovations for Scaling up to
Citywide Sanitation**

October 16-17, 2012, Ahmedabad



Organised by PAS Project, CEPT University



CITY SANITATION PLANS FOR 19 MUNICIPAL CORPORATIONS IN MAHARASHTRA APPROACH & METHODOLOGY

**ALL INDIA INSTITUTE OF LOCAL SELF GOVERNMENT
REGIONAL CENTER FOR URBAN AND ENVIRONMENTAL
STUDIES**

Presented by CSP Team

असेल जेथे स्वच्छता, नांदेल तेथे निरोगिता
म्हणूनच, आरोग्यम् धनसंपदा!



MUNICIPAL CORPORATIONS COVERED

▶ KONKAN REGION

- THANE
- KALYAN–DOMBIVALI
- NAVI MUMBAI
- BHIVANDI–NIZAMPUR
- MIRA–BHYNDER
- ULLHASNAGAR

▶ WESTERN MAHARASHTRA

- PUNE
- SANGALI–MIRAJ–KUPWAD
- KOLHAPUR
- SOLAPUR

▶ **NORTH MAHARASHTRA**

- JALGAON
- MALEGAON
- DHULE
- AHMEDNAGAR

▶ **VIDHARBHA**

- NAGPUR
- AMRAVATI
- AKOLA444

▶ **MARATHWADA**

- AURANGABAD
- NANDED-WAGHALA

APPROACH

- ▶ FORMATION OF TASK FORCE
- ▶ BRIEFING TO TASK FORCE MEMBERS
- ▶ APPOINTMENT OF MOTIVATORS AND TRAINERS
- ▶ TRAINING TO MOTIVATORS AND TRAINERS
- ▶ COLLECTION OF BASELINE DATA BY MOTIVATORS AND TRAINERS REACHING TO GRASS ROOT
- ▶ AID OF SOCIAL MAPPING TOOL



**Orientation for
Social Mapping**



Participants at Mapping Exercise

METHODOLOGY

- ▶ BASELINE DATA QUESTIONNAIRE FILLED BY MOTIVATORS AND TRAINERS–EACH MOTIVATOR AND TRAINER REACH UP TO ELECTORAL WARD AREAS.
- ▶ THE INFORMATION CONSISTED OF NAME OF MOTIVATORS, TRAINERS , ELECTED REPRESENTATIVES
- ▶ IT ALSO CONSISTED INFORMATION OF ELECTORAL WARD IN RESPECT OF POPULATION, AREA, INFRASTRUCTURE LIKE ROADS, DRAINS, WATER SUPPLY, SOLID WASTE.,
- ▶ SPECIFIC INFORMATION IN RESPECT OF URBAN POOR AND BPL POPULATION
- ▶ THE INFORMATION IN RESPECT OF SPECIFIC ECONOMIC INDICTORS LIKE EDUCATIONAL INSTITUTES, HOSPITALS AND OTHER HEALTH FACILITIES.

- ▶ THE NO. OF OPEN DEFECATION SPOTS AND THE NUMBER OF OPEN DEFECATORS ,
- ▶ IN RESPECT OF WATER SUPPLY NUMBER OF WATER CONNECTIONS FOR RESIDENTIAL, COMMERCIAL AND PUBLIC PLACES.



Leak detection



24x7 meter and valve fixing

- ▶ THE HOURS OF WATER SUPPLY, THE LPCD, NO. OF STAND POSTS, WATER QUALITY.
- ▶ REGARDING STORM WATER DRAIN THE NO. OF NATURAL WATER COURSES, NO OF WATER LOGGING SPOTS, ROAD SIDE DRAINS .
- ▶ REGARDING SEWERAGE AND WATER POLLUTION , THE METHODOLOGY OF DISPOSAL OF WASTE WATER AND ITS EFFECTS ON WATER BODIES .



Natural Water Course



Laying of sewer

- ▶ AS REGARDS SEWERAGE, THE PROVISION OF SEWAGE CONVEYANCE SYSTEM, TREATMENT, SEPTIC TANKS AND EFFLUENT TREATMENT.
- ▶ AS REGARDS SOLID WASTE MANAGEMENT, THE TOTAL QUANTITY COLLECTED THROUGH GHANTAGADIS FOR HOUSE TO HOUSE , SEGREGATION AT SOURCE, COLLECTION, TRANSPORT .
- ▶ THE SOLID WASTE FROM DIFFERENT USAGES LIKE HOTELS, LODGE, INSTITUTIONS ETC.,
- ▶ AS REGARDS URBAN POOR AREAS, NOTIFIED / NON NOTIFIED SLUMS, METHOD OF DISPOSAL OF SULLAGE, NO. OF DUSTBINS / COLLECTION CENTERS, NGO'S / CBO'S WORKING .



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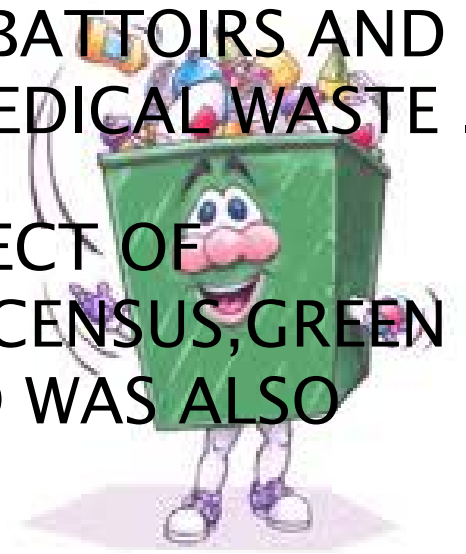


Bin Rickshaw for Household Waste Collection



Chocking of the nall due to garbage dumping

- ▶ THE INFORMATION IN RESPECT OF ABATTOIRS AND DISPOSAL OF WASTE FROM IT ,BIO MEDICAL WASTE .
- ▶ THE SPECIFIC INFORMATION IN RESPECT OF ENVIRONMENTAL ASPECT LIKE TREE CENSUS, GREEN COVERAGE IN THE ELECTORAL WARD WAS ALSO COLLECTED.
- ▶ THE ASPECTS REGARDING REVENUE COLLECTION, TAXES AND CHARGES LEVIED.
- ▶ THIS ENABLED THE GROUP TO UNDERSTAND THE ELECTORAL WARD SITUATION AT THE LOWEST AND GRASS ROOT LEVEL.(SITUATION ANALYSIS)



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- ▶ THE SOCIAL MAPPING TOOL COMPRISED ACTIVITIES LIKE BRIEFING TO VASTI SWAYAMSEVIKA, VASTI FERI, GROUP DISCUSSION WITH HELP OF MAPPING EXERCISE AND COLLECTION OF INFORMATION REGARDING VARIOUS SERVICES CLOSELY RELATED TO HYGIENE AND TOTAL SANITATION AND LIVABLE AREA FOR WOMEN IN PARTICULAR AND URBAN POOR IN GENERAL.



Participants at Social Mapping Workshop



Participants at Mapping Exercise

INTEGRATION AT PRABHAG LEVEL

- ▶ THIS ENABLED THE GROUP TO FORMULATE SPECIFIC QUESTIONNAIRE TO BE GOT FILLED IN BY THE CONCERN AUTHORITIES OF THE CORPORATIONS.
- ▶ THE QUESTIONNAIRE WAS PREPARED INTEGRATING ELECTORAL WARDS AT PRABHAG LEVEL.
- ▶ THE QUESTIONNAIRE CONSISTING OF EIGHT CHAPTERS
- ▶ THE CHAPTER (1) INTERGRATED THE GENERAL INFORMATION IN RESPECT OF DEMOGRAPHY, GENERAL PROFILE OF EACH PRABHAG.
- ▶ THE CHAPERT (2) CONCENTRATED ONLY ON OPEN DEFECATION SPOTS, NO.OF TOILETS, INADEQUACY ASPECT BASED ON THE REQUIREMENTS OF EASY ACCESS TO THE FACILITY.

- ▶ THE TOILTS WERE CLASSIFIED AS INDIVIDUAL, COMMUNITY, GROUP , PUBLIC
- ▶ THE REQUIREMENTS OF TOILTS MAINLY FOR MEN,WOMEN, CHILDEN AND HANDICAPPED WERE ALSO IDENTIFIED.
- ▶ THE CHAPTER (3) CONCENTRATED ON EXISTING AND PROPOSED SEWARAGE SYSTEM , TREATMENT AND DISPOSAL, BLACK/GRAY WATER MANAGEMENT, POSSIBILITY OF TECHNOLOGICAL OPTIONS , POSSIBILITY OF REUSE/ RECICULATION AND EVEN IMPLEMETING ECOSAN PHILOSOPHY.
- ▶ CHAPTER (4) CONSISTED OF QUNTFYING NUMBER OF WATER COURSES, OPEN ROAD SIDE DRAINS, EXISTING AND PROPOSED MITIGATION STEPS TO TAKE CARE OF WATER LOGGING.

- ▶ CHAPTER-(5) CONSISTED OF QUANTIFICATION OF TOTAL SOLID WASTE, SEGREGATION AT SOURCE, COLLECTION FROM EACH HOUSEHOLD , COLLECTION AND TRANSPORT UP TO COLLECTION CENTERS AND DUMPING GROUNDS AND AVAILABILITY OF LAND FOR SCIENTIFIC DISPOSAL AND TREATMENT.
- ▶ CHAPTER-(6) CONSISTED OF WATER DEMAND, PRESENT AND FUTURE REQUIREMENTS, EXISTING AND PROPOSED DISTRIBUTION SYSTEM, AVAILABILITY AND CONTINUITY OF WATER, QUALITATIVE ASPECTS, LEAK DETECTION, NRW, REQUIREMENT IN THE URBAN POOR AREAS AND STUDY OF 24*7 SITUATION.
- ▶ CHAPTER-(7) CONCENTRATED ON ENVIRONMENT IN GENERAL AND POLLUTANTS IN RESPECT OF WATER ,AIR AND NOISE, IN PARTICULAR MITIGATION, ENVIRONMENTAL MANAGEMENT PLAN AND EFFECT OF CONTAMINATION AND DISEASES.

THIS ENABLED THE GROUP TO EFFECTIVELY BUILD UP THE CAPACITY BUILDING TO IDENTIFY THE QUANTITIES IN RESPECT OF ALL THE ELEMENTS OF CSP AND PREPARE DRAFT CITY SANITATION PLAN FOR EACH PRABHAG OF THE ENTIRE CORPORATION AREA AND FURTHER INTEGRATE TO PREPARE THE CSP FOR CORPORATION .

THE CHAPTER NUMBER (1) TO (7) WHICH IDENTIFIED THE QUANTIFICATION OF THE ELEMENTS ENABLED TO PREPARE THE ESTIMATED COST OF EACH ELEMENT AND LIKELY COST OF CSP FOR THE CORPORATION.AS WORKERD OUT IN CHAPTER (8)

FORMAT OF THE CITY SANITATION PLAN

- ▶ ON COMPLETING THE CAPACITY BUILDING IN RESPECT OF CHAPTER-1 TO 8 . THE CORPORATION AUTHORITIES WERE ADVISED TO PREPARE AND SUBMIT CSP DOCUMENT WITH FOLLOWING INDEX.
 - FORWARD
 - LIST OF ABBRIVIATIONS
 - EXECUTIVE SUMMARY
 - OBJECTIVE AND VISION OF CSP
 - GENERAL CITY PROFILE
 - APPROACH AND METHODOLOGY ADOPTED TO PREPARE CSP
 - CITY SANITATION PLAN ELEMENT (TOILETS, SEWERAGE, STROM WATER, SOLID WASTE, WATER SUPPLY, ENVIRONMENT, IEC AND SOCIAL MAPPING)

- EXISTING SITUATIONS (all elements)
- FUTURE REQUIREMENTS (all elements)
- GAPS IDENTIFIED (all elements)
- POPULATION SCENIERIO 2030
- FRAMEWORK OF ACTION
- FINANCIAL OUTLAY, BUDGETS AND VGF
- LIMITATIONS (PRABHAGE WISE)
- CONCLUSIONS/SUGGESTION AND RECOMMENDATIONS
- ANNEXTURE–I (PRIMARY DATA OF ELECTORAL WARDS)
- ANNEXTURE–II (BASELINE DATA OF PRABHAGS)
- ANNEXTURE–III (UNIT RATES AND COST ASPECT)
- ANNEXTURE–IV (STANDARDS AND NORMS FOLLOWED)
- ANNEXTURE–V(PLANS)

- ANNEXTURE–VI(BACK UP REGARDING IEC AND SOCIAL MAPPING)
- ULB WERE ALSO ADVISED TO CORRELATE THE EXISTING SITUATION AND GAPS WITH 28 INDICATORS OF SLB'S AND PROPOSED PHASE PROGRAMME TO IMPLEMENT THE WORKS IDENTIFIED IN CSP .
- THEY WERE ALSO ADVISED TO IDENTIFY THE PROBABLE O&M COST AND VIABILITY GAP FUNDING TO IMPLEMENT THE CSP PREPARED BY THEM WITH SHORT/ MID/ LONG RANGE PROGRAMMES.

SUBMISSION OF ZERO DRAFT

- ▶ **PRINCIPAL SECRETARY, WSSD ALLOWED RCUES, AIILSG, MUMBAI TO FORWARD ALL THE ZERO DRAFTS TO MOUD,GOI, WHICH WAS DONE ACCORDINGLY.**
- ▶ **IN PRESENCE OF REPRESENTATIVES OF ALL THE CORPORATIONS, THE ZERO DRAFTS WERE DISCUSSED IN WORKSHOP HELD ON 14TH MARCH,2011 . IN THIS, THE NATIONAL CO-ORDINATOR, MOUD ,GOI BRIEFED ABOUT GENERAL COMMENTS AND INTRODUCED SELF ASSESSMENT CHECKLIST TO BE SUBMITTED BY ALL THE CORPORATIONS.**

SUBMISSION OF ZERO DRAFT

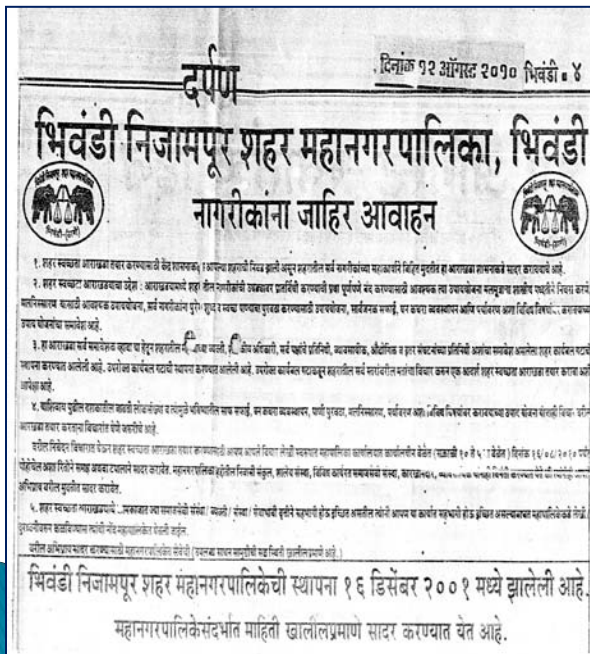
- ▶ **THE SELF ASSESSMENT CHECKLIST PERFORMA WAS FORWARDED TO ALL THE CORPORATIONS WITH AN ADVISED TO SUBMIT THE CHECKLIST ALONG WITH REVISED DRAFT.**
- ▶ **NATIONAL CO-ORDINATOR, MOUD ,GOI AND REPRESENTATIVES FROM WSP WERE PRESENT IN THE WORKSHOP HELD ON 23RD JUNE, 2011.**

- ▶ IN THIS WORKSHOP DISCUSSION ABOUT GENERAL COMMENTS AND SELF ASSESSMENT CHECKLIST TO BE SUBMITTED BY ALL THE CORPORATIONS WAS EXPLAINED BY THE GOI REPRESENTATIVES. ALL THE CORPORATIONS REPRESENTATIVES WERE ADVISED TO SUBMIT THE REVISED DRAFT BASED ON THIS SUGGESTIONS BY 15TH AUGUST,2011.
- ▶ THE CSP TEAM, HOWEVER, FELT NEED TO VISIT ALL THE CORPORATIONS TO NARRATE, EXPLAIN THE REVISED FORMAT OF CSP WITH DUE COGNIZANCE TO THE OBSERVATIONS MADE AS WELL AS EXPLAINING IN DETAIL THE FORMAT OF VIABILITY GAP FUNDING. THIS WAS COMPLETED BY 1ST WEEK OF AUGUST,2011.

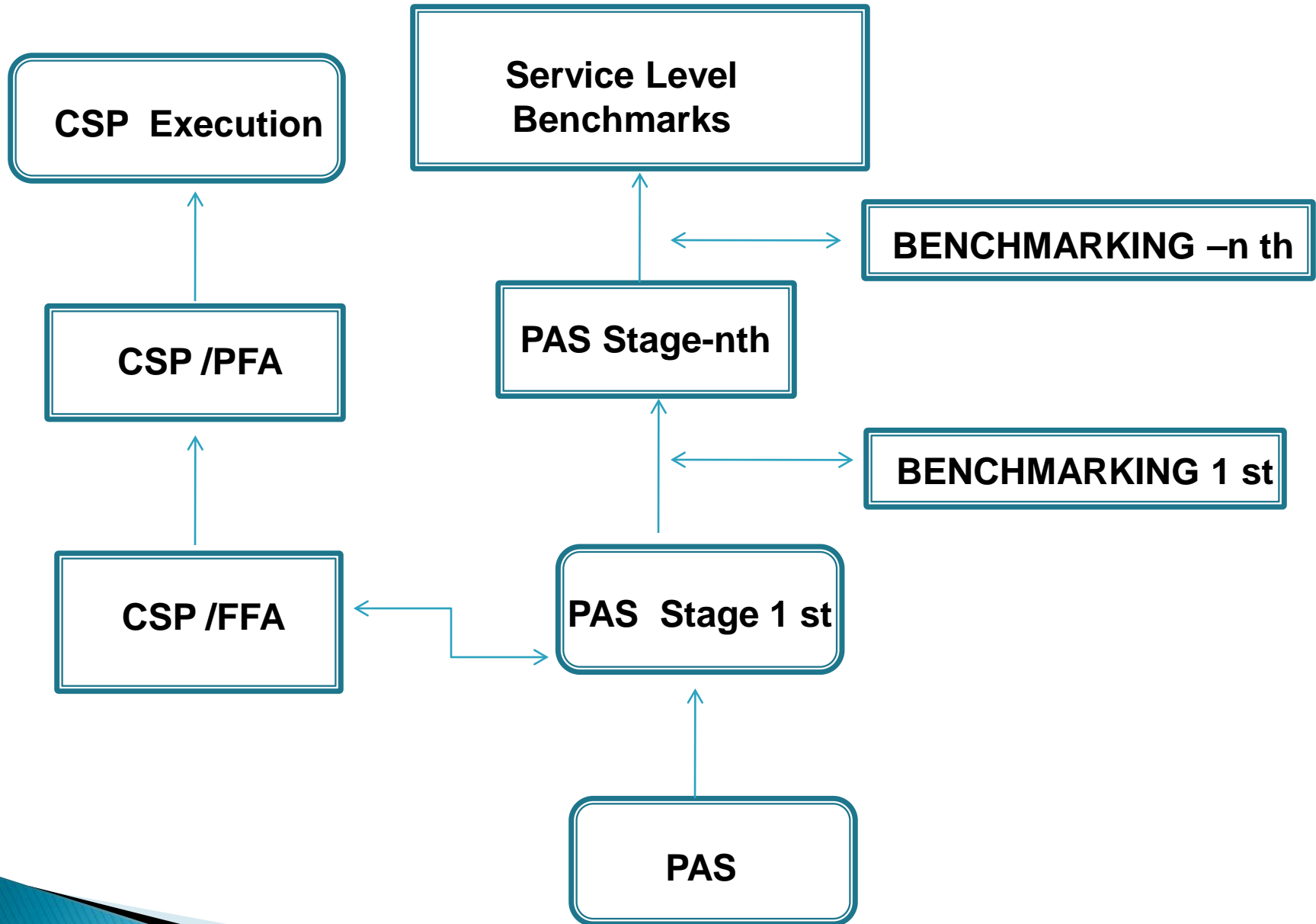
- ▶ IN THE MEANWHILE, LOT OF PERSUASION WAS DONE WITH ALL THE CORPORATIONS WITH A REQUEST TO SUBMIT A REVISED DRAFT BY 15TH AUGUST,2011 . SINCE THE EXPECTED SUBMISSION WERE GETTING DELAYED, ALL THE CORPORATIONS WERE REQUESTED TO VISIT AIILSG,MUMBAI OFFICE FOR SUBMISSION OF THE DOCUMENTS. THIS WAS DONE IN FIRST & SECOND WEEK OF OCTOBER,2011.

EFFORTS MADE BY CORPORATIONS TO REACH GRASS ROOT

- ▶ FUNDS WERE PROVIDED TO ALL THE CORPORATIONS FOR IEC ACTIVITY UNDER CSP.
- ▶ UNDER THIS THE CORPORATIONS WERE ADVISED TO TAKE COMPETITIONS, POSTER PRESENTATION, STREET PLAYS, GROUP DISCUSSIONS, ETC.,
- ▶ MANY OF THE CORPORATIONS CONDUCTED ESSAY COMPETITIONS ON DIFFERENT ELEMENTS OF CSP AND ANNOUNCED PRIZES.



FLOW CHART FOR INTERRELATION SHIP –SLB and CSP



FIRST AND SECOND REVISION OF THE DRAFT CSP

- ▶ **FIRST REVISED DRAFTS WERE SUBMITTED BY ALL ULBS TO THE PRINCIPAL SECRETARY, GOM BY END OF OCTOBER 2011.**
- ▶ **ON 22ND NOVEMBER, 2011, THE PS, WSSD AND PS, UD, ALONGWITH STEERING COMMITTEE MEMBERS HELD DETAILED DISCUSSIONS AND EXPECTED MORE DETAILS FROM ULBS.**
- ▶ **THE MAIN POINTS WERE VALIDATION OF DATA AND SUB-ELEMENTWISE COST, FINANCIAL BREAKUP AND REFORM NEEDED WITH INTIMATION TO THE GB.**

- ▶ **AIILSG, CONSULTANT TEAM FURTHER HELD TWO MEETINGS AND EXPLAINED ALL ULBS THE NATURE OF SUBMISSION AS WELL AS FORMULATE STATEMENT OF ALL INDICATORS AND REVISED COST OF CSPS.**
- ▶ **ACCORDINGLY RE-REVISED DRAFT (R2) WERE RECEIVED FROM 14 ULBS BY END OF FEBRUARY, 2012. NO SECOND REVISION WAS RECEIVED FROM 4 ULBS AND FIRST REVISION FROM 1 ULB.**
- ▶ **ACCORDINGLY GOVERNMENT OF INDIA IS NOW TODAY HOLDING A WORKSHOP FOR DISCUSSION AND FINALISATION OF CSPS DEALT WITH BY AIILSG TEAM.**

INTEGRATION OF DATA COLLECTED

- ▶ THE AIILSG, MUMBAI TEAM HAS FORMULATED FOUR TYPES OF INDICATORS FROM THE DATA MADE AVAILABLE BY CORPORATIONS IN THE CSPS WHICH ARE AS BELOW.;
- ▶ PHYSICAL INDICATOR : THIS CONTAINS THE POPULATION , DEMOGRAPHY , URBAN POOR, TOILETS, SEWERAGE, STORM WATER , SOLID WASTE MANAGEMENT, WATER SUPPLY, IEC AND SOCIAL MAPPING STATUS CONSOLIDATED TO DEPICT THE COMPARATIVE ASPECTS OF ALL CSPS.

- ▶ **FINANCIAL(O&M,TAXES AND OUTLAY) : THIS STATEMENT DEPICTS THE TAXES/CHARGES COLLECTED , O&M COST, CAPABILITIES OF CORPORATIONS TO RAISE ONLY SOURCES , DEPENDENCY ON VARIOUS PROJECTS AND ULTIMATELY VIABILITY GAP FUNDING ASPECTS TO ENABLE THE CORPORATIONS TO IMPLEMENT THE CSP INITIALLY IN PHASE WISE MANNER AND SUBSEQUENTLY IN TOTALITY.**

- ▶ **ADMINISTRATION AND GOVERNANCE : THIS STATEMENT DEPICTS THE ASPECT OF REFORM, INSTITUTIONAL ARRANGEMENT, METHODOLOGY RAISE FUNDS, INTRODUCTION OF PPP PROJECTS, ESTABLISHMENT AND REVENUE COMPARISON, INVOLVEMENT OF CBOS/NGOS, REHABILITATION OF URBAN POOR, REFORMS IN TARIFFS, PREPAREDNESS FOR FURTHER DEMOGRAPHIC SETUP AND PROBABLE YEAR OF ACHIEVING THE SLBS FOR EACH ELEMENTS.**

PHYSICAL INDICATORS (19 ULBS)

		Indicative
•	Population 2011	200 Lakhs
•	Area in Sq.Km.	1600 Sq.Km.
•	Population Urban Poor	55 Lakhs
•	Existing Individual Toilet (Seats)	500000
•	Existing Community Toilet (Seats)	30000
•	Open Defecation Spots	800
•	Additional Seats required for ODF	65000
•	Number of Septic Tanks	500000
•	Segregation of Domestic Solid Waste	NIL
•	House to House Collection	35%
•	Total Metric Tonne Per Day	6500 MT
•	Total Metric Tonne Treated	2700 MT
•	Water Demand (135 lpcd)	3700 MLD.
•	Supply Made	2650 MLD.
•	Hours of Water Supply	2.5 Hrs. (Avg.)

COMPREHENSIVE STATEMENT OF COSTS OF CSP ELEMENTS

All in Cost in Rs. Crores

	Name of ULB	ODF	Sewerage	SWM	Water Supply	Storm Water	Environ-ment	IEC & SM	Total
1	Thane	29.15	303.00	52.85	107.92	307.94	7.25	6.02	814.13
2	Kalyan-Dombivali	14.70	46.78	62.04	70.00	197.20	35.00	5.24	430.96
3	Navi-Mumbai	1.80	3.30	31.85	8.00	685.87	39.98	12.20	872.73
4	Bhiwandi-Nizampur	76.50	510.10	198.40	337.60	119.60	26.90	5.45	1274.55
5	Ulhasnagar	36.77	252.70	58.89	-	17.87	-	0.40	366.63
6	Mira-Bhayandar	6.98	1.10	47.32	521.00	-	16.60	2.53	595.53
7	Pune	79.65	845.48	170.00	1167.50	953.00	0.75	-	3216.38
8	Sangli-Miraj-Kupwad	84.58	285.82	59.25	90.00	151.57	23.48	2.00	696.90
9	Kolhapur	8.33	252.00	81.40	90.02	355.67	9.00	2.00	798.42
10	Solapur	15.17	151.11	12.29	229.25	258.60	6.00	3.00	675.42
11	Jalgaon	14.21	334.55	7.25	508.65	261.55	26.65	11.50	1164.36
12	Malegaon	35.74	222.00	28.74	65.41	30.00	72.50	1.00	455.39
13	Dhule	22.62	214.19	36.30	233.38	155.90	1.20	1.35	664.94
14	Ahmednagar	6.84	169.90	15.50	62.40	134.16	4.75	2.00	395.55
15	Nagpur	41.00	758.74	34.50	-	1558.00	23.70	1.00	2416.94
16	Amravati	21.28	245.15	31.92	150.63	403.55	7.00	0.48	860.08
17	Akola	17.54	146.15	36.65	328.27	52.10	1.20	1.00	582.82
18	Aurangabad	46.17	406.40	73.84	792.20	1424.37	115.25	12.00	2870.23
19	Nanded-Waghala	6.00	304.38	22.00	242.82	45.73	-	9.00	629.93
	Total	571.03	5452.85	1060.99	4999.05	7112.68	417.21	78.17	19781.82

ADMINISTRATION AND GOVERNANCE

- **INSTITUTIONAL ARRANGEMENT**
- **METHODOLOGY FOR CAPITAL RAISING**
- **ANY FORM OF PPP**
- **REHABILITATION OF URBAN POOR**
- **PROPOSAL OF TARIFF INCREASE**
- **ACTION PLAN FOR SHORT, MID AND LONG TERM**
- **RECOMMENDATIONS FOR AMENDMENTS IN PENAL AND OTHER PROVISIONS**
- **PROBABLE YEAR FOR ACHIEVING SLB.**

FUNDING REQUIREMENT FOR SUB-ELEMENTS (19 ULBS)

All in Cost in Rs. Crores

A]	ODF	571
1)	Civil Repair Works	40
2)	Water Supply Works	17
3)	Electrical Works	17
4)	Treatment and Disposal	29
5)	Additional Seats	382
6)	Individual Toilets	11
7)	Construction of Open Drain	29
8)	Connection to Open Drain	17
9)	Land Requirement	29

B]	Sewerage	5453
1)	Providing Soak Pit and Connection to Open Drain	107
2)	Constructing Individual Toilets with Septic Tank and Soak Pit	164
3)	Extending Existing Sewerage	818
4)	Providing New Sewerage	1091
5)	Defunct Septic Tank and Provide Drainage Connection	545
6)	Intermittent Treatment to Septic Tank Effluent	164
7)	Extending Sewage Treatment	273
8)	Totally New Sewage Treatment	1091
9)	Decentralised Sewage Treatment	491
10)	Pilot Ecosan	54
11)	Facility to Effluent Disposal	273
12)	Reuse of Treated Sewage	218
13)	Land Requirement	164

C]	Solid Waste Management	1 060
1)	Segregation at Source	1 06
2)	House to House Collection and Transport	212
3)	Collection to Other Than Domestic and Transport	159
4)	Transport to Treatment Site	106
5)	Treatment to Solid Waste	318
6)	Disposal by Reuse and Recycle	106
7)	Land Requirement	53

D]	Water Supply	5000
1)	Resource Development	500
2)	Additional Conveyance upto WTP	500
3)	Augmentation of WTP	100
4)	Conveyance after WTP	250
5)	Strengthening Existing Distribution	1000
6)	Leak Detection	350
7)	Providing Bulk Meter	300
8)	Providing E-Meters	900
9)	Enabling for 24X7	150
10)	Distribution and Reservoirs for 24X7	850
11)	Land Requirement	100

E]	Storm Water Management	7113
1)	Integrated Study, Urban Hydraulology	142
2)	Repairs to Existing Drains	1067
3)	Construction of New Drains	2845
4)	Draining of Nallas	2134
5)	Enabling Works for Disposal	711
6)	Rehabilitation of Utilities	214

F]	Environment	417
1)	Prepare ESR, EIA, EMP	41
2)	Monitoring of Standards	41
3)	Study of Assimilative Capacities	20
4)	Implement EMP	271
5)	Dedicated Environment Cell	44

G]	IEC & Social Mapping	78
1)	Propagate ALM, NGO, CBO	11
2)	Capacity Building	23
3)	Awareness Campaign	27
4)	Social Mapping Tool	17

YEARWISE FINANCIAL REQUIREMENT FOR SUB-ELEMENTS (19 ULBS)

All in Cost in Rs. Crores

	Element	Total Fund Requirement	2012-13	2013-14	2014-15	2015-16
1	ODF	571	228	228	115	-
2	Sewerage	5453	1236	1236	1781	1200
3	SWM	1060	217	217	419	207
4	Water	5000	950	950	1900	1200
5	Storm Water Management	7113	498	498	3272	2845
6	Environment	417	120	120	88	89
7	IEC & Social Mapping	78	20	20	19	19
	Total	19692	3269	3269	7594	5560

REQUIREMENT OF FUNDING (19 ULBS)

All in Cost in Rs. Crores

•	Total Capital Cost	19692
•	Reported ULB Share	10%
•	Reported Support from Various Schemes	15%
•	Viability Gap Funding	75%

THANKS