City Sanitation Plan for Small Towns in Maharashtra

Review Meeting

May, 2012

pas performance assessment system

CEPT UNIVERSITY

Review Meeting on Approach to Sanitation Plan in Smaller towns in Maharashtra

8th May 2012, Nasik

Organised by:

CEPT University

Maharashtra Jeevan Pradhikaran

All India Institute of Local Self-Government

Background

Under the Performance Improvement component of the PAS Project, the team focuses on developing tools and approaches to improve delivery of city level services for water supply, sanitation and wastewater and solid waste management. Unlike typical infrastructure investment plans, service oriented performance improvement plans (S-PIPs) focus on improvement in service delivery performance. An S-PIP is formulated by assessing the interplay between performance assessment and action planning. Performance indicators for each sector are the main basis for assessing actual service performance. Actions include both traditional capital intensive infrastructure as well as other no/low-cost actions such as policies and business process changes. The overall plan is developed through a rigorous financial feasibility assessment.

From the recent statistics, it has been concluded that while the global millennium development goal (MDG) for drinking water target is on-track, due to progress in India and China in particular, large parts of the developing world remain off-track, and there is a growing disparity between regions. [1] The recent Census of India 2011 results for India also reiterate the need in urban areas to provide for sustainable sanitation facilities and take steps to reduce population resorting to open defecation. Taking in to account, these two important results, PAS team has decided to take up preparation of City Sanitation Plans (CSP) as a major theme under Performance Improvement Planning.

Citywide sanitation plans can be termed as performance improvement plans formulated exclusively to achieve urban sanitation goals related to equity & access, public health and natural environment. A city sanitation plan essentially includes all the above three steps of improvement planning exercise. The sanitation value chain formulated to achieve above goals includes elements of excreta disposal (black water and septage), grey water (sullage), storm water disposal and solid waste disposal. Thus the first step of performance assessment calls for evolving a citywide framework that assesses all elements of the value chain.

Based on a recent meeting with Principal Secretary (PS), Water Supply and Sanitation Department (WSSD), Government of Maharashtra and Member Secretary (MS), Maharashtra Jeevan Pradhikaran (MJP), four small towns have been selected in Maharashtra for preparation of sanitation plans. These plans will be prepared with a focus on non-networked system. This activity is spearheaded by PS, WSSD; MS, MJP in partnership with CEPT University and All India Institute of Local Self-Government (AIILSG). The focus on non-sewered systems is relevant as in many small

[1] http://www.wateraid.org/documents/Off-track-off-target.pdf

towns the capital resources for underground sewerage systems are not likely to be available. Also, the required human and financial capacity to operate and maintain these systems is not likely to be available. On the other hand, with appropriate technologies and simple regulation, good sanitation systems and outcomes are possible with non-sewered systems.

Purpose of the Meeting

The meeting was organised with a purpose to kick off city sanitation planning process for the four CSP cities. It was attended by sanitation experts from MJP, participants from CEPT and AIILSG and chief officers, technical staff (engineers, sanitary inspectors and other field support staff) from urban local body (ULB) and elected representatives from participating ULBs. Preliminary data collection guide was shared with ULBs in advance to collect and bring basic data related to sanitation aspects, information related to ongoing/planned projects, data related to services in slums, maps available with them (soft and hard copies) etc. Preliminary checklist was filled by all the four ULBs and shared with CSP team at the meeting. Secondary data for maps, detailed project reports (DPR), other project reports were also shared with team of CSP consultants to enable it to acquaint with the ULB situation in advance before undertaking field visits.

Introduction

Mr. V R Kalyankar, Chief Engineer, MJP in his opening remarks addressed the participants and shared the purpose of the meeting. He welcomed sanitation experts, chief officers, technical staff (engineers, sanitary inspectors and other field support staff), and elected representatives from participating ULBs and requested them to lend full support to the CSP process. Prof. Meera Mehta from CEPT University in her opening remarks shared Indian situation on access to sanitation as per Joint Monitoring Programme (JMP) report and Census 2011 results. She also elaborated that process of reflection has started to review options for the future sustainable development framework that will replace the existing MDGs. She added while the interest from ULBs administrative and political leadership is highly appreciated, it is necessary that cities choose relevant sanitation solutions based on the existing financial and technical capacities. Mrs. J Chekkala from AIILSG also shared their experiences of preparing CSP for municipal corporations in Maharashtra. This process will also be repeated for 15

class 'A' cities, wherein appropriate consultation and capacity building activities will be undertaken to plan for sustainable sanitation solutions.

Presentation on "Approach to Sanitation Planning in Small Towns: Application of Citywide Sanitation Framework"

CEPT presented the detailed sanitation scenario in Indian context. The presentation discussed Census 2011 results on sanitation, highlighting that open defecation is still a major issue in urban India. Basic sanitation value chain

framework developed by CEPT and stepwise requirements for baseline assessment was also elaborated in the presentation. Brief city profiles of CSP cities (Sinnar, Wai, Ambajogai and Hingoli) based on performance assessment under PAS Project was presented to the participants.

While discussing the process for comparative analysis, the need to discuss water supply and sanitation issues collectively to plan for sanitation solutions was highlighted. Steps for identifying the appropriate technology options across the stages of value chain were discussed. Finally, it was mentioned that a comprehensive CSP is a result of reviewing existing financial resources available with ULB and its institutional and technical capacity. CEPT has also developed several tools to help in costing of sanitation options [various Models such as Open Defecation Free (ODF) Model and Performance Improvement Planning (PIP) Model are available for ULBs]. It is also imperative to include consultation with stakeholders and decision-makers at the different stages of CSP work. A draft timeline for CSP work and responsibility framework was also shared with ULBs for their feedback.

Presentation on Existing Sanitation Issues and Priorities in CSP Cities

Wai

Wai is a class 'C' class municipal council with an area of 3.63 sq. km with 19 wards. It is a pilgrim town also known as Dakshin Kashi and old Buddhist settlement. Wai is gaining popularity as a famous tourist centre and outdoor shooting centre for film industry. It is situated at north and south banks of River Krishna. The ULB presentation highlighted basic city profile on urban water supply and sanitation (UWSS). It elaborated details of previously proposed sewer project and sewage treatment plant along with financial pattern of the project (share of Central, State, MJP and ULB). The presentation also highlighted detailed spatial maps available for further analysis including base maps, open gutter, natural topography and water sources of city, development plans, water zones, slum locations, location of public toilets, secondary storage bins and dumping ground, location maps of vegetable market and slaughter house etc.

The existing source of water supply is through Dhom Irrigation Project @ 135 lpcd and is operated and maintained by Wai Municipal Council. There is no existing sewerage scheme in the city and sludge water is discharged in River Krishna through open gutters and local nallas. Largely, individual septic tanks serve the purpose of septage treatment and are connected to surface drains. This leads to huge pollution of River Krishna. The city has proposed a scheme for pollution abatement for River Krishna. Details of this proposal were also highlighted, which has been proposed under National River Action Plan (NRAP) grants. The ULB's contribution for this project will be 10 percent.

Hingoli

Hingoli is 'B' Class municipal council spread across a total area of 16.74 sq. km with a population 85,137 (Census 2011) in 7 wards. Support through central government schemes is provided under Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), Integrated Housing and Slum Development Programme (IHSDP), Backward Region Grant Fund (BRGF), Swarna Jayanti Shahari Rozgar Yojana (SJSRY), Prime Minister's new 15-point programme for the welfare of minorities to name a few. Under State schemes, the ULB receives grants under Maharashtra Sujal Nirmal Abhiyan 2010-11, Maharashtra Suvarna Jayanti

Nagarothan Mahabhiyan, Tourism Development, Dalit Wasti etc. The presentation discussed basic city profile of Hingoli and efforts taken to eliminate open defecation. The sanitation facilities are largely managed by the Council and there is only one contract related to management of community toilets, which has been outsourced for a period of three years. The presentation also discussed in brief, the financial health of ULB and the slum related services.

Ambajogai

Ambejogai is a class 'B' municipal council with a population of 80,000 (Census 2011). It has a high percentage of slum population (26 percent) residing in 16 slum settlements. The city is the cultural capital of Marathwada with important heritage temples in the city which are frequented by visitors.

The presentation described drivers of the city's economy and highlighted the status of basic services in the city. For water supply, it discussed the coverage, available infrastructure, the water treated and supplied on a daily basis and the charges including connection charges borne by the consumers. In solid waste management, the available infrastructure and human resource were discussed. The recent projects using waste to produce compost and proposed improvements were also highlighted. In sanitation, it discusses the coverage by individual toilets along with the number of individual toilets and public toilet seats added under various schemes. The city has an open drain system to convey liquid waste and rain water to River Jaywanti. It has proposed a sewerage scheme worth nearly Rs. 72 crores under UIDSSMT. The mayor in the highlighted that though field work throws up many challenges, it is important to finish projects as per the schedule and have necessary capacity and support for timely implementation.

Sinnar

Sinnar is a 'C' Class municipal council spread across 51.40 sq. km with a population of around 71,500 (Census 2011) living in 6 wards. In September 2009, surrounding areas of Sinnar got merged and its area increased from 5.24 sq. km to 51.40 sq. km. Sinnar is one of the major industrial zones (MIDC) built around the city of Nashik. It lies 30 km southeast of Nashik city on the Pune-Nashik Highway. It is the fastest growing town in Nashik District and the sudden expansion has created severe pressure on

the Council to extend its services to new inclusions to be able to claim property tax resources from them. The presentation by the Chief Officer discussed basic city profile of Sinnar in terms of demography and UWSS situation. The sanitation facilities are largely managed by the ULB. All the community toilets and cleaning of septic tanks are also managed by the ULB. The wastewater from the drains is reused for agricultural purpose. In water supply, there is a new surface source augmentation project that is under consideration. The DPR for the same is being prepared. There is also another Rs. 12.85 crores worth project for expansion of water distribution network in the unserved areas. The presentation also discussed in brief, the financial health of the ULB in terms of increase in revenue due to increase in administrative area. At present, they have started metering of water connections for which consumers are charged on slab basis and there is also a flat rate charged for water supply.

Wardha

Wardha is a class 'A' municipal council and the district headquarters of Wardha District. 16 percent of the total population in Wardha resides in 17 slum settlements. Out of 17, although just 12 slum settlements are notified, services are provided irrespective of the status of slums. As population has decreased in last few years, city level lpcd has increased even with the same quantity of water being supplied. Metering is completely absent in Wardha and water supply is for an average duration of 45 minutes (1.5 hours on alternate days). Low water tariff plus comparatively low coverage of water supply connections has resulted into lower cost recovery and collection efficiency for water supply services. The presentation highlighted the prevailing condition of all the four basic services in the city and the proposals waiting approval of the state government.

Beed

Beed is an 'A' class municipal council with a population of 2.85 lakhs. The city is of historic importance and functions as a centre for local religious tourism. Beed District is famous across the State as the labour bank since it provides labour for agriculture and construction across the state. Beed is situated at 519 mean sea level. River Bindusara flows through the city dividing it in two parts, Peth and Kasba. The ULB currently supplies 38 MLD water. 18 deaths have been reported due to water borne diseases in the last few years in the city. The ULB intends to increase toilet coverage through provision of individual toilets and is also assessing whether the treated water can be used for agriculture.

Presentation on "Liquid Waste Management for Large villages in Maharashtra a Pilot Project under Rural Infrastructure Development Fund of NABARD"

The main objective of the pilot project was to design, construct and maintain sustainable and appropriate solutions to treat wastewater generated in selected large villages in the state of Maharashtra with active participation from village institutions. There are 389 villages in Maharashtra with population above 10,000 and 94 villages with population more than 15,000. The population growth rate in these villages was 50 percent in the last decade. While conventional programmes in rural areas have focused on excreta disposal (latrines), wastewater

management remains a neglected area. In large villages, surface disposal and stagnant pools continue to be health hazard and cause ground water pollution and presently, there is no programme to support the wastewater treatment in large villages. MJP proposes to implement appropriate wastewater treatment solutions in villages with population above 15,000. A basket of technologies with low capital and O&M costs has been chosen. The proposed Project will be implemented in co-ordination with Village Water Supply and Sanitation Committee and under NABARD XVII.

Mr. N. S. Kerkar elaborated that the choice of the technology has been primarily guided by low O&M costs, eco-friendly nature, space requirements and ease of operations. The presentation discussed various technologies including Soil Bio Technology (patented by IIT Bombay), Phytorid Wastewater Treatment Technology (patented by National Environmental Engineering Research Institute or NEERI, Nagpur), Jet loop Technology, decentralised wastewater treatment and package type wastewater treatment. A thorough analysis of technologies and their comparison based on capital costs was highlighted in the presentation. The presentation was quite relevant for the city participants to understand various technologies available for implementation and relevant implications of the same.

Discussions with City Teams:

Post the presentations, the participants broke into citywise groups to discuss data availability for ULBs and work out plans for additional data collections along with an overall plan for preparation of City Sanitation Plans. The MJP/CEPT/AIILSG team representative was present with each city group to help devise a plan for CSP exercise. The interactions at individual tables also helped clarify issues, verify data sources and other secondary material with City officials. The group also identified responsibilities between city groups, MJP team and identified a contact person for each ULB.

At the end of the group discussion, each Chief Officer or the ULB President presented a summary of discussions at their respective tables and shared their commitments and time plan for the CSP exercise. It was agreed that field visits and reconnaissance survey by Consultant team in the next one month to the respective cities will be initiated. The overall timeframe for CSP exercise was agreed upon as four months.

Meeting Agenda

8th May 2012, Nashik

10:00 to 10. 10	Welcome and introduction: Mr. R. Mopalwar, IAS, Member Secretary, MJP
10:10 to 10. 30	Keynote address: Ms. Malini Shankar, Principal Secretary, WSSD, Government of Maharashtra
10:30 to 11:00	Approach to sanitation planning in small towns: Application of citywide sanitation framework (presentation by CEPT)
11:00 to 11:40	Sanitation issues in cities: Higoli, Wai, Ambajagai, Sinnar (10 minutes presentation from participant CSP cities)
11.30 to 1:00	Data requirements for city sanitation plan: Checklists for ULBs, HH survey, other service provisions
1.00 to 2.00	Lunch
2.00 to 3.00	City Team Discussions: Deciding on time line and field work plan for participant cities: Identifying roles and responsibilities, (who will do what and how): (2 groups of with CEPT, MJP, AIILSG and City officials team)
3:00 to 3:30	Presentation and reporting by groups
3.30 to 4.00	Conclusion and way forward Remarks by PS, WSSD; MS, MJP; CEPT and AIILSG

List of Participants

Maharashtra Jeevan Pradhikaran				
Research and Training Centre, Nashik Road				
Name of course :- Workshop-Waste Water Management for Six M.C.				
Period :- 08/05/2012				
Sr.No.	**Name of Participants**	**Designation**	**Office**	
1	Poshatti S.L.	C.O.	M.C.Ambajogai	
2	Modi R.K.	V. President	M.C.Ambajogai	
3	Lanane V.t.	Munci.Engr.	M.C.Ambajogai	
4	Vede A.R.	Sani.Insp.	M.C.Ambajogai	
5	Lolapod R.S.	Ex.Engr.	MJP PMC A'Bad	
6	Paithankar R.S.	Sect.Engr.	MJP Unit Hingoli	
7	Ghuge A.M.	S.D.E.	PMC Dn.Nashik	
8	Smt.Chekkala J.J.	Advisor	AIILSG Mumbai	
9	Wagh M.S.	Dy.Engr.	M.C.Beed	
10	Kadam Y.A.	C.S.I.	M.C.Beed	
11	Revanwar N.V.	Dy.Engr.	M.C.Beed	
12	Khorate V.K.	C.O.	M.C.Wardha	
13	Farsole S.J.	Munci.Engr.	M.C.Wardha	
14	Tappe R.S.	Sr.Heal.Insp.	M.C.Wardha	
15	Gandi A.K.	S.D.E.	PMC Dn.Latur	
16	Smt.Narwade S.M.	Ex.Engr.	PMC Dn.Nashik	
17	Asasne Saurabh	Urb.Planner	CEPT	
18	Yashwant Soni	Urb.Planner	CEPT	
19	Dr.Pradip Thenga	C.O.	M.C.Hingoli	
20	Chavan Dilip	President	M.C.Hingoli	
21	Agrawal Ashok	Munci.Engr.	M.C.Hingoli	
22	Rathod Ulhas	Sani.Insp.	M.C.Hingoli	
23	Gawali Ashok	Engr.	M.C.Wai	
24	Hatkar M.G.	Engr.	M.C.Wai	
25	Shah D.M.	Sect.Engr.	MJP ATS Nashik	
26	Dusane S.S.	C.O.	M.C.Sinnar	
27	Patil S.S.	Engr.	M.C.Sinnar	
28	Deshmukh R.V.	Sani.Insp.	M.C.Sinnar	
29	Otari K.K.	Sani.Insp.	M.C.Sinnar	
30	Venkati B.Nilawad	C.O.	M.C.Beed	
31	Awate Vaishali S.	Ex.Engr.	MJP PMC Pune	
32	Aher C.R.	Sect.Engr.	MJP U&R Nashik	
33	Gogte R.D.	Sect.Engr.	MJP ATS Nashik	
34	Pophali J.W.	Dy.Engr.	MJP ATS Nashik	
35	Waychal G.P.	Ex.Engr.	MJP ATS Nashik	

36	Kakde V.G	Dy.Engr.	MJP ATS Nashik	
37	Smt.Patil V.T.	Sect.Engr.	MJP ATS Nashik	
38	Joshi R.G.	Sect.Engr.	MS Office Mumbai	
39	Smt.Palande Manisha	Ex.Engr.	CPDM Mumbai	
40	Dr.Megha Phauralkar	Co-ord.	CEPT	
41	Orpe Prakash	Consultant	AIILSG Mumbai	
42	Deodhar Anand	Consultant	AIILSG Mumbai	
43	Kelkar Kalyan	Consultant	AIILSG Mumbai	
44	Patankar S.N.	Consultant	AIILSG Mumbai	
45	Smt.Meera Mehta	Professor	CEPT University	
46	Mehta Dinesh	Professor	CEPT University	
47	Chandrikapure R.P.	Ex.Engr.	MJP PMC Nagpur	
48	Madankar P.Y.	Dy.Engr.	MJP PMC Nagpur	
49	Ms.Kavadi Utkarsha	Resea.Asso.	AIILSG Mumbai	
50	Smt.Nair Anita	Resea.Asso.	AIILSG Mumbai	
51	Smt.Bhaumik Sukanya	Resea.Asso.	AIILSG Mumbai	
52	Lalani Nazmin	Resea.Asso.	AIILSG Mumbai	
53	Smt.Sakhare Nitu	Resea.Asso.	AIILSG Mumbai	
54	Chawala Chandan	S.Fell.	CEPT University	
55	Amitha	Resea.Asso.	CEPT University	
56	Mansuri Aasim	Resea.Asso.	CEPT University	
57	Chalak A.S.		M.C.Beed	

The Performance Assessment System (PAS) Project

The 'Performance Assessment System – PAS' is a five-year action research project, initiated by the CEPT University, Ahmedabad, with funding from the Bill and Melinda Gates Foundation. It supports development of appropriate tools and methods to measure, monitor and improve delivery of urban water and sanitation services in the states of Gujarat and Maharashtra. The PAS Project comprises three components of performance measurement, monitoring and improvement.

The PAS Project is supporting the development of City Sanitation Plans (CSP) to achieve open defecation free status for four small cities in Maharashtra, which are Wai, Hingoli, Ambajogai and Sinnar. These cities were selected by the Water Supply and Sanitation Department, Government of Maharashtra, and Maharashtra Jeevan Pradhikaran (MJP). A framework for city-wide assessment using the full value chain for urban sanitation has been developed, which is being used in developing these CSPs. Initial workshops were organised by the MJP with officials of these cities to discuss the CSP approach. Draft plans for these cities are ready and will be discussed with city officials.

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