

Performance Assessment System for Urban Water Supply and Sanitation

Documentation of Good Practices

Documentation of Good Practices in Tasgaon Municipal Council Addressing Equity Issues in Water Supply, Sanitation and Solid Waste Management Services



**All India Institute of Local Self Government, Mumbai
May 2010**

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Tasgaon Municipal Council**

**Addressing Equity Issues in
Water Supply, Sanitation and
Solid Waste Management Services**

By-

Nilesh Modak



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Abbreviations

AIILSG	All India Institute of Local Self Government
BPL	Below Poverty Line
DP	City Development Plan
CEPT	Centre for Environmental Planning and Technology
GIS	Geographical Information System
IHSDP	Integrated Housing and Slum Development Programme
LPCD	Litres per Capita per Day
M.J.P.	Maharashtra Jeevan Pradhikaran
PAS	Performance Assessment System
SJSRY	Swarna Jayanti Shahari Rojgar Yojana
SWM	Solid Waste Management
TMC	Tasgaon Municipal Council
TPD	Tonnes Per Day
UIDSSMT Towns	Urban Infrastructure Development Scheme for Small and Medium
ULB	Urban Local Body
WSS	Water Supply and Sanitation

Executive Summary

Tasgaon Municipal Council (TMC) has undertaken proactive measures to improve access of water supply, sanitation and solid waste management services to the marginalised population from the city. Until year 2006, there was practically no waste management practice in the city. Dust bins flooded with waste, citizens threw kitchen waste in open gutters or at the road-side, waste decomposition led to foul odour. This was the general picture in the city. Situation was even worse in slum area. There were no individual toilets in slum area. Community toilets available for citizens were inadequate to cope with the growing population. Open defecation was a common practice among slum dwellers, thus making slums into an unhygienic area. Moreover, the slums had no access to waste collection service. So waste saturation and subsequent decomposition made the slum areas further unhealthy.

There was no adequate water supply in the city. Water distribution network was mostly restricted to Gaonthan area, the central residential area in town. The marginalised population had poor access to water supply service.

It was high time that the elected public representatives and officials of the Council felt a genuine need of a comprehensive City Development Plan (CDP) for Tasgaon. After exhaustive discussions with the key stakeholders, both individual and institutional, a CDP was finalised. A participatory survey was also carried out which involved marginalized population also to get an insight into the prevailing status of basic services provided to citizens, their problems and suggestions to improve the quality of services. The CDP extended the service delivery for water supply, sanitation and solid waste management to marginalized city population. A slum development plan is also sanctioned under Integrated Housing and Slum Development Programme (IHSDP) scheme for development of slum dwelling population.

With the joint efforts from the elected public representatives and officials, TMC undertook some crucial measures to improve water supply service [under Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) scheme] for efficient and equitable sanitation services and, slum development (under IHSDP scheme).

The key feature of this good practice is the conscious attempts of the Urban Local Body (ULB) to improve service delivery to poor and marginalised city population.

1. **Introduction**

There are 393 below poverty line (BPL) families residing in five non-notified slums in Tasgaon city. Their current population is around 1764 as reported by the TMC. There are two non-slum BPL communities, namely, Gosavi community (71 families with a population of around 355) and Nath-Panthi Dombari community (53 families with a population of around 265). The total number of BPL families in TMC is 517. The TMC made conscious efforts to extend water supply, sanitation and solid waste management service delivery to the marginalised and deprived city population.

Community water connections have been provided in the slum area and also in localities of Gosavi and Nath-Panthi Dombari communities. The marginalised population is no more required to cross long distances in search of water. Moreover, the Council has ensured supply of good quality water to the marginalised population to avoid communicable diseases and other health hazards.

The Council has provided community and mobile toilets in these areas to reduce open defecation. The people here also have an access to waste collection service. Consequently, the problem of waste saturation and decomposition has been eliminated. It has helped to maintain clean and healthy environment in slums, thus making them a better place to live.

The Council has adopted a strategy to involve Gosavi community for the waste segregation at the landfill site. The efficient waste management service has made the waste segregation activity a full-fledged job for the Gosavis waste collectors. They now earn their livelihood through waste segregation.

The inclusive service delivery to marginalised city population underlines the pro-equity approach of the Council and has helped to raise their quality of life.

2. **Documentation Methodology**

Based on the secondary information obtained from the Council officials, the equitable water supply, sanitation and solid waste management service delivery practiced by TMC was identified to be a good practice. The documentation methodology adopted for this document comprised:

- Field visits
- Interviews of the Council officials

- Focused group discussions with the members of marginalised population.

The data collected has been supported with photographs.

3. Background of Tasgaon Municipal Council

The TMC was established in 1865. It is a class 'C' municipal Council. Tasgaon is the headquarter of Tasgaon tahsil in Sangli District, Maharashtra. Historically, Tasgaon was a part of constituency of Patwardhans during the reign of Peshawa the Fourth (1761-1772 AD) and was at top of its prosperity during the period of Parashurambhau Patwardhan (1790 AD).

The total population of TMC is 33,435 (Census 2001). The population from marginalised communities is estimated to be seven percent of the total population. This section includes 393 BPL families residing in five non-notified slums, the population of which is around 1764. The Gosavi vasti has 71 BPL families with a population of around 355 and the Nath-Panthi Dombari vasti has 53 BPL families with a population of around 265. The total number of BPL families in the city is 517.

4. Situation before Interventions

4.1 Situation of Water Supply and Sanitation in the City

- Until year 2006, there was inefficient waste management practice in the city. Dustbins flooded with waste, citizens threw kitchen waste in open gutters or at the road-side and waste decomposition led to foul odour. This was the general picture everywhere in the city.

Image: Open gutters spreading waste-water everywhere



- There was inadequate water supply. Water distribution network was mostly restricted to the Gaonthan area, the central residential area in city.
- The poor and marginalised city population had poor access to water supply, sanitation and solid waste management services.
- There was a need of greater co-ordination between the elected representatives and officials to develop a long-term solution to the problem of water supply, sanitation and solid waste management in the city. In 2007, joint efforts were undertaken by the elected representatives and officials to identify the key issues regarding service delivery by the Council.

4.2 Situation of Marginalised Communities

The residence of Gosavi and Nath-Panthi Dombari communities in Tasgaon dates back to around fifty years. Both these communities were originally nomads. As they had no guaranteed income source, they frequently found themselves charged with involvement in criminal activities. Lack of shelter made their life highly insecure.

Both these communities were provided housing facility by the government around forty years ago. This facility provided stability to their lifestyle and helped them look for income source within the city. Since then, the Gosavi community is believed to be engaged in waste collection activity to earn its living. The Nath-Panthi Dombari community started working as construction labourers. Still, these communities were found to be very much conserved. Lack of education was a major obstacle for their comprehensive development. So community centres were established in their locality to initiate interactions among community members. All these families were also provided television sets to serve as a means of enlightenment. Subsequently, free education facilities were also provided to these communities.

These communities also had poor access to water supply, sanitation and solid waste management services. They had to trudge long distances in search of water. The water available was usually of bad quality. The recurrence of communicable diseases and other health hazards through contaminated water was a common scenario.

As they had poor access to toilets, open defecation was inevitable. Also, there was inefficient waste collection service in their localities. So waste saturation and subsequent decomposition made their localities unhealthy. It indirectly affected their quality of life.

5. Efforts made for Improving the Situation

5.1 Participatory Survey and Discussions with Stakeholders:

The first and the foremost intervention undertaken by the Council for providing equitable WSS and solid waste management services to the marginalised population was a participatory survey to ascertain the prevailing status of services and the problems being faced by the citizens as well as the marginalised section. It was a door to door survey and covered all the 5,520 households in the city including 393 households in the slum area and non-slum BPL families from Gosavi community (71 households) and Nath-Panthi Dombari Community (53 households). Apart from status of service delivery, the survey also focused on suggestions and expectations of the citizens. The survey also focused on financial aspects like expected operating cost for the entire waste management system.

The survey was followed by extensive discussions with the stakeholders, both individual and institutional. These stakeholders included key representatives of all political parties, educational, economical, social and religious institutions, industrial and business representatives, Government departments like Maharashtra Jeevan Pradhikaran (M.J.P.), Town Planning Department, Department of Public Works, Primary Health Centre, Agriculture Department, Solid Waste Management Cell of Government of India-working under All India Institute of Local Self Government (AIILSG), Mumbai etc.

5.2 Preparation for the comprehensive City Development Plan (CDP):

The whole exercise helped to identify the core issues in service delivery to the marginalised population and suggest solutions as well. A CDP was designed for comprehensive development of the city. The development plan was mainly aimed at improving service quality and providing equitable access to water supply, sanitation, solid waste management and roads and transport services to all the citizens including the marginalised and deprived population. .

5.3 Issues Identified

- i) Spatial inequity in water supply, sanitation and solid waste management service delivery negatively affecting households from the non-notified slums in the city and other BPL families including Gosavi and Nath-Panthi Dombari communities.
- ii) Low efficiency of solid waste collection and segregation.
- iii) No waste treatment facility.
- iv) Lack of sufficient infrastructure and human resources to manage the services.

6. Service Delivery to Marginalised Population:

The TMC mainly aimed at providing service delivery and maintaining service quality across all the citizens from the city with special attention on service delivery to the marginalised sections from slum and the non-slum BPL population as well.

All the 71 BPL families from Gosavi, and 53 BPL families from Nath-Panthi Dombari communities, have been rehabilitated by the Council. These families were provided housing, water supply, sanitation and solid waste management services. Community water connections have been provided in these localities, improving their access to

water. Good quality water is supplied and has helped to minimise health hazards arising from contaminated water consumption.

Community and mobile toilets have been provided in these areas. It has helped to reduce open defecation. Waste collection containers have also been provided in these areas and waste collection is carried out regularly. These communities were also provided with community centre along with free education to their children to bring about comprehensive development.

Community water connections have been given to all the five non-notified slums providing quality water. Mobile toilets have also been provided here, which have significantly reduced open defecation. Waste collection containers have also been made available in slums and are given regular waste collection service, thus turning them into a clean and hygienic area.

All the 393 BPL slum households here will be rehabilitated under IHSDP scheme by March 2012. These households will be provided individual water connection, toilets and drainage facility.

Image: Community Toilet provided to Marginalized population



Image: Mobile Toilet Unit



Solid waste management service is extended to the deprived and marginalised population from the slum area as well as non-slum BPL population, as it is being provided to other parts of the city. It has helped to improve the efficiency of waste management practice and subsequently, resulted in a cleaner ambience in the entire city.

This intervention underlines the pro-equity approach of the Council for service delivery.

Moreover, the pro-equity approach undertaken by the TMC has also spilled over from the domain of service provision to enhancing livelihood of the marginalised Gosavi community in sync with efficient waste management.

7. Key role of Gosavi Community in Solid Waste Management (SWM)

Efficient waste segregation is a pre-requisite for efficient waste treatment. Since it is not feasible for the Council to undertake mechanical segregation at present, it has adopted a strategy to involve the Gosavi community for the purpose of waste segregation. This has helped the community to earn its living and has also saved the financial investments of the Council for this purpose.

Both men and women from this community are involved completely in waste segregation activity. The whole process of waste segregation is carried out by the members directly at the landfill site itself.

The waste pickers are free to take away whatever waste they want to from the landfill site. They generate fair amount of income by selling this waste material. Efficient waste collection has made the waste segregation a full-fledged daily activity for the waste pickers. The waste pickers take away around 0.6 Tonne Per Day (TPD) of waste from the landfill site, which relieves the Council of recyclable material treatment.

It is a tiresome job for the waste pickers to walk everyday to the landfill site, which is almost eight km away from the city. To reduce this drudgery, the Council has provided free to and fro transport service. It has made the waste segregation even more efficient benefitting both the Council and waste pickers.

The men from Gosavi community involved in waste picking buy discarded iron, wooden and plastic materials from the households at cheaper rates. All these materials are potentially recyclable and reusable and thus are sold to recyclers at fairly high rates. These discarded materials, which make up for a significantly large volume, are recycled through this activity. The waste pickers generate fair income out of this practice and simultaneously, contribute to waste segregation.

But this practice requires initial investment from the waste pickers to buy discarded material and transport it to the recycler's shop. The TMC has given financial assistance to these men and women through Swarna Jayanti Shahari Rojgar Yojana (SJSRY) for this purpose. Thus, it has become a regular income generating activity for these waste pickers.

8. Livelihood for Gosavi Community

The remarkable intervention for solid waste management by the Council was to involve Gosavi community in this process and thus extend a helping hand towards the deprived waste pickers. The men and women from all the Gosavi families work as waste pickers and earn their livelihood by selling collected waste materials like plastic, iron materials etc. Thus, they play a key role in segregation of solid waste. The activity of waste segregation has made them self-sustainable. Secondly, this activity has saved on any financial investments from the Council for this purpose, thus benefitting the Council too. The Council has provided free of cost transport service to these waste pickers to and from the dumping site.

This reflects that the Council is sensitive towards the role of waste pickers in solid waste management service and efficient management of human resources.

9. Rehabilitation of Waste pickers and Livelihood for the Gosavi Community:

Prior to interventions of the Council, the waste pickers from the Gosavi community had to bear the drudgery of carrying tens of kilos of waste every day and cover a distance of around eight km on foot. However, after the Council extended a helping hand and provided free transport service to them, the job became very easy for them. They are now able to collect even more quantities of waste than earlier.

Image: Waste-picker Gosavi families



It is estimated that a waste picker woman earns approximately Rs 200/- (\$4.26) per day after selling the collected waste materials and men from these families too fetch approximately Rs 300-350/- (\$6.39-\$7.46) per day from their activity. Thus the activity of waste segregation has helped these families to improve their financial conditions.

After segregation by these waste pickers, the remaining waste matter is a good quality feed for composting, which has improved the efficiency of composting. The earning members from the waste picker family are involved in the activity of waste segregation and can now generate their livelihood out of it.

The strategy of the Council to involve these waste pickers for waste segregation has saved on financial investments of the Council required for this purpose. Waste segregation in turn has improved efficiency of composting thus giving good quality compost, a source of revenue for the Council.

The Council has also provided basic services to these Gosavi families like housing, mobile toilet, drainage, roads, street-lights, free education to their children, community centre etc. They are also granted financial help from the SJSRY scheme. This reflects the Council's aims of comprehensive development of the waste picker families.

10. Impact:

10.1 Impact on Slum dwelling Population:

The TMC has adopted a strategy to provide equitable water supply, sanitation and solid waste management services across the citizens including the population residing in non-notified slums. The marginalised population had to cross long distances in search of water. The water so available was usually not of good quality. The occurrence of communicable diseases because of contaminated water was a common scenario.

Because of equity in service, good quality water is supplied regularly to the marginalised slum population. The waste collection from these slums is carried out regularly through the waste collection containers provided in the slums. So the health hazards due to waste saturation and decomposition are taken care of.

The Council has also provided mobile toilet units with 10 seats each in the non-notified slums. It has helped to reduce open defecation in this area to a significantly large extent. Moreover, there was inefficient waste management in slums. It led usually to waste saturation there, and further decomposition of the waste lead to spreading of foul odour everywhere. The environment in the slums was not hygienic enough to live.

As these slums are now provided with equitable waste management service, the waste from slums is collected regularly through waste collection containers and is transported to the landfill site. This practice has provided the slums into a clean and healthy environment and raised the quality of life of the slum households.

10.2 Impact on Gosavi Community:

All the families from Gosavi community are provided housing facility by the Council. Moreover, community water connections supplying good quality water are provided in this area.

The equitable sanitation service is provided to Gosavi community. The solid waste from this area is regularly collected using waste collection container and there is no waste saturation and decomposition in this area. The Council has provided a proper drainage facility in this area, which has improved the disposal of waste water. There is also a mobile toilet unit with 10 seats provided in this area by the Council. This has improved the cleanliness practices in this area. The Gosavi families can now live in clean and a healthy environment.

The intervention of the Council to involve these marginalized Gosavi families for waste segregation has provided a source of livelihood to them. The efficient waste management practice has made waste segregation a full-fledged job for these waste pickers. These families can now earn respectable income out of this activity and have become economically self-sustainable.

10.3 Impact on Nath-Panthi Dombari Community

There are 53 BPL families in Nath-panthi Dombari community with a population of around 265. Community water connections are provided in this area and good quality water is supplied regularly. This intervention has given the Nath-Panthi Dombari community a better access to water.

Equitable sanitation service is also provided to this community. Before this intervention, there was inefficient waste management. It usually led to waste saturation and decomposition making the environment unhygienic.

The solid waste from this area is regularly collected using waste collection container. So there is no waste saturation and decomposition. The Council has provided a proper drainage facility in this area, which has improved the disposal of waste water. A community toilet unit with 12 seats has also been provided in this area by the Council. This has improved the cleanliness practices in Nath-Panthi Dombari locality. The Nath-Panthi Dombari families can now live in clean and healthy environment.

11. Futuristic:

The Council aims at further augmentation of the water supply, sanitation and solid waste management services and improve the service quality to deprived and marginalised population. All the 393 BPL households from five non-notified slums will be rehabilitated by March 2012. Housing will be provided to the entire households under IHSDP scheme. Each household will be provided with 257 sq ft block with individual water connection and an individual toilet. The construction work has already started and is expected to be completed by March 2012. The improved waste collection and drainage services will be provided to these slum households. The Council expects Tasgaon to be a “Slumless-City” by March 2012 and augment and improve the quality of equitable services for water supply, sanitation, solid waste management and drainage to the deprived and marginalised population.

Image: Housing for BPL Family under IHSDP



The Council has submitted a proposal for underground drainage network across the city. According to the government norms, underground drainage facility can be granted if the water supply exceeds 135 litres per capita per day (lpcd). At present, the average water supply for the city is around 100 lpcd. So the Council has proposed augmentation in water supply capacity under UIDSSMT scheme. In addition to capacity increase, individual metered water connections will be provided to all the city households including the marginalised households. The augmented water supply will enable the provision of the underground drainage facility in the city.

The Council has plans to extend the door to door waste collection service to cover 100 percent city households including the marginalised households in future. The Council is also planning to organise the waste pickers for waste management service delivery and mainstream their informal skills. This will help to raise their income from this activity and in turn improve their quality of life.

12. Learnings:

TMC has adopted a conscious strategy to provide inclusive service delivery for WSS and solid waste management to poor and marginalised city population. Community water connections to slum population have certainly helped to solve the problem of water supply in this area. This sanitation practice has helped to maintain healthy environment in slums. This has improved their quality of life. Secondly, the inclusive service delivery is at the root of improvements in the service quality of water supply, sanitation and solid waste management for the entire city. This seems to be a foundation step towards achieving the goal of 100 percent “Clean and Neat City”.

The learnings of this case study can be enlisted as follows:

- i) Inclusive service delivery to marginalised population is a prerequisite for providing equitable services across the entire city.
- ii) A participatory survey dedicated to present status of service quality helps to identify the core issues and also to define the approach to improve the service quality.
- iii) Inclusion of marginalised and deprived population is inevitable for comprehensive development of the city.

13. Replicability:

The conscious Pro-equity strategy for identifying the most marginalised communities in a city or town and undertaking proactive measures to improve their access to WSS and solid waste management services is replicable in most of the ULBs. In order to replicate this practice, a dedicated participatory survey regarding the status of service delivery to the marginalised population should be carried out at the very first step. This will help to develop tailor-made interventions. With a conscious “Pro-Equity Approach” the equitable service quality can be provided to the deprived and marginalised population.

Conclusion:

The practice of providing inclusive service delivery for WSS and solid waste management to deprived and marginalised city population undertaken by the TMC underlines their

“Pro-Equity Approach” and vision for the comprehensive development of the city. The inclusive service delivery has given the marginalised population, a better access to WSS and solid waste management services. It has helped to improve their quality of life. It has also ensured improvements in the quality of services across the entire city population. The waste segregation activity has provided the waste pickers a source to earn their livelihood.

The Council has also planned futuristic with a conscious approach to bring about of comprehensive development of BPL families and improve their quality of life.