



# Monitoring Arrangements for Urban Water Supply and Sanitation in Gujarat - A Paper

CEPT University

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URBAN WATER SUPPLY AND SANITATION  
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## Introduction

*The recent spike in fund flows for urban infrastructure development from central and state governments to urban local bodies (ULBs) has brought into focus the prevalent fund monitoring practices, and their effectiveness in ensuring proper project implementation and in achieving sector development objectives. Though project implementation monitoring appears to be the most widely used method across states including Gujarat, its effectiveness in meeting sector growth objectives is suspect. The data requirements of such an approach offer limited avenues to undertake realistic assessment of effectiveness of fund utilisation for projects, and have no in-built mechanism for course correction. In light of the shortcomings of project implementation monitoring, a few central level schemes have introduced the concept of performance monitoring which tracks fund utilisation and effectiveness by gathering a series of intermediate inputs. If developed and used systematically, such a system can be utilised in strategic decision-making for setting sector goals and budgeting and in dissemination of information to key stakeholders. Further, such a system can be helpful in institutionalising monitoring through appropriate institutional responsibilities and systems to gather and analyse information.*

## Urban Sector Monitoring

When used in a holistic manner, monitoring can be an effective tool to serve multiple purposes including assessing progress on project implementation, determining extent of success in achieving national and state government goals, and also help in strategic decision making for setting sector goals and budgeting.

There are different types of monitoring, that is, strategic performance monitoring and programme implementation monitoring. The

latter largely focuses on inputs and outputs, the former addresses intermediate results and outcomes (Figure 1).<sup>1</sup>

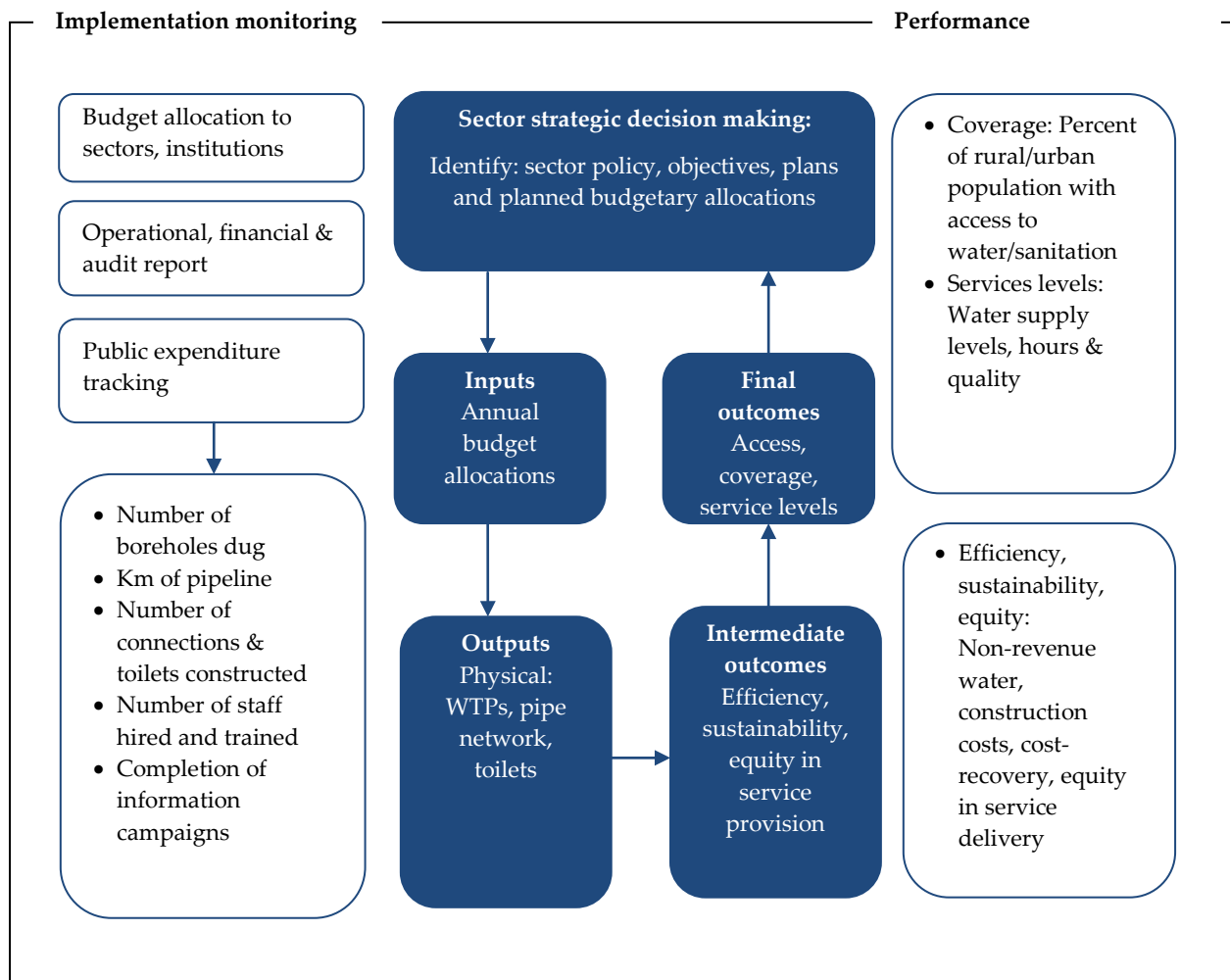
In India, governments, including that of Gujarat's, have tended to focus largely on monitoring programme implementation. A similar focus has not been laid on performance monitoring, which addresses intermediate results and outcomes of programmes under way.

Monitoring activities in Gujarat are undertaken for the urban sector as a whole. In this regard, monitoring of the urban water supply and sanitation (UWSS) sector is not dealt with separately. The focus of these monitoring efforts is on assessing programme implementation of central and state government projects. In addition to this, regular or routine monitoring for administrative matters and ULB finances is also undertaken in the state. All these together add up to considerable reporting requirements for ULBs, especially due to the separate formats for each grant and scheme. Greater harmonisation and simplification of reporting/monitoring formats would help lower the burden on ULBs. However, there is a clear gap in terms of performance monitoring that requires attention.

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<sup>1</sup> See, for example, Mehta et al. (2007), Thomson (2006), and Huang Gia (2007).

**Figure 1: Different Types of Monitoring Processes**



***Programme implementation monitoring is the commonly used monitoring system***

Monitoring requirements for grants (CFC and state government), centrally sponsored schemes and the state government’s own schemes, typically adopt the programme implementation monitoring system. Currently, approximately 45 different grants and schemes are operational in the state – and each ULB would, at any stage, probably need to report on about half of these. Further, significant variation exists between the monitoring procedures to be adopted for central- and state-level programmes. These variations are with respect to differences in the

approaches, incentives, information flow and use of the information. While grants are more predictable and based on a formula, allocation of funds for programmes and schemes depend on how fast a ULB can prepare project proposals.

▪ **Monitoring of central and state government grants**

As indicated earlier, the Gujarat Municipal Finance Board (GMFB) manages transfers of both Central and State Finance Commission grants to ULBs. The differences in the monitoring processes followed for grants from these two sources is better explained through a comparative analysis of tax transfers and the 12th Finance Commission (TFC) (GoI) transfers.

The monitoring process formulated by the central government, with respect to the TFC transfers, focuses on timely release of funds by the State (GMFB) to the ULBs and adherence to guidelines of the TFC for using the grant funds for specific purposes (mainly, UWSS). Aspects such as the devolution mechanism, review, monitoring and reporting system, institutional responsibilities, schedules and procedures for release of second/subsequent instalments, audit requirements and procedures, disincentives to state disbursement, etc, for TFC grants are well defined. However, audit reports or monitoring and review reports are not disclosed.

The state government, on the other hand, focuses on aspects relating to access to the government grant of entertainment tax. ULBs wanting to access this grant can do so by sharing relevant information through a series of 14 formats, each for a specific purpose/situation in the cycle of use of the transferred amount. The emphasis here is, therefore, more on ease of access to grants than on monitoring the outcomes.

To ensure that use of entertainment tax grants are in accordance with the criteria of their use, the GMFB monitors physical and financial progress and fund utilisation for works undertaken using these grants. However, assessment suggests that there exist a few issues in the monitoring and approval process of entertainment tax and other transfers for development works such as:

- a. Devolution is not linked to ULB performance or reforms.
- b. Annual reporting does not allow for mid-year course correction.
- c. Collation or compilation of reports received from ULBs is not undertaken by the GMFB owing to

shortage of staff, preventing comparative performance assessment.

- d. Emphasis is placed only on financial reporting; physical achievement/asset creation is not verified on the ground.

▪ **Monitoring of central and state programme/scheme**

Programmes/schemes of the central government use more elaborate review and reporting mechanisms. They have features such as third party monitoring, specific indicators to monitor ULB progress, system of awards/incentives, and monitoring of commitments on reforms. For central schemes such as Jawaharlal Nehru National Urban Renewal Mission/Urban Infrastructure Development Scheme for Small and Medium Towns (JNNURM/UIDSSMT), third party monitoring is undertaken by the National Institute of Urban Affairs (NIUA). Independent monitoring to assess implementation of reform commitments by independent firms has also been recently introduced.

At the state level, third party monitoring for Gujarat is undertaken by the Town and Country Planning Organisation (TCPO). Through a few of its schemes, the state government has introduced an element of independent monitoring. For instance, under its Nirmal Gujarat programme, an independent entity has been engaged to carry out physical inspection of projects. Under the same scheme, independent monitoring is also undertaken for the 'Individual toilet and Pay and use toilet' schemes. The City Managers' Association of Gujarat (CMAG) has been engaged for this activity. The District Urban Development Agency (DUDA) is also required to check a

sample of toilets. The features of monitoring systems and processes of a central programme (UIDSSMT, representing the JNNURM/UIDSSMT genre of reform-linked

programmes) and a relatively new state programme (Nirmal Gujarat – individual toilets and pay and use toilets) are presented in Table 1.

**Table 1: Monitoring Process for a Central and a State Programme**

	UIDSSMT Programme & IHSDP, GoI	Nirmal Gujarat- Individual Toilet/Pay and Use Toilet Scheme, GoG
<b>Process</b>	<ul style="list-style-type: none"> <li>Monitoring by GUDM</li> <li>Periodic monitoring of : <ul style="list-style-type: none"> <li>project progress , reform commitments , fund utilisation through specific formats;</li> </ul> </li> <li>Reporting through UDD, GoG to MoUD, GoI</li> <li>Third party monitoring and reporting by TCPO to MoUD/GoG on progress</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring/physical inspection of scheme implementation by chief officer of a municipality; Random inspection undertaken by the sub-divisional magistrate.</li> <li>Release of subsidy post-inspection by DUDA</li> <li>Third party monitoring by CMAG of actual implementation</li> </ul>
<b>Audit</b>	<ul style="list-style-type: none"> <li>Yes;</li> <li>Audited project accounts submitted by ULBs to GUDM</li> </ul>	<ul style="list-style-type: none"> <li>No</li> </ul>
<b>Performance linked</b>	<ul style="list-style-type: none"> <li>Release of funds (second instalment onwards) linked to physical and financial progress and adherence to timelines;</li> <li>performance awards for implementation of pro-poor reforms under IHSDP</li> </ul>	<ul style="list-style-type: none"> <li>No</li> </ul>
<b>Incentives/ disincentives</b>	<ul style="list-style-type: none"> <li>Disincentive for delay (&gt;15 days) in transfer to ULBs;</li> <li>GoI withholds amount short spent on UWSS, until it receives confirmation on rectification</li> </ul>	<ul style="list-style-type: none"> <li>Disincentive in form of withholding of funds for lack of timely reporting</li> </ul>
<b>Application of technology</b>	<ul style="list-style-type: none"> <li>GoI plans to operationalise online system of reporting/monitoring</li> </ul>	<ul style="list-style-type: none"> <li>No</li> </ul>
<b>Reporting and frequency</b>	<ul style="list-style-type: none"> <li>Quarterly progress reports (physical and financial progress); half-yearly reports (status of reforms, physical and financial progress);</li> <li>utilisation certificates for grants released;</li> <li>reports submitted in specified formats</li> </ul>	<ul style="list-style-type: none"> <li>Inspection reports (of works implemented by NGOs) by chief officers and DUDA (10% sample sub-projects) submitted to GMFB annually;</li> <li>annual inspection reports by CMAG (100% sub-projects) submitted to GMFB</li> </ul>
<b>Information collected/ monitored</b>	<ul style="list-style-type: none"> <li>Physical/financial progress, implementation of reforms; fund utilisation; indicators on level and quality of services</li> </ul>	<ul style="list-style-type: none"> <li>GMFB collates ULB-wise data in its Patraks for 'Pay and use and Individual toilet' schemes</li> </ul>
<b>Use</b>	<ul style="list-style-type: none"> <li>For decision on further release of funds</li> <li>ULB-level tracking</li> </ul>	<ul style="list-style-type: none"> <li>For decision on further release of funds</li> </ul>

*Source: Based on discussions with Government of Gujarat officials.*

While the above initiatives indicate a positive trend towards improved monitoring arrangements, there exist a few issues which require intervention. Discussions with the GMFB reveal that in order to avoid delays in approval/disbursement of funds, a schedule that facilitates timely inspection of projects undertaken by DUDA such as construction of toilets, needs to be introduced. Further, the reporting format for inspection of progress

achieved on project implementation needs to be standardised.

However, despite this, it is a step forward in monitoring of state schemes which, until recently, did not have field-based physical verification or independent monitoring – most other state government schemes do not have either of the two. These are largely focused on the extent of fund utilisation and whether funds are used for the intended purpose.

### *Limited use of performance monitoring system*

A good performance monitoring system is characterised by clarity on both intermediate and final outcomes (Figure 1). Current urban sector monitoring does not seem to include any systematic performance monitoring. Most of the monitoring efforts tend to focus on collecting information on the final outcomes, such as access to toilets or for per capita supply of water, without linking them to incremental inputs that go in at different stages of the project (for example, total water supplied per day and the population served). An important lesson to be learnt from international benchmarking efforts is that effective monitoring requires not only information on indicators, but also the variables that are used to derive the indicator. With this information, validation of outcomes becomes possible.

However, efforts to include performance monitoring system can be seen in the introduction of performance-based grants, in line with the recommendations made by the 13<sup>th</sup> Finance Commission. This grant requires state governments to assess and publish information on service performance. From FY 2011, each state government is expected to collect, analyse and publish information related to target service performance for all urban local governments. The key performance indicators in this list include both intermediate and final outcomes for water supply, wastewater, solid waste management and storm water drainage. Proper measurement and monitoring of these will, therefore, become necessary.<sup>2</sup>

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<sup>2</sup> However, in March 2011, the state government appears to have collected this information from ULBs and published it without validation or checks with other similar information that is collected routinely from ULBs.

To ensure systematic performance monitoring, it would also be necessary to work out clear links with the state budget process. For instance, at present, a significant portion of funds devolved to the ULBs are used for UWSS investments. However, there is no system prevalent which tracks the flow and use of these funds, which makes it difficult to establish links between inputs/outputs and sector performance. Ideally, performance monitoring would help establish links with the budget and assess the outcomes achieved through various budget allocations.<sup>3</sup>

### **Dissemination of Sector Information by GoG and ULBs**

Civil society movements and legislations in the recent past have resulted in increased awareness and attention on the need for information dissemination to citizens by all public authorities. Several initiatives are under way in this regard, both as a response to the Right to Information Act (RTI), 2005, and to public disclosure requirements under the JNNURM reform commitments both at state and ULB levels.

#### *Elaborate RTI-related dissemination efforts under way in the state*

With the objective of fostering an environment of increased transparency and accountability in the working of public authority, the RTI and the Gujarat Right to Information Rules, 2005, provide for right of access to information from public authorities by citizens. In response to specific provisions in the RTI Act,<sup>4</sup> the Urban

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<sup>3</sup> For examples of WSS performance monitoring, see Thomson (2006) for Uganda and Hoang Gia (2007) for Senegal.

<sup>4</sup> Chapter 2, Section IV of RTI calls for proactive disclosures under the Act.

Development and Urban Housing Department (UDD), has uploaded on its website detailed information on state schemes in the urban sector, related budget provisions, staffing details, roles, responsibilities, contact details and salaries of officers.

A State Information Commission has been constituted in the state, while at the ULB level municipal corporations have created RTI Cells, with public information officers at their helm. Information dissemination is primarily undertaken by ULBs through their websites and through media coverage of events. The websites of most of the smaller municipalities are in the regional language, Gujarati.

The UDD website provides ULB-wise details on programme monitoring done through various online monitoring formats. These provide information on programme implementation, status of projects undertaken in the sectors of water supply, sanitation, solid waste management and municipal finance.<sup>5</sup> However, while ULBs are required to report on a monthly basis, these are only occasionally updated on the UDD website.

At the ULB level, disclosure norms of RTI have been adopted by the municipal corporations of Ahmedabad and Surat, with the latter also sharing information on its performance monitoring process and performance indicators for critical functions (for instance, urban infrastructure and municipal finance). Surat and Jamnagar are among the few municipal corporations that publish updated or the latest annual budgets and financial information as well as list of works/projects under way; however, information on physical and financial progress of projects has not yet been shared in the public domain.

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<sup>5</sup> This is discussed in more detail later. See Table 3.

### *Public disclosure requirements under JNNURM reforms*

A pointed effort by the central government to institute transparency and accountability in the functioning of municipalities is the enactment of a Public Disclosure Law (PDL) under the state level mandatory reforms of JNNURM. The law necessitates all beneficiary ULBs to publish and share quarterly information on key performance indicators with all key stakeholders. “The enactment of the law requires the state governments to make appropriate provisions in their municipal statute(s) to ensure that these disclosures are mandatory”.<sup>6</sup> The PDL is expected to:

- a. Provide appropriate financial and operational information on various municipal services to citizens and other stakeholders.
- b. Promote efficiency and consistency in the delivery of public goods and services by the municipality.
- c. Enable comparison over time (of a particular ULB) and space (between ULBs) by disseminating information in a structured, regular and standardised manner.

Assessment of checklists for PDL for the four mission cities<sup>7</sup> under the JNNURM in Gujarat shows that the Government of Gujarat (GoG) has essentially suggested that “since the provisions in the Bombay Provisional Municipal Corporations Act, Gujarat Municipalities Act and the Right to Information Act adequately ensure disclosure to the public, further enactment of a separate law is not very relevant. However, if GoI provides guidelines, the state

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<sup>6</sup> NIUA (2010), p 28.

<sup>7</sup> The four cities are Ahmedabad, Vadodara, Surat and Rajkot.



government will initiate the enactment of a new Law.”<sup>8</sup> It is also suggested that all municipal corporations have websites where “accounts, expenditure and budgetary provisions” are generally posted.

### *ULB websites*

While ULB websites are a key medium of information dissemination, assessment indicates wide variations in the extent of information sharing by various ULBs. To start with, only 42 ULBs (25 per cent) have their own websites; of these at least six were not working at the time of review. Ironically, participation in JNNURM/UIDSSMT does not appear to impact the share of municipalities with operational websites.

Second, most ULBs have shared only minimal information. For example, with respect to water supply and sanitation, the only data shared is on consumer outreach for new water and sewerage connections and the status of complaints under the consumer grievance redressal system.

The situation appears to be relatively better in the case of Gujarat’s four mission cities under the JNNURM. These cities provide information on the projects taken up under JNNURM and the status of the various reforms committed to by each ULB. However, only Rajkot Municipal Corporation posts quarterly and monthly progress reports for JNNURM sub-projects on its website, and provides fairly comprehensive descriptions of its ongoing projects. This trend is, however, contrary to the expectations since through their commitment for PDL, all mission cities were required to share detailed services-related information within the first three years. Similar commitments would be implicit in the

Memorandum of Agreements signed by the 52 ULBs covered under UIDSSMT.

A quick review of ULB websites, however, suggests that there is not much information on service levels and quality as envisaged under this reform. The Surat Municipal Corporation is the only ULB to provide detailed performance information for key services using the Service Level Benchmark (SLB) framework. There is also a wide variation in what is being reported by different ULBs. The smaller municipalities are yet to initiate such disclosure practices.

## **Management Systems and Institutionalisation for Monitoring**

For an urban monitoring system to function effectively, it would have to be supported by management information systems that appropriately link and connect various databases to provide useful results for decision making at both state and local levels. However, several anomalies exist in the way data is collated and this renders them less effective for use in a monitoring system.

Programme implementation reporting requires tracking inputs (mainly fund allocation through state and ULB budgets) and physical outputs. It is observed that though this data is available, it is not tracked systematically to enable a robust assessment of funds available and spent on UWSS for each ULB and for the state as a whole. In addition, online tracking of project implementation as envisaged under the JNNURM has not been set up as yet.

Similarly, while data on outputs or physical facilities built does exist, it has also not been compiled systematically. Ideally, ULBs ought to have detailed records on their water and

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<sup>8</sup> GoG (n.d.), p 1.

sanitation inventory. In the absence of an asset register, updated information on any rehabilitation or addition to the assets does not get captured adequately.

However, efforts have been made to develop an asset register for municipalities under the Gujarat Municipal Accounting Reform Project.

The UDD has taken cognisance of these issues; to address them, it plans to develop a special central management information system (MIS) that combines these various efforts through appropriate information and reporting requirements. It has set up a special committee for the introduction of e-governance under the Swarna Jayanti Mukhya Mantri Shaheri Vikas Yojana. It also aims to enable all ULBs to set their targets and systems to monitor progress on these targets. This implies that such a system would have to go well beyond the routine monitoring that the current UDD online reporting system focuses on, to include both programme implementation and performance monitoring in its scope.

At present reporting takes place through two main systems:

#### *Monthly online reporting through a set of formats*

Initially, monitoring procedures to be adhered to by the ULBs were quite cumbersome in nature. ULBs were required to manually fill and submit several spreadsheet-based formats to different departments within the UDD. However, with time these procedures have changed, and the number of such formats to be filled has reduced. An online reporting system for ULBs was also introduced by the state government in 2008. This has facilitated online data updation by ULBs, which is then verified at

the district headquarters and uploaded to the state government website.

#### *Programme progress reports: Data Project and Financial Management System (DPFMS)*

While the current monitoring systems of the state government result in significant data collection from ULBs about progress achieved in implementation of various schemes, financial reforms, etc, such data is not being used to make informed decisions.

Most state government schemes require reporting by ULBs of progress made in implementation of varied schemes. In doing so, ULBs have had to manually fill several physical copies of the various formats. *“Thirty monthly formats and more than 70 annual statements are being generated, reviewed and monitored on a regular basis for all municipalities.”*<sup>9</sup> Few of the central programmes also require reporting on progress achieved on various reforms.

Monitoring of the financial status, reforms and roles and responsibilities of ULBs is undertaken annually by the GMFB through formats designed for the purpose. At present, though this information is collected by the GMFB, it does not validate, collate and analyse the data systematically owing to a shortage of staff.

However, the state government has created a data project and financial management centre with the purpose of developing a standard MIS and decision support system across all municipal corporations and municipalities with regional sub-portals for effective connectivity and networking.

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<sup>9</sup> UDHUD (2010), p 19.

## Measures to Strengthen UWSS Sector Monitoring

The following key measures to strengthen UWSS sector monitoring have been identified.

### *Develop a comprehensive management information system*

The need to develop a well-integrated MIS system for the urban sector in Gujarat has been acknowledged by the UDD. The following points may be considered while developing the MIS system

- a. Develop clarity on the various types of monitoring systems and identify indicators to support each type.
- b. Identify different databases and assess how they could be connected to support main types of monitoring and related institutional responsibilities. Ideally, it would be useful to move to online reporting for most databases.
- c. Design of online systems with protocols for access to regular updates with standardised information will also need to be established.

### *Need for systematic performance monitoring*

As noted above, it is essential to set up performance monitoring systems for basic urban services. The recent initiatives by central and the state governments to develop a set of standardised sector indicators would be vital for efficient performance monitoring systems.

The SLB of the Ministry of Urban Development provides a nationally agreed set of indicators for urban water supply, wastewater and sanitation and solid waste management. In addition, under the ongoing PAS Project, additional indicators for equity and non-sewered cities have also been developed.

Besides periodic/annual updates on information to generate these indicators, this monitoring system will also need to be linked to programme implementation monitoring to be able to see the impact of funding through various programmes and schemes on performance in service delivery.

For setting up such a monitoring system, a first step would be to use the information on service level indicators of the PAS project as baseline and develop a monitoring system. The key is to make this system acceptable/owned by the ULBs and state government. While this process has been initiated under the PAS Project, common agreement will need to be reached across key stakeholders in the government.

### *Decision support system connected to various databases and MIS*

The overall monitoring system comprising various databases, set of indicators for programme implementation and performance monitoring, and an MIS that links these will provide a strong basis for introducing decision support system (DSS) tools to aid in state level financial allocation decisions. Similarly, appropriate DSS tools will need to be developed for use by ULBs, their complexity varying by the size class and type of ULBs.

### *Improving dissemination through state/ULB websites*

A cursory review of dissemination efforts suggests that while the state government does provide considerable information on its activities in general on its website, specific information on UWSS is limited. Greater details in terms of current status and government's goals along with current performance status would go a long way in highlighting the state government's achievements in the sector.

Similarly, best practice examples across sub-sectors and ULBs would also be useful. At the local level, a large number of ULBs do not have functioning websites, despite e-governance being introduced many years ago. Even of those

The institutional arrangements for funding and monitoring are quite clear at the state level. However, within the ULBs there is no monitoring. It is viewed more as reporting upwards to various state agencies rather than for use internally to improve performance. In order to set up a common MIS, clear assignment of roles within one or more of the state agencies would be needed. This may be linked to a performance assessment system and then used to develop and deploy various DSS tools to link the monitoring systems with decision making. At both the ULB and state levels, institutional strengthening and capacity building are needed in terms of building monitoring and review processes within the staff roles and tasks. move towards assessing the outcome of these infrastructure investments in a more systematic manner. The PAS Project's assessment of service level benchmarks is the first step in developing a baseline. It is now imperative that the state government develops an appropriate

ULB websites that are functioning, many have not been updated for years and do not have information on activities and performance.

Particularly, capacity would need to be built for use of monitoring-linked DSS tools at state and ULB levels. Capacity building would also include adequate hardware and software capacities. An assessment of state agencies and ULBs for this will be needed.

Gujarat is one of the few states in the country that has made its focus on urban development explicit, both in terms of policies as well as in fund allocations. It is not solely dependent on central government funding for urban development, but has used central government funds to kick-start many activities. Large amounts of resources are being deployed for the sector – the state now needs to monitoring system, and builds capacity of ULBs to use this assessment for performance improvement. Only then will the investment in urban infrastructure be targeted at where it is most needed.

## The Performance Assessment System (PAS) Project

The Performance Assessment System (PAS) Project 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 includes three major components of performance measurement, performance monitoring and performance improvement. It covers all the 400+ urban local governments in Gujarat and Maharashtra.

CEPT University has received a grant from the Bill and Melinda Gates Foundation for the PAS Project. It is being implemented by CEPT University with support of Urban Management Centre (UMC) in Gujarat and All India Institute of Local Self-Government (AIILSG) in Maharashtra.

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## PAS Project

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