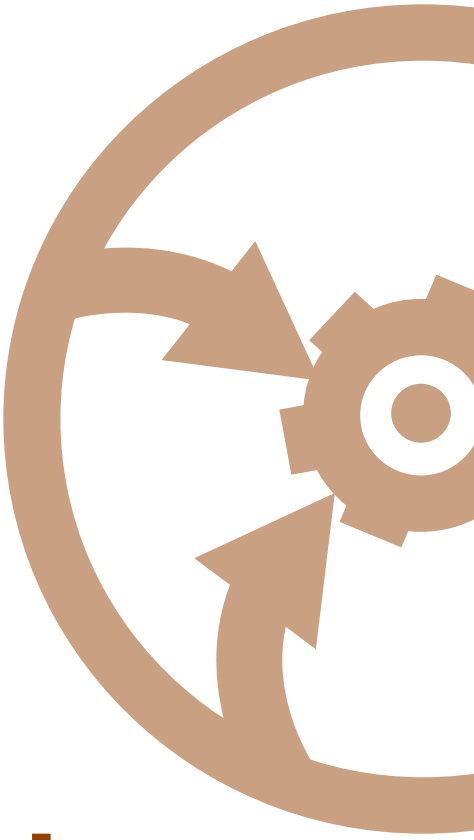
Chapter 4



City Financial Viability

FIRE (D) PROGRAM

City Financial Viability

A city's financial viability is an important part of its ability to develop sustainable and inclusive infrastructure. Given that the responsibility of managing infrastructure services has been decentralized to India's local governments, financial viability is more important than ever. A local government is financially viable if it has enough resources to support the social and economic development goals of its citizenry. Financial viability depends on a local government (1) establishing financial autonomy by mobilizing local revenues, (2) acquiring a strategic focus in financial management, (3) displaying transparency and accountability in administrative matters, and (4) carrying out service provision effectively and efficiently.

Strengths. There is a growing appreciation of city financial viability. Under the Model Municipal Law (MML) (2003), there is a legal framework to permit increased fiscal autonomy. Financially viable local governments have access to the capital markets and can better manage infrastructure services.

Weaknesses. States lack policies that encourage local government financial autonomy, and states still have discretion over many rules that govern municipalities, including debt approval and grant transfers from the central government. Incentives to implement reforms that improve city financial viability are not strong enough. Local governments are reticent to collect tariffs and fees from their citizens.

Key Things to Remember

1. **Local governments become financially viable when their fiscal positions match their functional authority, through both operational and fiscal decentralization.** The optimum situation is when a city's own-source revenues cover establishment costs, costs associated with the operations and maintenance (O&M) of services, and at least a portion of the capital costs of infrastructure. Commercial finance, in addition to grants, pays for a large portion of capital costs. And other grants fund special priorities, such as implementing reforms and combating market inequalities (e.g., poverty).

2. **Legislative decentralization is a necessary but insufficient step in making cities more financially viable. National and state governments must also establish long-term assistance programs.** Because local government capacity is low, technical assistance teams within each tier of government, need to coordinate the reform program and provide on-the-job training. Monitoring the impacts of reforms, using nationally recognized indicators and making any necessary adjustments to those reforms over time are equally important.

3. **Double-entry, accrual accounting is a foundation of an improved and modern local government system.** It provides a realistic financial description of the local government and can be used for advancing many other key reforms, including more accurate budgeting, subsidy-grant analysis, performance trend benchmarking, and improvement in good governance practices.

4. **Fiscal and functional regulation will become an important responsibility for state governments, as more functional authority transfers to local governments.** State Finance Commissions can contribute to municipal fiscal autonomy by broadening the scope of their work beyond fiscal recommendations to state governments.

5. **Urban performance and the pace of reforms can increase when local governments implement resource mobilization projects.** Resource mobilization projects combine cost-saving and revenue-generating activities that help break the vicious cycle of underinvestment leading to bad services, weak revenues, and underinvestment. Because there are lots of areas for improvement, local governments should consider a wide range of options, including organizational restructuring and human resource policy.

6. **Each level of government can encourage change by offering predictable rewards to those that are responsible for efficient, high-quality urban performance.** At the center and state levels, improvements to incentive grant programs, like the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), can be made through more objective performance indicators, a regulatory system that includes local government audits, and focused investment in priority sectors and technical assistance programs. At the local level, incentive schemes can augment staff salaries and also tie them to performance.

7. **Allowing citizens to help establish priorities and receive regular progress reports, through participatory planning and ward committees, builds accountability.** Citizen involvement, along with market-based research, prioritizes investments for service improvements. This links local government service provision to citizens' real needs.

***This chapter** discusses the importance of making cities more financially viable and the strategies for pursuing a reform agenda. Financial viability allows local governments to advance development initiatives, including infrastructure services, more effectively than is currently possible in most cities.*

Articles in this chapter:

- *Accounting Reforms: The Groundwork for Financial Viability*
- *Resource Mobilization and Institutional Reform*
- *Institutional Restructuring and Corporatization: Water and Sewerage Sector Reform in Orissa*
- *Using E-Governance Combined with Administrative Reforms to Improve Governance*
- *Reforming the Central-State-Municipal Fiscal Relationship: India's Central and State Finance Commissions*

ARTICLE 4.1

Introduction to City Financial Viability

When cities reach financial viability, they expand their capacity to influence their own development path. Financially viable cities can define long-term plans and are capable of investing resources to carry them out. They can anticipate and mitigate the impacts of growth, rather than having to constantly catch up. They have the resources at their disposal to improve services and to respond credibly to the demands of their citizens.

But the path to financial viability is not an easy one. Pursuing it requires (1) reforming the processes, systems, and institutional roles of the local government and state-level agencies; (2) acquiring technical competence in numerous areas; and (3) resetting the relationship between local government, state government, and citizens to improve accountability and service delivery. This chapter discusses aspects of city financial viability, and how financial viability underpins the success of local governments to provide the quality services that are essential for equitable economic growth. It explains how India's urban reform agenda seeks to improve city financial viability, and describes how the interventions of the FIRE (D) Program have contributed to this long-term goal. It also identifies some of the key actions still pending on India's urban agenda.

Ask Yourself

If you are responsible for implementing projects

- What are the best options for improving own-source revenue, cutting costs, and making operations run more efficiently? Is the current organizational structure of local government effective or too outdated? Are you willing to change the organizational structure?
- How can you incentivize staff to perform better and gain more professional skills?
- How can urban services and pro-poor initiatives be improved with enhanced financial viability?
- How can new technologies improve services and decision making?
- How can good financial management and accounting practices help other areas of reform?

If you are responsible for setting policy

- What are the key policy reforms needed to improve city financial viability? Is financial viability, good governance, or other urban initiatives the primary objective for your city/state?
- Which reforms are the priorities? Can these be packaged into a comprehensive program to achieve maximum results?
- What legislative and rule changes are required at the state level to pursue the reform program?
- Is there a quality technical assistance and monitoring system in place to support the reforms?
- How can you incentivize the reforms better through targeted grants and a regulatory framework?

The Challenges of Creating Financially Viable Cities in India

India's local governments have difficulty managing cities effectively—providing basic services to all citizens on a sustainable basis, resolving problems effectively as they arise (whether traffic congestion or citizen grievances), and planning for future development. As discussed in Chapter 3, local governments perform limited planning, despite the reform efforts of JNNURM and other Ministry of Urban Development (MoUD) programs. Implementing reforms is a slow and incremental process, requiring continuous commitment.

Although service-level benchmarking and other urban indicators are helpful for measuring progress over time (see Chapter 7), credit ratings also provide a good indication of municipal performance, since they capture most key quantitative and qualitative elements of financial viability.[1] Based on the credit rating study commissioned by MoUD, as part of JNNURM, **only 30 of India's 65 JNNURM cities are considered investment-grade quality (BBB- or higher)**. And none of them has a high enough rating to access the domestic capital markets without significant credit enhancements.[2]

1 A credit rating specifically indicates the likelihood that an institution will meet its financial obligations (see Article 6.3). A creditworthiness report provides more analysis of the workings and organizational structure of an institution, and suggests how it can be improved financially and efficiently.

2 Investors consider an "AA" or better rating to qualify for lending/investing. No city received this overall rating.

What Is City Financial Viability?

A municipality that is financially viable is one that has the financial means and functional authority to support the social and economic development goals of its citizens through planning and the equitable provision of services, on a sustainable basis.

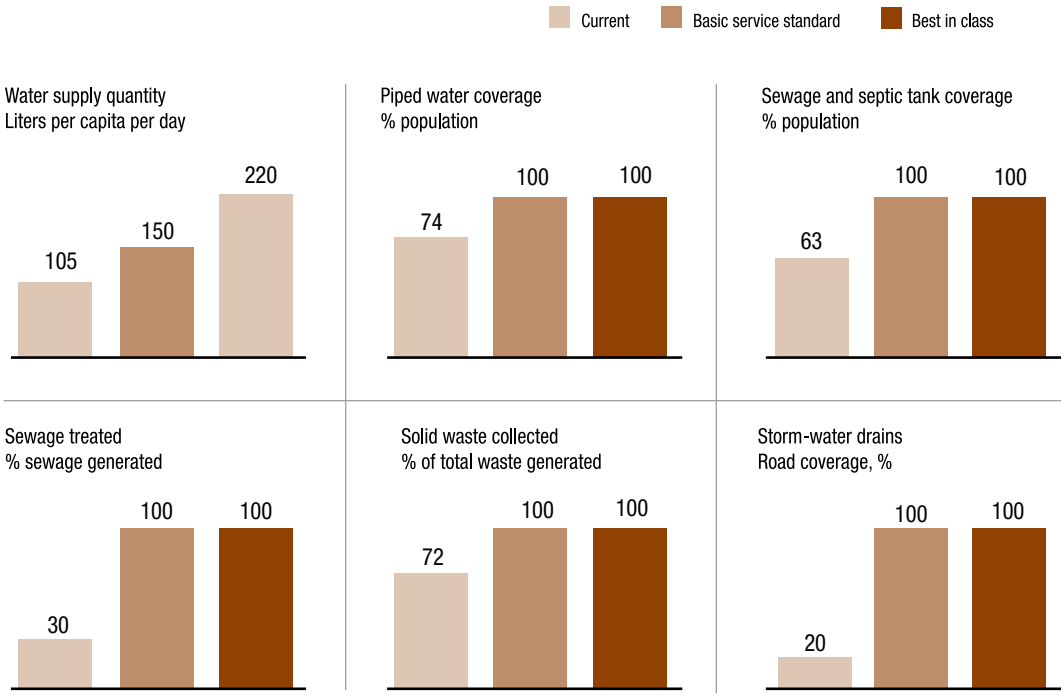
A financially viable local government should have the following characteristics:

- An efficient, cost-effective organizational structure built around key business processes and objectives
- Administrative procedures that are efficient and well documented and that provide understandable, accurate information to key stakeholders and decision makers, both within and outside the municipality
- Local revenue sources that are robust and diversified and that create rational incentives for the use of services
- A system of internal and external controls that minimizes opportunities for corruption and that encourage a culture of transparency and accountability
- Services that are provided using a model of commercial viability that controls expenses and mobilizes adequate resources directly from users, whenever possible, and makes subsidies transparent
- Mechanisms that are regularly employed to involve citizens in defining goals for the city's development and in determining the level and quality of services and that are used to provide feedback to the local government on citizen satisfaction

Service Gaps

Of the many challenges facing local governments, low service levels are the most visible. Based on evolving standards for urban services in India (see Annex 4-1), cities are underperforming and in need of more investment and better management. Service gaps are significant in the sectors for which local governments have increasing responsibility, and these gaps often undermine the quality of life and economic potential of cities, by making them less desirable places to conduct business and live. Figure 4-1 illustrates the deficiencies of essential urban services assessed by the McKinsey Global Institute (2010) for a survey of Indian cities. See Annex 4-1 for definitions of basic service standards defined by the Government of India. Although some high-performing cities in India have demonstrated a capability to meet high performance standards in delivering infrastructure services, the average among the cities in the McKinsey survey was significantly lower.

Figure 4-1. Average Performance of Indian Cities in Infrastructure Services, 2010



Source: United Nations; press search; City Development Plans: The Energy and Resource Institute; Planning Commission; Census 2001; Central Pollution Control Board; McKinsey Global Institute analysis

Without major change, these service gaps will continue to worsen over the coming decades due to the anticipated growth of urban populations. Demand for urban infrastructure services will most likely increase by 2–5 times over what is shown in Figure 4-1, depending on the sector. This highlights an incredible challenge for local governments to develop infrastructure that serves both the backlog and future growth needs.

Not Investing Enough Money

About half of the projected capital investment requirements is needed just to cover the backlog of infrastructure projects to reach basic standards; the remaining investments would serve additional demand. India's Housing and Urban Development Corporation (HUDCO) estimated that the investment needed for core local government services—water supply, sewerage, solid waste disposal, drainage, roads, and street lights—is Rs. 8,359 (US$190) per capita, per annum.[3] Capital expenditures in 2007 averaged Rs. 765 (US$17) per capita: Annual urban infrastructure investment will have to increase by 11 times. High levels of infrastructure investment (in both capital costs and O&M) should be viewed as a continuous process into the foreseeable future, and local governments will need the capacity to manage that process.

Maintaining current infrastructure is as important, if not more so, than making new capital investments: The National Institute of Urban Affairs (NIUA) has estimated that spending on O&M is currently 30% less than it should be.[4] On this path, current services will continue to deteriorate, even if cities were to stop growing right now.

Underinvestment is largely related to the weak fiscal condition of most of India's local governments. Although cities generate about 60% of India's gross domestic product (GDP), local governments' fiscal envelope contributes only 0.75% of GDP. This contrasts significantly with other emerging market countries like South Africa, where the figure is 6.0%; Brazil (5.0%); and Poland (4.5%). The other levels of government in India also account for much more of the country's GDP, with state government own-source revenue totaling 8% of GDP and central government totaling 12%.[5] This small "fiscal footprint" of local governments is problematic considering the pace of urbanization in India and the trend of decentralizing public services from the state to the municipal level. Unfortunately, the fiscal footprint did not improve during the first half of the 2000s—state and central governments' revenues grew faster than those of local governments. The 13th Central Finance Commission (CFC) pointed out that the expenditures of local governments actually decreased as a share of GDP from 1998 to 2007.[6] Improvements in local government performance are not yet keeping pace with India's growth.

Dependency on State Governments

Until recently, India's local governments have never focused on strengthening own-source revenue and capital expenditures, since they were never autonomous institutions. Instead, for decades, they depended on the state and central governments to provide urban services and funding. Intergovernmental transfers pay for large-scale infrastructure projects, and also support basic municipal operations, including establishment costs and O&M.

However, local government dependency on intergovernmental transfers varies considerably among Indian cities, as does the degree to which the transfers are used for operating versus capital purposes. For instance, data from 17 local governments analyzed by NIUA in 2004 show that levels of dependency (state transfers as a share of total revenue) range from 6% in Pune to 58%, 60%, and 80% in Chandigarh, Raipur, and Jaipur, respectively. Five of the six least dependent local governments were still receiving octroi[7] in 2004, implying increased dependency in those locations as the tax is phased out.

While transfers can be used to improve horizontal equalities (i.e., to address inequities between similar jurisdictions), to expand the poor's access to services, or to support specific development goals, dependency on transfers for normal investments and everyday operations is risky, due to their unpredictable fluctuations and the restrictions they place on local government autonomy. High levels of dependency also reduce accountability between elected officials and the citizens of their jurisdictions, since funding comes from a non-local source.

3 K.S. Sridhar, O.P. Mathur, and A. Nandy, 2006, "Costs of Urban Infrastructure: Evidence from Indian Cities," New Delhi: South Asia Network of Economic Research Institutes, Phase 7 Research, http://www.saneinetwork.net/research/sanei_I/index.asp.

4 M.P. Mathur et al., 2007, "Norms and Standards of Municipal Basic Services," New Delhi: National Institute of Urban Affairs (NIUA), Working Paper 07-01, p. 13.

5 P.K. Mohanty, B.M. Misra, Rajan Goyal, and P.D. Jeroni, 2007, "Municipal Finance in India: An Assessment," Mumbai: Reserve Bank of India (RBI), http://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=1169.

6 The 13th CFC, 2009, "Report of the 13th Central Finance Commission," Chapter 10, Local Bodies, http://fincomindia.nic.in/writereaddata/html_en_files/tfc/Chapter10.pdf.

7 Octroi is a duty on goods entering a city. It is a type of import duty that is collected at border checkpoints (along highways), mostly from delivery trucks or other cargo vehicles. As of 2011, it has been phased out in all parts of the country, except municipalities in Maharashtra. Octroi is highly criticized for being inefficient form of taxation and for breeding corruption.

Technical Diagnostic on City Financial Viability

This section discusses the underlying issues that contribute to the financial viability challenges that India's local governments face. There are a number of factors that contribute to low service levels, underinvestment, and fiscal dependency. Initially, the FIRE (D) Program focused somewhat narrowly on improving financial viability to assist local governments in financing infrastructure projects. Technical assistance for the Ahmedabad water and sewerage project (see box), for example, focused on improving cost recovery, through tariff revisions, and on financial management that would lower the credit risk of a municipal bond issue.

However, as the FIRE (D) Program evolved, it became clearer that tackling the underlying causes of weak city financial viability required a comprehensive approach, including organizational restructuring, administrative and management changes, and resource mobilization.

Why City Financial Viability Is Important: Reforms as a Prerequisite to Ahmedabad's Municipal Bond

In January 1998, the Ahmedabad Municipal Corporation (AMC) issued the first municipal bond in India without the backing of a state guarantee. The Rs. 100 crore (US$25 million) bond issuance partially financed the Raska water supply and sewerage project, which cost Rs. 440 crore (US$110 million). Although the 1998 Ahmedabad municipal bond has received significant attention globally for the innovations it introduced into the Indian financial markets, it would have never happened without significant fiscal and management reforms over several years.

In the mid-1990s, the FIRE (D) Program began working with AMC to plan for urban revitalization. Despite its economic prowess, the old city—where a lot of the textile and commercial activity that the city is known for takes place—had become incredibly congested, polluted, and underserviced. A large poor population lived in the area, receiving minimal services and amenities. Forty-one percent of the total population lived in slums in 2000. The bulk of slum residents had shared water supply and more than a quarter had no toilet facilities.

Stemming from the revitalization plan for the walled city, the FIRE (D) Program helped prepare a capital investment plan of Rs. 597 crore (US$150 million) for the 1996–2002 period; the plan included water supply, sewerage, roads, bridges, and solid waste management (SWM) projects. To finance this ambitious investment plan, AMC proposed to pay for 30% of the water supply and sewerage component of Rs. 439 crore (US$110 million) from internal funds, and to mobilize the remaining amount through debt.

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Given the investment needs of the city, the projects would have been impossible without a strong financial position and favorable credit rating. However, before 1993, AMC operated at a deficit, with accumulated cash losses of Rs. 35 crore (US $9.2 million). To confront this situation, in 1994, AMC launched a major effort to improve revenue collection with a focus on octroi and property taxes. These measures included:

- Increasing octroi collection by updating the valuation manual for tax assessment, installing scales, deploying police to catch defaulters, linking check posts electronically, and conducting spot checks of vehicles
- Increasing property tax collection by identifying defaulters, recovering outstanding balances, introducing an area-based assessment system, and strengthening the tax department
- Implementing management improvements including computerized accounts, and upgrading the workforce, as well as introducing a computerized double-entry, accrual accounting system

As a result of these measures, in 1999, AMC eliminated its deficit and achieved a closing cash surplus of Rs. 214 crore (US$54 million). In addition, management innovations helped AMC change its image among the local citizenry. This effort helped AMC receive an initial credit rating of "A+" (first municipal credit rating in the country). With credit enhancements specific for the Raska project, the rating improved to "AA" (see Chapters 5 and 6 for credit enhancement tools).

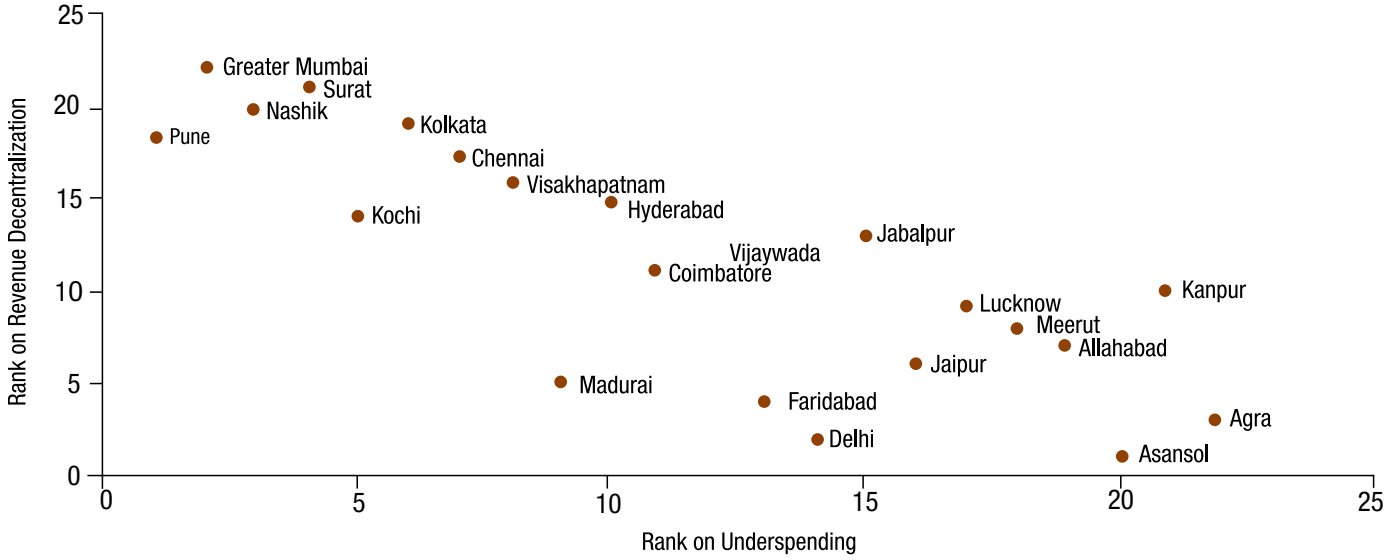
The financial administration and management reforms were a critical element in helping Ahmedabad raise the funds necessary to build an extensive water project, improve conditions in slums, and expand its own financial autonomy. The Raska water project continues to supply water to 60% of the city's population.

State Devolution Processes Are Incomplete

Two important, interrelated determinants of city financial viability are (1) the quality of the decentralization process, as defined and managed by the states, and (2) the capacity of local governments to assume financial responsibility. The Reserve Bank of India (RBI) found that these two aspects are related: Investment in infrastructure services was better in those cities with greater financial decentralization (see Figure 4-2).

8 Underspending is the amount of actual investment compared to service norms. The decentralization ratio compares the per capita revenue of local governments to the state government. See P.K. Mohanty et al., 2007, pp. 113-120.

Figure 4-2. Revenue Decentralization and Underspending[8]



While the importance of these factors is by now quite well understood, how best to implement the reforms so that they have a lasting impact on the financial viability of a city is still being determined. Decentralization is a "lumpy" process; that is, it is hard to implement gradually while at the same time managing costs and ensuring government accountability. One route, whereby responsibilities are split among different levels of government during a transition period, creates duplication of costs, a lack of accountability, and (often) resistance on the part of the devolving entity. The 2006 Infrastructure Finance Report by the Infrastructure Development Finance Company (IDFC) identifies "overlapping roles" of government agencies and "institutional fragmentation" as two of the principal governance issues affecting the delivery of urban services.[9]

Yet the other alternative—suddenly transferring full functional responsibility to the local level—is also problematic because institutional and management capacity, as well as revenue mechanisms to pay for the services, are generally not in place.

In many cases, the objectives and standards for functional devolution to local governments are not clearly established in many states, and therefore, the process becomes haphazard. Even when devolution has taken place in the legislative sphere, states have not always adjusted their administrative procedures, codes, and regulations to appropriately liberate local governments. As a result, local governments need to seek state approval to revise tax rates and user charges and to establish new taxes, among other actions.[10]

Local Financial Resources Are Insufficient and Do Not Match Functions

Despite the paradigm shift outlined in the MML (2003), few local governments have the requisite fiscal powers to fully assume the responsibilities associated with the decentralization of service provision. Even where decentralization has taken place, local governments may not have adequate revenue sources. The shortage of funds affects both daily operations and future capital investment. In decentralization literature, this is referred to as a vertical imbalance (i.e., local governments have been assigned expenditure responsibility without being given the corresponding revenue sources). The functional-fiscal mismatch results in a high degree of financial dependency on intergovernmental transfers from state governments and central-level grants.

In 2007, RBI published a report in which it analyzed the reasons for varying fiscal and service performance in 35 municipal corporations, noting that local government revenues have not improved over the previous decade although responsibilities for service provision have increased.[11] Because most local governments are legally required to operate a balanced budget (some even with a surplus), the consequence of fiscal-functional mismatch is underspending on services. The fiscal balance largely results from not providing acceptable levels of services.

9 IDFC, 2006, *Urban Infrastructure Report*, Chapter 3, "Governance Framework for Delivery of Urban Services." See also R.M. Kapoor, 2002, "Policy Options for Framing New Municipal Laws in India," Volume 3, Urban Environmental Infrastructure, New Delhi: FIRE (D) and The Times Research Foundation, pp. 485-488.

10 See JNNURM brochure, http://jnnurm.nic.in.

11 P.K. Mohanty et al., http://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=1169.

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Transfers Are Unpredictable

India's local governments rely heavily on transfers from state and central governments. India's intergovernmental transfer system needs reform, since it lacks some important features: transparency, objectivity, and predictability. In addition, a large share of the transfers is tied to nondiscretionary expenditures, like establishment costs.

The 13th CFC highlighted that own-source revenues provide less than half of the total expenditures of local governments. Furthermore, MoUD expressed concerns that local governments have been unable, at this point, to fully exploit property taxes as a major source of revenue. Local government taxes, as a share of total tax revenue in the country, have not significantly increased since ratification of 74th Constitution Amendment Act (CAA). They have hovered around 3%–4% of total tax revenue.

At the same time, grants for capital investment from the state and central governments are insufficient to meet capital investment requirements. Intergovernmental transfers will never be able to cover all the urban investment needs; local governments have to improve their own financial viability.

Municipal Institutional Structures, Systems, and Procedures Are Outdated

The efficiency of India's local governments in collecting taxes and user charges, and in providing services, is often low. This is due to the fact that municipal staff assignments, skill sets, and job descriptions are outdated; business processes have not been updated to respond to stakeholder requirements or modern technology; and weak data management systems undermine proper financial administration and reporting. While the need to improve financial management first arose in the FIRE (D) Program as a constraint on market financing, it is now understood to be a prerequisite for most other urban reforms (see Article 4.2 on accounting reforms).

Key financial management processes, such as budgeting, are outdated and serve a limited purpose in many local governments. The following summary of budgeting practices comes from an analysis of the Bhubaneswar Municipal Corporation (BMC) prepared by the FIRE (D) Program in 2007. It provides a typical example of local government business processes that need modernization.

"At present, BMC is not properly aligning its budgeting system within the existing structure of accounting, financial management, and decision-making based on financial information…The BMC is treating budgets more as a legal exercise than as a control tool…While the scope of activities of the local governments has changed substantially over the past hundred years, the budgeting systems have hardly undergone any measure of change or transformation to any material extent.

BMC ends up using the budget as an instrument for obtaining state government funds…BMC re-schedules its budget heads and budget allocations to suit the specific needs of the elected representatives and the needs of the state government…Due to weak budgetary planning at the time of development of the budget, many budget heads remain unutilized, and some fall short while others need to be re-apportioned. In the existing system, expenditure is not conditional on resource realization. The operating departments use their allocations irrespective of revenue realized or availability of money."[12]

12 Infrastructure Professionals Enterprise (P) Ltd., 2007, "Improved Creditworthiness of Bhubaneswar Municipal Corporation, Final Report to INDO-USAID FIRE (D) Project."

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Local Government Management Capacity Needs Strengthening

In the first phase of the FIRE (D) Program, the strongest demand for assistance came from local government officials who were keen to innovate, but who were also aware of the capacity limitations of their staffs.[13] Staff rotation is one factor limiting local government capacity. Another is the low salaries local governments pay their employees, per state and Government of India (GoI) regulations, meaning that administrative work in local governments is not always the best professional option.

In many cases, excess or poorly allocated local government staff creates an enormous strain on municipal finances and can affect the quality of services. For example, a transport subsidy study that the FIRE (D) Program supported in Thane, Maharashtra, found that applying the recommended staff-to-bus ratio to the transport company produced a surplus of 501 conductors and 347 drivers out of a total staff of just over 2,500.

Nearly every FIRE (D) Program assessment of a local government has identified shortfalls in staff skills and resources. These need to be addressed. Not every function can be outsourced to the private sector. Short-term technical assistance is no substitute for embedded professional capacity.

Mechanisms for Participation and Accountability Are Limited

While the culture of accountability and participation is slowly changing in India, local governments do not have a tradition of reporting to taxpayers or consulting with them on key expenditure decisions. Even if citizen groups attempt to investigate how resources are being raised or spent, the lack of information and transparency makes it difficult to verify whatever information may be available. When information is available, it may not be publicly disclosed in a form that allows citizens to conduct any oversight of municipal financial affairs.

Citizens interact with local governments more than any other public sector body, yet local government procedures are often opaque and frustrate citizens. Many local governments continue to operate in an inward-looking way, rather than considering how to simplify and streamline interactions with citizens so that these processes are transparent. When the organizational design of a municipality is outdated, it causes both internal inefficiencies and ineffective communications between the local government and its citizenry. Changing the administrative culture is important so that citizens are viewed as customers, consultations with citizens become a regular practice, and transparency in municipal affairs is paramount.

Pilot Projects: Design, Implementation, and Policy Reform

The pilot projects summarized below show that constraints to city financial viability can be successfully addressed and measurable improvements are possible. Broadly speaking, the problems of city viability stem from outdated institutional systems. Urban management in India was conceived before local government became the third tier of the country's democratic government. The old system, where cities are just an extension of the state governments, is very different than one where local governments are autonomous, accountable to the electorate, and responsible for supplying urban services. As this transition occurs, the underlying issues affecting financial viability become accentuated.

- Decentralization processes are incomplete.
- Local financial resources are insufficient and do not match functions.
- Transfers are unpredictable.
- Municipal institutional structures, systems, and procedures are outdated.
- Local government management capacity needs strengthening.
- Mechanisms to encourage and facilitate participation and accountability are limited.

State and local governments will have to pursue many reforms to address this array of issues adequately. Many of the JNNURM reforms (Annex 1-2) cover aspects of financial viability. The reforms should be considered as an ongoing process to make local governments more self-sustainable, responsive to citizens, and efficient in service delivery. This section highlights some individual aspects of city financial viability supported by the FIRE (D) Program, while the next sections shows how the activities can be integrated in a more comprehensive way.

13 See FIRE (D) Project, Phase I, 1998, Final Report.

- A **double-entry, accrual accounting system** (DEAAS) is the foundation of good urban management because it provides decision makers with a complete financial picture of the city, rather than simple cash flow balances of the old systems. Under DEAAS, municipal assets and financial transactions can be verified and managed more efficiently, the true cost of services can be determined, cost-recovery tariffs can be set, and realistic budgets can be created. The FIRE (D) Program tested DEAAS in individual cities, and then worked on an approach for replicating the reforms across all local governments in particular states. Introducing a new system requires in-depth training for accounting staff and for other departments that need to utilize the improved information. New accounting and financial reporting systems also require legislative changes at the state and city levels.

- **Resource mobilization** (i.e., financial strengthening) became more important for local governments when it became clear that budget allocations (primarily from center and state grants) could not pay for all the urban infrastructure needs, and as octroi—the most buoyant source of local revenues—started being phased out across the country. Although property tax reform was the obvious replacement and offered the most potential for improvement, the FIRE (D) Program developed a comprehensive approach, first in Indore, Madhya Pradesh, in 2000, to look at all avenues of cost-saving and revenue enhancements. At the same time, the resource mobilization approach examines how to reorganize local government structures to operate more efficiently.

- **Institutional restructuring and corporatization** is a way to transform ineffective government entities into professional organizations that can be accountable to local government, under India's decentralization agenda. In Orissa, the FIRE (D) Program has helped corporatize the state water department responsible for servicing the city of Bhubaneswar, with a heavy focus on improving financial viability. For the first time in the water sector in India, all the critical facets of financial management will be integrated into the organizational structure: (1) accounting, (2) service costing, (3) asset management of the physical infrastructure, (4) tariff setting, (5) bill collection, and (6) budgeting. The FIRE (D) Program has combined this financial management work with institutional restructuring; it takes advantage of a corporate business structure and performance-based contracting, with the local government, to improve service delivery.

- **E-governance** is a technological tool to improve data flow and the decision-making processes of local governments. While there is obvious benefit from computerizing municipal information, efficiency from e-governance is really gained by connecting citizens directly to the local government through a single network that links service management to payments, official approvals, information registries, and outlets for feedback. Whether via the Internet or in service centers, key citizen services can be completed in one spot, while the generated data uploads to central databases that each local government department accesses, as appropriate. Government departments receive information in real time and in an organized and verifiable manner. The FIRE (D) Program supported MoUD in process design and in creating an implementation strategy for e-governance.

- **State Finance Commissions** (SFCs) provide valuable analysis of municipal finance issues in each state. They can articulate the problems of city financial viability, recommend the reforms most critical for that state, and help improve state-local government fiscal relations. In the future, they could also serve as municipal finance regulators. But unlike the CFC, SFCs do not yet play as essential a role as they could.

Table 4-1. Confronting City Viability Challenges in India

Pilot work	What was learned from the pilot	Pending issues	See article
Accounting Reforms and Financial Management	Large-scale replication is possible with support from state legislations, technical toolkits, and professional support that includes significant on-the-job training. Politicians and city managers also need to understand the benefits of DEAAS, particularly how it can be used to create budgets and monitor performance of services.	State governments need to amend financial reporting rules to mandate DEAAS. Local governments need more professional accountants with computer skills. Central and state governments should set up an internal and external auditing system.	4.2
Resource Mobilization	Huge potential exists for financial strengthening of local governments, on the scale of 15%-30% revenue improvements per year. Increasing taxes is less important than collecting outstanding receipts, making the tax system simple for citizens to understand, and utilizing all local government assets more effectively.	For comprehensive reform, local governments lack requisite skills, although capacity does exist to implement discrete activities. The changes to administrative policies usually need state government authorization. Local leadership needs stability to implement over many years	4.3
Institutional Restructuring and Corporatization (Water Sector Reform in Orissa)	Legal and political approval is required to implement this activity. Employee support is also crucial if compensation plans change. Fixed asset valuation takes a long time to develop. On-the-job training of new systems needs to be a continual process for several years.	Although the reforms provide data for accurate cost-recovery, a mechanism to revise tariffs needs political backing. Sector regulation needs to be created to complement contracts. Local government capacity to manage performance contracts does not yet exist.	4.4
E-governance	Difficult to reach full potential because data management, administrative reforms, and technology systems all need alignment. As a result, the reform does not automatically improve governance, reduce corruption, or make municipal services more efficient.	Although computerization is relatively simple, a full e-governance system requires significant external support/outsourcing. States need to decide if one software system can and should apply to all local governments.	4.5
State Finance Commissions	The quality of SFCs varies by state, as does state government embracement of SFC recommendations. SFCs do not have any statutory authority.	SFCs could become more important institutions, by gaining regulatory powers or becoming responsible for overseeing an urban indicator and monitoring system.	4.6

Policy and Regulatory Reform

Many of the policy and regulatory reforms designed and promoted by the FIRE (D) Program were ones that reinforced city financial viability. In the mid-1990s, these were largely reforms that contributed to the commercial viability of infrastructure projects. Later, the reforms addressed a wider variety of policies and regulations to support financial viability.

Accountability and transparency. Accountability contributes to the sustainability of the decentralization process by educating the public and seeking its support for proposed government actions. Community participation has been promoted extensively by the FIRE (D) Program to ensure the accountability of local governments. Participatory activities—such as the involvement of communities in project planning or service expansion decisions—ensure that local governments become more responsive to citizens. While it is not easy to reach a consensus on such matters (especially when projects are complex and stakeholder opinions are diverse), ongoing, two-way communication, as well as mechanisms for grievance redressal, create good will that builds confidence in the public sector over time. This, in turn, contributes to citizen accountability and more willingness to support the government financially through timely payment of taxes and fees.

Accounting and financial reform. After successfully piloting DEAAS in several cities across the country and state-wide rollout in Tamil Nadu and Maharashtra, the central government wanted to make the accounting reform a standard for all local governments. Before DEAAS became a mandatory reform under JNNURM, the FIRE (D) Program worked with the Institute of Chartered Accountants,

the Comptroller and Auditor General (C&AG), and MoUD to create the National Municipal Accounting Manual, which was launched in early 2005. Accompanying resources included training manuals for staff and elected representatives, a user requirement report for software systems, and a manual on fixed asset valuation. The implementation of improved accounting systems also contributes to transparency, not just by making more information available, but by permitting the auditing of municipal finances by objective, outside parties.

Model Municipal Law. The (then) Ministry of Urban Development and Poverty Alleviation created the MML in October 2003, with support from the FIRE (D) Program and its partner the Times Research Foundation (see Article 1.3). The objectives of the MML are to help state governments implement, in totality, the decentralization provisions of the 74th CAA and to provide a legislative framework for India's urban sector reforms agenda. The MML is a vehicle for empowering local governments. The MML contributes in important ways to the financial viability of local governments by establishing financial management standards, authorizing diverse revenue-generating powers, and allowing local governments to issue debt.

Financing services for the poor. The 74th CAA creates the mandate for local governments to provide services for the poor. Local governments are being asked to address the gaps in services for both the poor and the rest of the city, while building and maintaining their fiscal equilibrium. This represents an extraordinary challenge that requires more careful financial planning, the development of more consistent intergovernmental transfer mechanisms, methodologies for using targeted subsidies, the development of cost-recovery strategies specifically tailored to poor households, and the introduction of alternative, more cost-effective technological solutions for certain services. The FIRE (D) Program has helped develop policies (e.g., slum upgrading policy, annual subsidy reporting) to allow states and local governments to accomplish these challenging goals.

Integrated Solution: The Reform Process to Improve City Financial Viability

The ambitious set of reforms under JNNURM (see Chapter 1) and the 13th CFC (2010–2015) should improve city financial viability. Taken together, they are comprehensive, spanning topics in administration, finance, planning, technology, service delivery, and poverty alleviation. If implemented in full, both local government structures and functions would dramatically change. However, there is limited guidance on how to implement these reforms; nor is there enough technical support to carry them out. Halfway through the initial 5-year phase of JNNURM, MoUD defined the reforms in detail: In 2008, the FIRE (D) Program wrote primers on each of the reforms to explain what was meant by them, and, to a lesser degree, the steps that would be required for implementation.[14] Implementing all 29 reforms in full would require tremendous coordination between the state and local governments, as well as the full commitment from almost every department at the local level (in addition to all the parastatal agencies working in the city), and a large technical assistance program to guide the process and build local capacity. Politicians, civil servants, staff, and civil society would all have to be committed at levels rarely seen.

14 See http://jnnurm.nic.in/nurmudweb/Reforms/Primer.htm.

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In Bhubaneswar, the FIRE (D) Program has spent almost five years working principally on three reforms: (1) DEAAS accounting, (2) enhancing own-source revenues, and (3) transferring water and sewer service responsibility to local government. While the new accounting system has been launched, as of 2010, the State of Orissa financial reporting rules have not changed and therefore, the BMC has little incentive to fully shift systems. The BMC is currently operating two systems, and primarily utilizes the old cash-based, single-entry system, since it is the one that staff are most familiar with. The water sector reforms experienced significant political and bureaucratic delays, although consensus had been reached on the detailed technical solution (see Article 4.4).

Fully sustaining the urban reform process is difficult because, in many ways, it requires a total transformation of local government—from an apparatus of the state to an autonomous and self-sufficient democratic institution. Legislative changes have to be followed by operational changes, increased staff capacity, and financial strengthening.

Approaching the Reform Process to Improve City Financial Viability

Individual reforms. There are two ways that the FIRE (D) Program approaches the challenge of making cities more financially viable. The first is to pursue reforms individually, in the "pilot cum scale-up" process described in detail in Chapter 2. This approach takes advantage of the interests of local stakeholders to define areas where an active demand for reforms already exists. A demand-oriented approach has good potential to succeed in most cities, if the leadership and key stakeholders remain stable. A major risk to this approach is that project champions frequently get transferred to other jobs. This approach can also appear ad hoc because it is based on local situations that vary from one city to another. Still, the FIRE (D) Program always relies on a set of guiding principles that helps prioritize areas of work and defines broad urban objectives (e.g., accessing market finance for infrastructure expansion, improving financial autonomy).

The reform process begins with a clear understanding of the urban challenges and where opportunities for intervention exist. With detailed analysis of those challenges, local solutions emerge, especially when all the relevant stakeholders (e.g., state government, local government, and other agencies involved in service delivery) are closely involved. Stakeholder involvement is essential because each agency has both vested interests in the current system and crucial roles to play in changing it. Not only does this represent a huge coordination challenge, but it can also be a source of apprehension and even resistance. Consequently, a dedicated team, with adequate resources, needs to work closely with all the stakeholders, on a daily basis.

Since many urban reforms represent a new way of conducting government operations, it is advisable to test small but significant pilot projects before adopting them on a city- or state-wide scale. Large-scale replication presents a second set of technical, coordination, and legislative challenges that will be inappropriate to address before knowing whether the local technical solution is correct (see accounting reforms as an example in Article 4.2). Initiating small pilot projects first also makes sense when local or state capacity is limited.

Comprehensive programmatic approach. Although local understanding of urban reforms varies widely, many of the technical solutions have already been thoroughly vetted and standardized (e.g., accounting systems, legislative reform, and resource mobilization). Therefore, adapting these to fit the local context should take less time than the initial pilot projects, when no precedent existed.

While a comprehensive approach to urban reforms takes more initiative and resources up front, it can also mitigate the risks of individual champions changing jobs, as well as other inefficiencies associated with an individual reform approach. An economy of scale exists when pursuing multiple interventions because interconnected constraints (e.g., legislative changes) can be addressed simultaneously.

JNNURM was conceived as a comprehensive approach, but it needs to consider the many implementation challenges—prioritizing reforms, sequencing them, and providing a strong support structure. The project management/implementation units have primarily focused on the infrastructure projects instead of the reform initiatives. Dedicated teams (one at the state level and one within each local government) should also be in charge of propelling the reform initiatives forward.

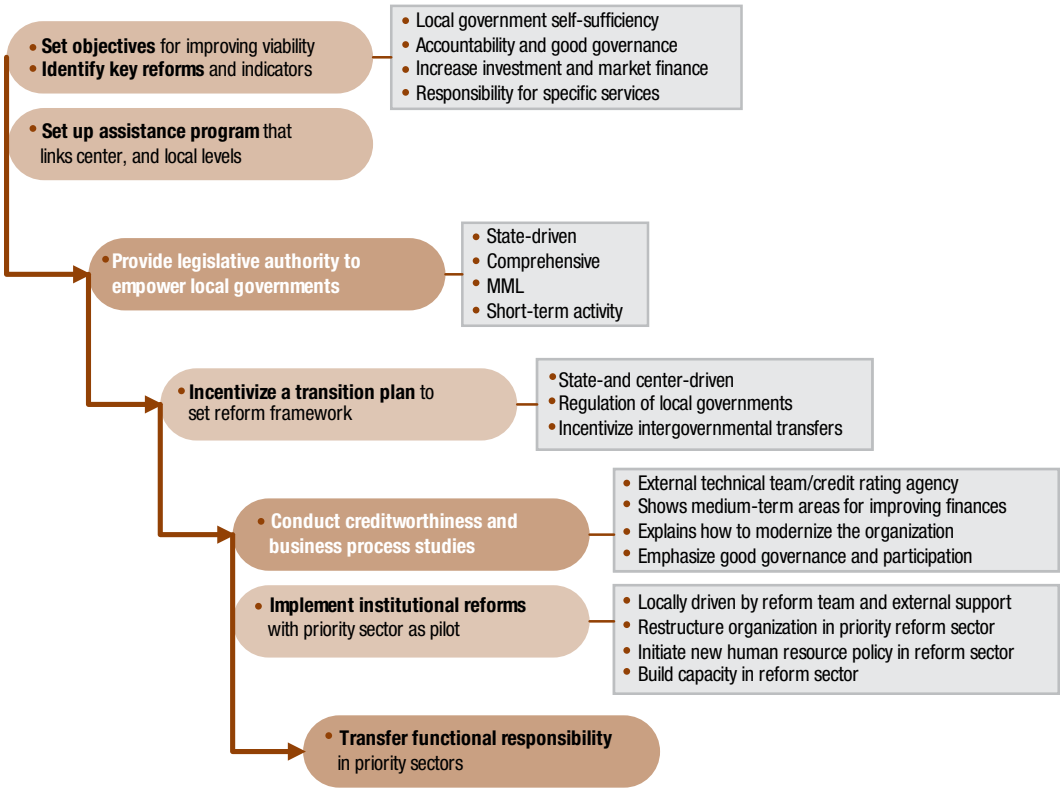
There are four prerequisites to establishing an appropriate framework for implementing comprehensive reforms. These should be designed and articulated before work begins.

1. Define reasonable objectives for local governments to meet, in terms of the level and quality of services within their sphere of responsibility.
2. Identify the reforms—at the national, state, and local levels—that would make it possible to produce the desired outcomes, including changes in local government authority.
3. With the objectives and reforms identified, develop cohesive programs of assistance to help implement the reforms, monitor results, and make adjustments until the new system is sustainable and self-reinforcing.
4. Develop a phased approach for implementing the reforms, to be supported by the assistance program.

The exact sequencing of the reforms discussed in this section depends on each particular situation. Local-level reforms are nearly impossible to implement unless a minimum acceptable policy framework for fiscal decentralization is already in place. The legal-policy framework provides the background for local government action (e.g., a law that permits flexibility in setting rates for taxes and tariffs). At the same time, any attempt to implement reforms in local government will point out weaknesses in the larger policy environment that will need to be addressed.

Financial management and resource mobilization are natural places to begin local-level reform, since nothing major can occur without having control of new resources. However, caution is necessary with improving own-source revenue, if basic governance structures are not in place to control and transparently utilize the resources. See Annex 4-2 for a discussion on reform sequencing, based on the FIRE (D) Program's e-governance work. Ultimately, the reforms should be considered an iterative and continual process (see Figure 4-3) that makes cities more efficient and financially viable over time.

Figure 4-3. The Comprehensive Reform Process



1. Set Objectives and Identify Reforms

The overarching objective of the 74th CAA is to decentralize urban management authority and create democratic, self-governing institutions at the local level. In addition to improving city financial viability, the constitutional change implies that a good governance framework, as defined in Chapter 1, is central to the decentralization process. The local government reform agenda should seek to attain this vision, first and foremost.

The definitions of good governance (see Chapter 1) and financial viability found in this chapter help define the reform agenda. Specific objectives will still vary by state or city, and therefore it is worthwhile to prioritize them from the onset. Each bulleted example below illustrates a potential focal point to establish a reform program:

- Government transparency and financial disclosure
- Own-source revenue enhancement
- Improvement in service delivery and transferring responsibility to local government
- Poverty alleviation and inclusive growth
- Democratic reform and citizen participation
- Encouragement of private sector economic development and participation in urban services

2. Set Up Assistance Program

In most cases, local governments will have difficulty fully implementing the reforms without technical assistance. Local governments can contract private firms to help implement individual reforms, such as accounting or e-governance systems. But the comprehensive approach is more challenging because many departments and agencies outside local government will be involved. There needs to be technical support in place to help guide the process with the local and state governments. The team(s) need significant authority and must work closely with the mayor and the municipal commissioner in the local government, as well as with the secretary of housing and urban development in the state government. Significant resources should be planned and allocated for an assistance program (see Article 5.7 for procuring urban services).[15]

3. Provide Legislative Authority

Changes to policy at the state level are generally outside the control of local governments, but are intrinsic to the decentralization process. In fact, most local-level reforms under JNNURM are predicated by legislative changes at the state level. For this reason, MoUD has instructed all states to revise their municipal acts in accordance with the MML. The legislative changes should be completed with specific objectives in mind, as discussed in Step 1. Although the decentralization process is iterative—legislative reform will be required intermittently as legal bottlenecks occur during implementation—the FIRE (D) Program recommends taking an expansive legislative view from the onset, as occurred in Kerala and Andhra Pradesh, because many overlapping legal issues affect urban performance. A local government's authority to make decisions on human resources, financial mobilization, private sector participation, and organizational restructuring can affect the success of each and every service area.

Alternatively, a noncomprehensive approach could be pursued by focusing on sectors where local government already has authority, such as SWM, while at the same time working with the state government on legislation as the need arises.

4. Incentivize Transition Plan

The time and resources it takes to effectively devolve authority to local governments is almost always underestimated. Comprehensive legislative change, as suggested under the MML, is only the beginning of the process. Staff at both the state and local levels will continue operating as usual, unless instructed differently. Changes in operating procedures and substantial on-the-job training will be required before any significant reform occurs. For this to occur, a better understanding of the technical reforms, and leadership in initiating them, will have to take place.

In addition to establishing an assistance program, the state government can define a transition period with key milestones to phase implementation. Specific milestones could trigger the adoption of new rules. State government should consider implementing the reforms in one or more cities, first, and then applying the lessons to the entire state over subsequent years. Reforms should also follow a logical path, as illustrated in the Annex 4-2.

15 For MoUD guidelines on reform hand-holding, see http://jnnurm.nic.in/nurmudweb/brochure.aspx.

A phased transition plan should include incentives. Apart from statutory requirements, the most significant incentive that state governments provide is grants. Restructuring the transfer system can produce two benefits simultaneously: Target priority reform/sector areas and encourage local governments to change their operations. In Maharashtra, the FIRE (D) Program helped restructure the capital grant system in the water sector to encourage better O&M, through water and energy audits and leak detection-repair projects.

5. Conduct Creditworthiness and Business Process Studies

Two essential and complementary studies shape the reform process, in detail, for local governments. A creditworthiness study examines the overall financial strength of an organization and its ability to meet financial commitments. The study looks at the performance of each department to identify opportunities for improvements over the short and medium terms. The FIRE (D) Program has conducted this analysis as a diagnostic tool for designing resource mobilization/financial strengthening projects (see Article 4.3). A credit rating agency or other financial advisor would be appropriate to engage in this assignment.

Business process reengineering (BPR), as it is called in the private sector, is the other crucial study to help design a comprehensive reform program. The BPR process analyzes how decisions are made within an organization, and whether the organization effectively fulfills its objectives. BPR begins by mapping the organizational structure of local government and the data flow within that structure. In doing so, it looks at how the local government interacts with urban residents and state-level agencies. The study then recommends how to improve operational efficiency based on the objectives/ decisions that have to be made by the organization. Technology and management upgrades are key aspects of BPR analysis, which is one reason why it is utilized in designing e-governance systems.

Both studies analyze key indicators on urban performance. If an urban indicator system does not already exist in the state, these studies can provide a baseline on financial and operational performance that should be monitored regularly during the reform process.

6. Implement Institutional Reforms

Implementing institutional reforms (including management, administrative, and organizational changes) is time- and resource-consuming. But this is critical to city financial viability and the sustainability of the decentralization process. Technical assistance, of the nature provided by the FIRE (D) Program, is very helpful, but cannot be a long-term substitute for internal professional capacity.

Local government capacity is undermined by a range of staffing issues. These include low salaries, mandated by state and GoI regulations, making administrative work in local governments a low-prestige job. Increases in municipal revenues can provide additional resources to train existing staff and to attract more technically experienced newcomers, so long as GoI regulations do not unduly limit the ability to craft competitive compensation schemes. Unless reforms can be introduced that incentivize, reduce, or reassign staff, local government will continue to find it difficult to manage urban services effectively.

To implement institutional reforms, it may be easier to take one priority sector and reengineer it comprehensively, instead of reforming the entire local government at once. SWM might be a priority sector because the legislative mandate already exists within local government. Reform in the SWM department could be the starting point to replicate across other departments.

As a pilot, the department in charge of SWM might need to be restructured to encourage efficiency and better service delivery. Staff can be reorganized, additional expertise hired, and salaries changed based on individual performance. At the same time, sector reforms, such as changes to SWM operations and user charges, should start being phased in. Better citizen interface, including grievance redressal and information disclosure, is another important aspect of service reforms. Under a comprehensive approach, all aspects relating to service operations are important (see Article 4.4 on applying this approach to the water and sanitation sector in Bhubaneswar, Orissa).

Financial Management Improvements

Good financial management is the backbone of a strong, sustainable municipal system. It is one of first areas that a reform program should address. The FIRE (D) Program has helped develop tools for implementing more effective and efficient financial management (see Article 4.2). The key areas where the FIRE (D) Program has worked and where future work should continue are:

- Financial reporting and control
- Improving municipal budgeting
- Resource mobilization
- Tax and tariff reform
- Rationalization and control of costs
- Introduction of double-entry accrual accounting
- Municipal auditing

Financial management refers to a broad set of activities aimed at improving the use of municipal resources. Results from these activities ultimately determine the quality and quantity of urban services. Financial administration refers to the mechanics behind financial management: how accounting and internal controls affect resource mobilization and payments; how organization determines the costs of services and how it prepares budgets; and how financial information reaches managers and other stakeholders in a timely, accurate, and transparent manner.

7. Transfer Functional Responsibility

Transferring the functional responsibility of any sector does not make sense without good systems of (1) accountability and transparency, (2) organizational structure and decision making, (3) administrative capacity, and (4) financial management. Functional transfer should take place as these areas improve in a local government, as part of the concerted process described here. It would be a failure to transfer functional responsibility to an institution without adequate capacity. For example, in an effort to decentralize water and sanitation services, the State of Karnataka deputed public health engineers from the state government to local governments, which ultimately were not prepared to absorb the staff or begin managing the infrastructure services. Within a short time, many local governments requested the state government to reverse the initiative. Transfer of responsibility without a concomitant strengthening of capacity threatens the decentralization agenda. At the same time, functional devolution cannot completely wait until a local government is financially viable because it is an iterative and ongoing process that takes place over many years.

Capacity Requirements for Improving City Financial Viability

Because the reform process takes significant commitment from staff and politicians, as well as technical know-how, the FIRE (D) Program led numerous training events over the years. There is a need for in-depth manuals on all the key reforms under JNNURM in addition to the introductory primers.

The accounting reforms offer the best example of how important training and capacity building are. The FIRE (D) Program worked closely with all relevant stakeholders to build consensus on accounting standards after many successful pilot projects across the country. In-depth technical material has been developed, including the National Municipal Accounting Manual, training manuals for elected officials and municipal staff, terms of reference for software development, and a methodology for valuing fixed assets. For implementation, the FIRE (D) Program matches a local chartered accountant with a city department to work hand-in-hand for an extended period of time, at least 2 years. At the state level, a legal advisor and an accountant will have to help change the state's financial reporting rules to conform to the new system. There are other activities that contribute to fully benefiting from the accounting reforms, such as developing an auditing and regulatory framework and a budgeting process based on accounting information.

This type of extensive involvement needs to occur for most JNNURM reforms—property tax, tariff revisions, and use of municipal land, among others—to achieve significant and sustainable results.

Table 4-2. Capacity Requirements for Improving Financial Viability

Functional capacity required	Personnel required
Accounting and financial management	Chartered accountant, accounting software company
Resource mobilization/financial strengthening assessor, community organizations	Credit rating agency, financial advisor, tax experts, real estate
Organizational restructuring	Institutional development experts, business consultants
Legislative reform	Legal advisors, good governance and sector-specific experts
Administrative reforms	Human resource policy experts, legal advisors, business consultants
E-governance	Good governance experts, software designers, business consultants
Departmental/sector reform	Varies by service area

Resources

FIRE (D) Program, 2010, *Orissa Water Utility Manuals: Accounting, Costing, and Budgeting*, New Delhi: India.

FIRE (D) Program, 2007, *Resource Mobilization Support to Eight Urban Local Bodies of Greater Bangalore*, New Delhi: India.

Kumar, Somesh, S.R.N. Reddy, and J. Shankaraiah, 2004, *Modernizing Municipal Management: Revenue Improvement Action Plan, Module 7*, Andhra Pradesh Urban Services for the Poor Project, Hyderabad: India.

Ministry of Urban Development, 2009, "Primers on all JNNURM reforms," New Delhi: India, http://jnnurm.nic.in/nurmudweb/Reforms/Primer.htm.

Ministry of Urban Development, 2005, *National Mission Mode Project for e-Governance in Municipalities: Design Phase Report*, National e-Governance Plan (NeGP), New Delhi: India.

Ministry of Urban Development and the Office of the Comptroller and Auditor General of India, 2004, *National Municipal Accounts Manual,* New Delhi: India.

Ministry of Urban Development and the Office of the Comptroller and Auditor General of India, 2007, *National Municipal Accounting Training Manuals for Elected Officials, Top Management, and Staff*, New Delhi: India.

National Institute of Urban Affairs, 2010, *Best Practices in Property Tax Reforms in India*, Research Study Series No: 111, http://jnnurm.nic.in/nurmudweb/best_practices/bp_swm.htm.

TERI, 2010, Review of Current Practices in Determining User Charges and Incorporation of Economic Principles of Pricing of Urban Water Supply, Project Report No. 2009|A02, New Delhi: India, http://urbanindia.nic.in/programme/lsg/TERI_UC_Report.pdf.

The Way Forward

City financial viability is central to the urban reform agenda. Both JNNURM and the 13th CFC make grants conditional on urban reforms, providing a catalyst for change. Nevertheless, many key implementation mechanisms are still being developed. To this end, more discussion on prioritizing and sequencing reforms would help determine how the reforms fit together.

This guidebook emphasizes a decentralization reform process that focuses on three broad areas: good governance at the local level (Chapter 1), city financial viability (this chapter), and urban service delivery (the process defined by the entire guidebook). City financial viability is crucial to enhancing the resources and technical capacities of local governments, so that they can effectively manage infrastructure development and become more responsive and accountable to citizens.

Utilize benchmarking and monitoring as a tool for advancing urban reform.

- There is growing experience on urban indicators, most recently with MoUD's service-level benchmarking program in 2010 and Gujarat's state-wide initiative with support from the Gates Foundation. Furthermore, MoUD commissioned credit ratings for all 63 JNNURM cities. In other countries, credit ratings are required regularly for all municipalities as a way to track urban financial performance through time. There would be tremendous benefit for the reform agenda if a national urban indicator and monitoring system tracked service delivery, municipal finance, devolution of authority, and good governance indicators. Current practices of "self-certification" and using legislation as a primary marker provide only minimal information. The 13th CFC has recommended local government audits by C&AG as a condition for receiving grants. This represents an important step forward for financial management reforms.

Adopt permanent institutional mechanisms for advancing urban reforms.

- An assistance program has to become a permanent feature of the reform process to support the slow and long-term nature of decentralization and to strengthen local capacity. A technical team placed within a local government should work with the diverse agencies to implement reforms. At the same time, a state-level team (possibly a more permanent SFC) should guide legislative changes, direct resources for carrying out reforms at the local level, and monitor progress throughout the state. The central government needs to organize a rigorous training network, channel resources into priority areas, and evaluate progress to reinforce the reform programs.

Without building dedicated, professional capacity, reforms can go only so far.

- Today's urban challenges are complex, and the solutions require skills beyond the capacity of most of India's local governments. There are some areas that local governments can improve themselves, but, for many sectors, there is a limit to what nonprofessionals can accomplish. Experience in implementing accounting and e-governance reforms shows how important financial and information and communications technology professionals are. Transformative change, of the nature implied by India's urban reform agenda, will be difficult to accomplish without administrative changes that liberalize human resource policy and produce better urban management. It is time to establish a dedicated urban cadre of professionals and to make civil servants more accountable to locally elected officials and residents. Technical certification programs are one element of administrative reforms that the central government can initiate.

Strengthen grant programs to incentivize change.

- The acceptance of conditional grants under JNNURM and the 13th CFC could represent an important step in diminishing local government dependence on intergovernmental transfers. With a better benchmarking and monitoring system across the country, the reform indicators can provide much more substantial information on the progress of reforms. At that point, grants should be tied to verifiable progress. The next evolution should target grants to sectors that are top priorities, but that receive little attention. The limited experience in Maharashtra of linking water sector grants to energy audits, leak repair projects, and management improvements is a valuable example. Ultimately, intergovernmental transfers should not be spent on establishment costs or O&M of urban services. They should be spent on more costly projects and to correct market inequalities, like services for the poor.

Issues on the Horizon

The above-mentioned points will advance the reform process from where it is to today. Most of the items have been discussed nationally. There are other issues that are a little more distant. Primarily, the reform process, thus far, has shown that local governments are still subservient to state governments and parastatal agencies. Almost all the reforms under JNNURM and the 13th CFC depend on state government action and direction. Either local governments cannot initiate reforms on their own or the municipal system does not really provide the incentives to do so. All grants from the center still flow through state governments, financial reporting is to state governments, and key municipal staff postings are appointed by state governments. In the future, local governments should be able to access center funding directly, based on objective performance indicators and even competition. Financial reporting should be a public exercise and submitted to external auditors, in addition to state-level regulators.

Another major issue for local governments is linking development planning to resource mobilization and then to project development. Few local governments do this today in India (Ahmedabad is one exception), but there is growing consensus that the responsibility for planning has to shift to local governments. When this occurs, local governments will be able to guide the full infrastructure development process, as described in this guidebook. This will warrant careful analysis to ensure that the organizational structure of local governments is such that they can effectively assume the role of development planner.

Recommendations for Improving City Financial Viability in India

- To improve city financial viability, central and state governments must establish concrete assistance programs that advance both operational and fiscal decentralization, monitor their impacts, and make adjustments over time.
- Central and state governments can encourage change in local governments by offering predictable rewards to those that make necessary financial reforms.
- SFCs can contribute to municipal fiscal autonomy by broadening the scope of their work beyond recommendations for allocating grants and proposals for increasing local government own-source revenues.
- The pace of local government reforms will increase when local governments develop resource mobilization projects that include realistic and concrete benchmarks and systems for monitoring and evaluating progress.
- Once local government accounting is modernized, the accounting system will provide critical information that facilitates a wide range of subsequent financial and operational reforms.
- The use of information and communications technology increases both the efficiency and the transparency of local government financial operations, particularly when combined with administrative reforms.
- Allowing citizens to participate in the establishment of priorities and to monitor progress helps ensure that local government investments in services are effective and address citizens' real needs.

ARTICLE 4.2

Accounting Reforms: The Groundwork for Financial Viability

Introduction

As the process of decentralizing authority from state to local government began in India, and as cities started seeking commercial investment to finance infrastructure in the middle 1990s, urban professionals realized that the current financial reporting and accounting practices were inadequate at the local level. The accounting and reporting practices did not provide transparent or standardized financial information necessary for (1) internal management (making informed decisions on resource allocation and revenue generation), (2) strengthening local accountability to citizens, or (3) attracting commercial investment. The practices did not allow external audiences, such as investors, to accurately assess the financial positions of local governments.

For more than a decade, the FIRE (D) Program worked at the local, state, and national levels to reform India's municipal accounting and financial reporting standards. By collaborating with key stakeholders, such as the Institute of Chartered Accountants of India (ICAI), the Comptroller and Auditor General of India (C&AG), and the Ministry of Urban Development (MoUD), the FIRE (D) Program supported all aspects of the reform process, from initial pilots in individual cities to the first state-wide initiatives in Tamil Nadu and Maharashtra and finally to replication at the national level.

Not only does modern accounting and financial management provide the necessary foundation for building financially viable cities, it also represents one of the more successfully pursued urban reforms in the country. It is valuable to consider the evolution of these reforms in India because the process can be relevant for other sectors.

The Need for Accounting Standards and Uniform Financial Reporting

The FIRE (D) Program identified the demand for an improved municipal accounting system while working to attract commercial financing for urban infrastructure services. Commercial lenders are interested in information that enables them to determine whether their loans, and the interest attached to them, will be paid on time.

Traditionally, local governments used **single-entry cash-based systems** of financial reporting. It compared cash payments against budgetary outlays, a system that presented a number of risks. The single-entry system is essentially an inadequate cash flow statement. It does not communicate the overall financial position, track assets, or capture all the local government's liabilities. The accuracy of the books cannot be verified. The absence of asset accounts limits control of fraud and leaves room for misappropriation of funds. Profit and loss statements and balance sheets cannot be prepared. While this type of reporting met legal requirements at the time, it was increasingly acknowledged as insufficient, especially as decentralization progressed and municipal affairs became more and more complex.

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The need to improve financial reporting practices had been pointed out by the Securities and Exchange Board of India (SEBI) when it approved the 1998 Ahmedabad municipal bond issue. In fact, the Board required that the quality of the city's financial statements—which were not based on Generally Accepted Accounting Principles (GAAP)—be disclosed in the prospectus as a risk to investors. Accounting standards are the rules from which consistent financial reporting formats and accounting practices can be established. None existed in India for local governments.

Credit rating agencies and financial institutions provided helpful guidance when asked to identify constraints to evaluating the financial condition of local governments. Credit Rating and Information Services of India Limited (CRISIL) reported that some of the most basic financial information was difficult to determine.

- Revenue receipts (e.g., estimates of octroi, property tax bills, duration of arrears)
- Revenue expenditures (e.g., classifications for services, accountants payable, liabilities)
- Capital receipts (e.g., classification of state government loans and grants, utilization of project-specific funds, proceeds from the sale of assets)
- Capital expenditures (e.g., monitoring major capital works, capitalization of expenses)
- Performance indicators of services and finances

In addition to the difficulties in determining basic financial information, several questionable management practices were common. These included showing unspent budget lines as credit balances for the following fiscal year and never establishing auditing procedures.

Financial institutions pointed out three main weaknesses that would need to be addressed to overcome the basic shortcomings listed above.

1. Use of single-entry, cash-based systems
2. Lack of staff adequately trained to implement modern accounting practices
3. Lack of clear accounting policies, resulting in minimal uniformity in financial reporting and disclosure among local governments

Statutory requirements, including those affecting financial reporting standards, varied greatly from state to state in India. This meant that any sustainable effort to reform accounting and reporting practices would require significant leadership by the state governments and, ultimately, guidance and support from central government.

Accounting Reforms in India

The First Local and State-Level Pilot Projects

Even in the absence of norms for financial reporting, a number of local governments took steps to reform their accounting systems. In 1990, the World Bank provided funds to six cities in the State of Gujarat—Ahmedabad, Baroda, Surat, Rajkot, Bhavnagar, and Jamnagar—to improve their accounting systems. The World Bank hired public accountancy firms to develop the new systems and manuals, but left implementation up to the local governments. After 8 years, most of the cities had not produced financial statements. While assisting Ahmedabad in improving its urban management and resource base prior to its first bond issuance, the FIRE (D) Program studied the World Bank effort with accounting reforms.

In 1997, the FIRE (D) Program presented its assessment on local government accounting practices to the Professional Development Committee of ICAI. In addition to needing better support in the World Bank pilot cities, the lack of coordination among city, state, and central levels became a big problem. It resulted in disagreement among the many accounting professionals involved over appropriate accounting norms to be followed. ICAI and MoUD realized that a concerted effort of consensus building would be required, and it would have to be based on successful pilot experiences on the ground. ICAI, which establishes the accounting standards for business entities in India, set up a five-member study group on local government accounting immediately after the FIRE (D) Program's presentation. MoUD asked the FIRE (D) Program to develop a model accounting system and test it.

In January 1999, the FIRE (D) Program collaborated with the State of Tamil Nadu and the World Bank to test a double-entry, accrual accounting system (DEAAS)[1] in 2 municipal corporations and 10 municipalities. The FIRE (D) Program and ICAI helped review a state accounting manual, and then a software company used it to create the appropriate computer system. To ensure a smooth changeover to the new accounting system, the Tamil Nadu Urban Development Project (TNUDP-II), funded by the World Bank, contracted 25 chartered accountant firms to work with the local governments on a daily basis for 18 months. They provided on-the-job training and helped prepare the first financial statements based on the new system. The FIRE (D) Program provided technical support throughout the process, including training and orientation programs for municipal staff and the accounting firms.

With the pilot project successfully under way, the state expanded the new system to its remaining 3 municipal corporations and 92 municipalities in 2000. Tamil Nadu was the first state in India to initiate such extensive accounting reforms on a large scale.

Steps for implementing accounting reforms. Even though certain aspects of the policy framework vary by state, the experience from Tamil Nadu contributed greatly to understanding the reform process.

1. Assess the present accounting system, including the current methods of recording revenues and expenses to determine the surplus/deficit during a fiscal year.
2. Structure the new municipal accounting system in accord with all current ICAI standards.
3. If the administrative procedures and business processes of the local government need to be reorganized or streamlined, do this before implementing the new accounting system to avoid simply automating an archaic and inefficient way of doing business.
4. Collect information on municipal properties, including dimensions, usage, and value, to prepare an asset registry and opening balance sheet.
5. Amend necessary state legislation to establish the new municipal accounting rules.
6. Undertake the following tasks to replicate the reforms across the state (internally or with the assistance of consultants):
   a. Prepare a manual for the new accounting system that covers the chart of accounts, administrative procedures, and forms/formats.
   b. Develop norms for recognition of assets and revenue using ICAI's national accounting standards.
   c. Conduct both classroom and on-the-job training of municipal staff.
   d. Provide professional support to the municipal staff for at least the first 18 months of implementation of the new accounting system.
7. Computerize the accounting system and teach local staff how to maintain the new system.
8. Run the new system in parallel with the old system for at least 18 months to test its consistency, and to allow time for officials to gain confidence and experience in operating it.

1 DEAAS is a global best practice. See Table 4-3 for the benefits of DEAAS and the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) primer written by the FIRE (D) Program. MoUD, 2009, Municipal Accounting, New Delhi: India, http://jnnurm.nic.in/nurmudweb/Reforms/Primer.htm#.

Testing a Comprehensive Approach in the State of Maharashtra

After Tamil Nadu's success, the State of Maharashtra wanted to pursue accounting reforms and contacted the FIRE (D) Program for assistance in June 2001. The FIRE (D) Program reviewed the existing local government accounting systems in the state and then developed new DEAAS manuals. The state selected two municipal councils and three municipal corporations to pilot the initiative. The FIRE (D) Program team prepared separate manuals for the state's municipal corporations and councils (as appropriate for different sized local governments), and then began training municipal officials of the five pilot locations prior to launching the 18-month implementation phase. Encouraged by the results of the pilot, the state decided to expand the initiative to its 40 largest cities, starting on April 1, 2003. The difference between Maharashtra and Tamil Nadu was the scope of reforms. Maharashtra wanted to use DEAAS as a basis for transforming urban management, and therefore requested that the FIRE (D) Program examine how accounting links to better budgeting processes, establishing the true costs (and subsidies) of services and ultimately reforming the intergovernmental transfer system under the Sukhtankar Committee (Maharashtra State Water and Sanitation Committee).

Establishing Technical Standards for Accounting

Based on the early experiences, ICAI collaborated with the FIRE (D) Program to write a *Technical Guide on Accounting and Financial Reporting by Urban Local Bodies in India* in 2000. The initial 5-member ICAI working group expanded into a more permanent 12-member subcommittee of the ICAI Accounting Standards Board. The fact that the members included eminent accounting professionals and urban officials demonstrated how serious ICAI treated the reform effort.

The ICAI technical guide provides the conceptual framework for proper accounting (see Table 4-3) and recommends how professionals (government and private sector accountants) should approach the reform process.

Table 4-3. Content of Technical Guide for Accounting

Reporting issue	Examples of guidance
Objectives of financial reporting by local governments	Financial reporting has to satisfy the information needs of various users. The three principal user groups are the local government itself, including elected officials; the public; and creditors. These groups need financial information to: 1. Determine compliance with laws, rules, and regulations 2. Evaluate efficiency and effectiveness through the costing of services 3. Assess the financial position and sustainability of local government 4. Allocate resources by linking accounting to the budget process 5. Establish better internal controls 6. Help mobilize external resources, such as capital market debt
Basis of accounting measurement	This phrase refers to the method used for recognizing revenues, expenses, assets, and liabilities in the accounts. Cash basis accounting recognizes revenue when the funds are received and the expenses when funds are paid out. This limits the ability to assess overall performance and financial position. With accrual accounting, revenues and expenses are recognized when they are realized or earned, no matter when the cash is received.
Accounting standards	Accounting standards lay down the rules for measuring and presenting financial information. Accounting standards for local governments are mandated by state governments, but are usually developed by professional organizations, like ICAI.
Transitioning to new accounting systems	An accurate record of all assets and liabilities is required to establish an entity's financial position (balance sheet). Unrecorded assets and liabilities are a major stumbling block for local governments transitioning from cash to accrual accounting. In the accrual system, assets are recorded based on the cost to acquire or construct them, which is amortized and depreciated over their useful life. Documentation of these costs may not be available. Also, some liabilities, such as pensions due employees in the future, may never have been quantified. The guide provides advice on establishing these types of values.
Form and content of financial reports and budgets	Financial statements communicate financial information to assist users in making a range of decisions. Information in financial statements should be understandable, relevant, material, and reliable. It should also faithfully represent each financial event in a standardized and recognizable form. The guide includes formats for presenting revenues, expenses, assets, and liabilities. It recommends disclosing information to evaluate the efficiency and effectiveness of local governments.
Implementation	Implementation of these guidelines requires widespread changes to the accounting practices in most local governments. A successful transition depends on management at the state and local levels. The recommended steps are consistent to the ones outlined in this article.

Political Support for Accounting Reforms

ICAI widely circulated the technical guide to all relevant stakeholders dealing with municipal finance for discussion and feedback. Since the deficiencies in municipal finance had become an important issue, this piece of work was very well received. In 2001, the 11th Finance Commission recommended the introduction of double-entry accounting systems in local governments. In its 2002–2003 budget, the central government set up the Urban Reforms Incentive Fund, of which 10% was earmarked for the introduction of DEAAS.

To help implement these efforts on a national scale, the FIRE (D) Program continued working with the ICAI subcommittee. One of the main stakeholders was the C&AG, which was (and still is) responsible for setting accounting rules and which will be responsible for auditing local government if those rules become law. The FIRE (D) Program sponsored a study group to the United States for key stakeholders from C&AG, MoUD, and the ICAI subcommittee during 2002 to become familiar with U.S. municipal standards and financial reporting.

The next step in the reform process was to translate the technical guide into financial reporting standards that any new DEAAS system would have to meet. C&AG formed a task force responsible for developing the appropriate national accounting and budgeting formats, and, in 2002, it published the *Accounting and Budget Formats for Urban Local Bodies*. Although focusing on accounting and budgeting systems, the task force noted the urgent need for better overall financial management. Ultimately, the reforms need to serve as an effective management tool for making timely decisions and facilitating greater accountability and transparency. Therefore, several interrelated management issues need to be considered: (1) implementing DEAAS; (2) updating accounting and auditing policies in each state; (3) adopting model budgeting and accounting formats, including financial statements and cost sheets for each sector (e.g., water and sanitation, solid waste management, street lights, hospitals, schools); and (4) setting up a quality management information systems.

The C&AG report also notes that since state governments are responsible for municipal laws, each state has to review the respective legislations and ensure that they are appropriate to the local situation. Each state government is also responsible for developing an accounting manual and legally enforceable rules, as well as providing training to its municipal staff. The role of MoUD is more supportive through grant programs, guidance notes, and monitoring.

In this context, MoUD organized a *National Workshop on Municipal Accounting Reforms*, wherein the C&AG,[2] with the FIRE (D) Program support, agreed to prepare a model national accounting manual, a companion training manual, and computer software specifications. In 2005, MoUD released the National Municipal Accounting Manual (NMAM) to all the states as an indispensible toolkit for implementation.

The multiyear process to develop and test DEAAS has generated significant support for the reform, and now most of the major urban initiatives include it as a fundamental component. For example, the Model Municipal Law (2003) incorporated various provisions intended to advance the accounting reforms. In 2005, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) made the accounting reforms mandatory for all participating cities. And in 2010, the 13th Finance Commission mandated DEAAS as a prerequisite for accessing performance grants (30% of the central funding earmarked for urban local governments).

One of the main factors contributing to the success of accounting reforms is the strong institutional support of ICAI and C&AG. Unlike many other sectors, ICAI is a professional institution dedicated solely to accounting. ICAI had a historical mandate on which to base its involvement with the reform, and it could take advantage of the distribution of its members throughout India.[3]

In March 2005, the ICAI subcommittee that had worked with the FIRE (D) Program on the technical guide for accounting and then the NMAM gained greater status. ICAI constituted the Committee on Accounting Standards for Local Bodies (CASLB) as a fully independent committee to harmonize local government accounting practices and develop industry standards on an ongoing, permanent basis. By participating in the major global forums, CASLB also considers international best practices and seeks to harmonize international standards where appropriate.[4]

2 The C&AG constituted a special committee for this work under the Chairmanship of the Deputy Comptroller & Auditor General (for local government).

3 ICAI was established on July 1, 1949, under the Chartered Accountants Act (1949), to regulate the accounting profession in India. Headquartered in New Delhi, a Central Council composed of 30 members manages the institute; members elect 24 councilmen, and the central government appoints 6. Regional Councils are located in Mumbai, Chennai, Calcutta, Kanpur, and New Delhi, and 87 branches of these councils are located throughout the country. (The institute also has nine chapters in Africa and the Middle East.) The Institute's membership has grown to 90,000, and 70% of its members are practicing accountants.

4 ICAI participates internationally through the International Public Sector Accounting Standards (IPSASs) prepared by the International Public Sector Accounting Standards Board (IPSASB) of the International Federation of Accountants (IFAC).

Table 4-4. Key Events That Have Contributed to Local Government Accounting Reforms

1999	Tamil Nadu Department of Municipal Administration and Water Supply approves a pilot to test a new DEAAS in 2 municipal corporations and 10 municipalities.
2000	Tamil Nadu Department of Municipal Administration and Water Supply expands the new DEAAS system to its remaining 3 municipal corporations and 92 municipalities.
	ICAI circulates the *Technical Guide on Accounting and Financial Reporting by Urban Local Bodies in India.*
2001	The 11th Finance Commission recommends the introduction of DEAAS.
	The Supreme Court of India recognizes the defects of cash-based accounting and directs the Government of India to develop guidelines for a DEAAS that could capture the full costs of services.
2002	The Union Budget of 2002–2003 establishes the Urban Reforms Incentive Fund (URIF). Ten percent of the fund is earmarked for introducing DEAAS in local governments.
	The C&AG task force provides its policy recommendations for financial management in local governments: (1) uniform formats for accounting and budgeting, (2) uniform approach to costing of urban services, (3) public disclosure, and (4) initiating the switch to DEAAS.
2003	MoUD issues Model Municipal Law. Part III, "Financial Management of Municipalities," and specifically Chapter 12, "Accounts and Audit," capture the relevant financial management and accounting reforms.
2005	ICAI constitutes CASLB to revise the accounting standards for local government and integrate them with global best practices. It is also committed to assisting local governments in implementing DEAAS.
	The C&AG and MoUD issue the NMAM, a comprehensive DEAAS toolkit. The FIRE (D) Program tests the NMAM in five cities with the help of chartered accountants.
	MoUD launches JNNURM in 63 cities for reforming urban governance, expanding infrastructure, and providing basic services to the urban poor. The 7-year program makes accounting reforms mandatory for all participating cities.
2006	CASLB publishes a *Preface to the Accounting Standards for Local Bodies* to support the implementation of the NMAM.
	The Urban Local Government Public Disclosure Law is approved by the central government to improve transparency and accountability in local governments. The law requires publishing specific information, such as audited annual statements and indicators for various services.
	MoUD and the Ministry of Finance issue *Guidelines for Issuing Tax-Free Municipal Bonds by Local Bodies.* It requires local governments to implement DEAAS and to have their financial statements audited to secure tax-free status on municipal bonds.
2007	MoUD releases the *National Municipal Accounting Training Manual* (for municipal staff) and the *National Municipal Accounting Training Manual for Elected Representatives and Top Management* as additional tools to help implement the reforms.
2009	MoUD issues the *National Municipal Assets Valuation Methodology Manual* to provide detailed steps on valuing local government fixed assets, as envisaged in the NMAM. The FIRE (D) Program also supports the *User Requirement Report* that specifies the technical parameters for developing accounting computer software (which can be combined with an e-governance platform if desired).
2010	By year-end 2010, ICAI finalized four *Accounting Standards for Local Bodies* covering revenue from exchange transactions, borrowing costs, property plant, and equipment and events after the reporting date. Furthermore, ICAI has several additional drafts in circulation.

Conclusions

The ongoing role of other institutions. Reforming urban accounting and financial reporting systems throughout India is an ongoing process with the involvement of various institutions.

- Central and state ministries that coordinate matters related to local government need to prepare a detailed roadmap for implementing financial management reforms and employ ICAI guidelines in making legislative changes, developing accounting systems and manuals, and providing assistance for implementation (including handholding for 18 months).
- Local governments must assume responsibility and employ a change management strategy with a step-by-step approach to avoid resistance from various stakeholders for implementation. All levels of government should work to develop a specialized, trained cadre of accounting staff.
- Private sector accountants and computer experts can be tapped to help municipal staff set up double-entry accrual accounting systems.
- Training institutions have an enormous opportunity to develop training modules specifically for municipal staff, and to provide both on-the-job and classroom training.
- International development agencies must continue to support the efforts of ICAI, MoUD, states, municipal bodies, training, and financial institutions to carry out accounting system reforms.

Local governments must optimize their resources to provide services to citizens that support social and economic development. The availability of market financing provides Indian cities with an opportunity to respond more effectively to the demands for these services. Accordingly, local governments are increasingly accountable for their operational and fiscal performance to a range of stakeholders: higher levels of government, investors, and lenders, as well as citizens. The information in financial statements helps these stakeholders evaluate various qualitative and quantitative aspects of local government performance.

For states and the central government, improved accounting will provide a sounder basis for performance-linked grants. For financial institutions and investors, adoption of the guidelines will allow more accurate and timely financial evaluation of infrastructure projects.

For local governments, improved financial information and reporting will facilitate more efficient operations and help identify better urban programs to pursue.

Most importantly, improved financial reporting will strengthen governance at the local level, by providing the information that will help citizens hold local governments accountable for their performance.

Next Steps: Benefits from Accounting Reforms

The accounting reforms become a powerful management tool for improving the viability of local governments when they are combined with other critical areas of financial management. The next steps for India will be linking DEAAS with:

- *Service costing and municipal budgets (national manuals are needed in these areas)*
- *Mandatory disclosure of financial statements and more standardized formats*
- *Professional certification program for municipal finance officers*
- *Municipal finance regulation that conducts regular external and internal audits and strengthen the intergovernmental transfer systems for grants*

ARTICLE 4.3

Resource Mobilization and Institutional Reform

The FIRE (D) Program pioneered a methodology for resource mobilization (i.e., financial strengthening), starting in Indore, Madhya Pradesh, that is now widely accepted across India. It is an essential tool for improving city financial viability and should be part of any municipal reform initiative. The methodology seeks to increase own-source revenue by focusing on institutional reforms that improve revenue performance and save costs (rather than trying to just raise tax rates and user charges). It has proven very successful, with local governments experiencing 15%–30% annual own-source revenue increases over a sustained period. This money is crucial for increasing investment in services and improving overall city financial viability.

Indore Resource Mobilization Pilot Provides Roadmap for the Country

In 1999, the Indore Municipal Corporation (IMC) prepared a development plan for the city with active participation of its residents, through neighborhood associations and consultations. Indore is the largest city in the State of Madhya Pradesh, with a population of nearly 1.7 million, and was experiencing significant population growth.

IMC recognized it would need additional revenues and capabilities to implement the development plan. In 2000, Indore began working with the FIRE (D) Program to increase its revenues and improve its financial management.

The baseline diagnostic recommended several key interventions, with particular focus on land markets: (1) surveying and assigning market values to approximately 1,100 municipal-owned properties, (2) identifying nonpaying residential and commercial property owners within the city, (3) linking various databases on revenue sources, (4) verifying property tax records at the time of registration of ownership, (5) reorganizing the IMC Revenue Department, and (6) reforming accounting and budgeting systems.

With this foundation, IMC formulated a commercialization strategy for all properties in the city that included simplified property tax collection campaigns, as well as long-term commercial leases with the private sector for municipal-owned property. The strategy also identified several options for developing retail markets on properties owned by IMC.

The FIRE (D) Program partner, CRISIL Advisory Services, helped IMC create a new system for making water connections and assisted in the establishment of the city's electricity billing system.

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Both systems used a modern management information system (MIS) that was designed to support revenue collection. These initiatives forced IMC to evaluate and ultimately reorganize its revenue department so that it could proactively identify, record, and collect taxes and nontax revenues. To build staff capacity, the FIRE (D) Program developed a training program with the Institute of Management Studies, Indore, which covered (1) the role and functions of the revenue department, (2) the legal details of the IMC tax systems, (3) hands-on exercises on tax assessment and collection processes, and (4) utilizing computerized and Internet-based approaches.

Indore also established a partnership with Garland, Texas, in the United States, through the United States Agency for International Development (USAID) City Links program. Teams from both cities visited each other between 2002 and 2004 to collaborate on three specific initiatives: operationalizing the resource mobilization project, developing a sanitary landfill, and designing a citizen communication strategy.

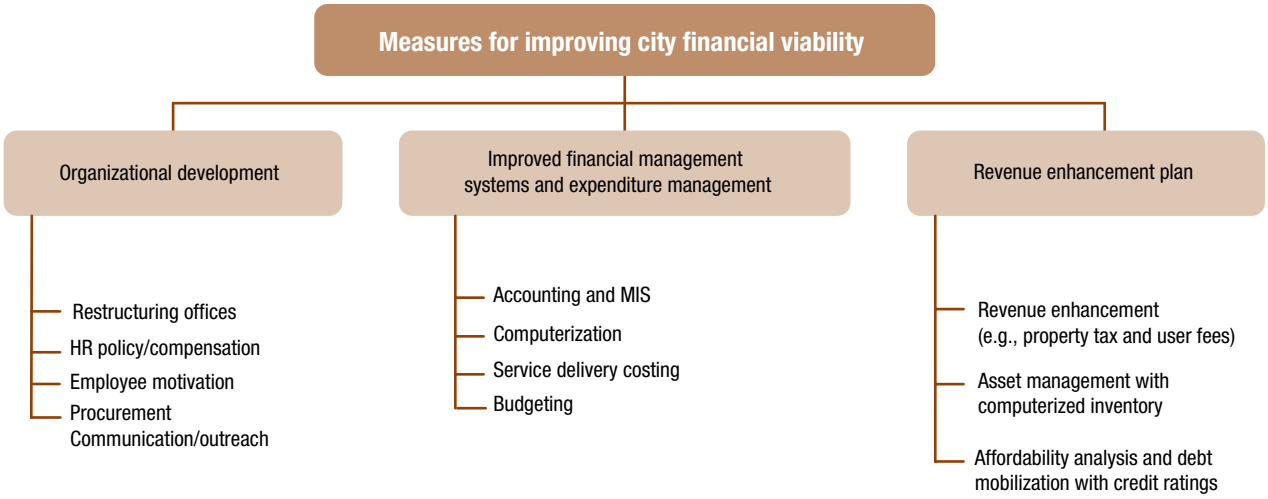
During 3 years of assistance, IMC increased its overall revenue by 48% and its own-source revenue by 87% (mainly through the reforms to the property tax and water charges). Since then, Indore's own-source revenues continued to increase, from Rs. 63 crore (US$14.3 million) in 2003 and to Rs. 151 crore (US$34.4 million) now. As a result of IMC's improved finances, the Asian Development Bank agreed to finance a Rs. 670 crore (US$152 million) infrastructure project, which increased investments from Rs. 6.6 crore (US$1.5 million) in 2004 to Rs. 14.6 crore (US$3.5 million) in 2005.

Methodology for Resource Mobilization and Institutional Reform

Although financial strengthening is the focus of resource mobilization projects—yielding tangible improvements in own-source revenues—the initiative becomes more sustainable with local government reforms and modernization. In Indore, the FIRE (D) Program trained staff and supported a reorganization of the revenue department. Organizational restructuring and improved management systems make local governments operate more efficiently and save costs. They also reorient the local government so that it can perform the tasks required to manage a modern city.

For this reason, the methodology for resource mobilization includes multiple phases, starting with a rapid assessment and business process reengineering (BPR) of the local government (4–6 months), and then short-term implementation activities (12 months), with an accompanying medium-term roadmap. This section focuses on the up-front diagnostics, since they subsequently mold the implementation action plan. The local government usually hires consultants to conduct the diagnostic and help implement the action plan to ensure multidisciplinary expertise as well as concentrated attention on the activity. The elements listed in Figure 4-4 should be considered in the diagnostic.

Figure 4-4. Elements in a Resource Mobilization Project



Components in the Resource Mobilization Diagnostic

1. Rapid financial assessment. In addition to understanding the urban context and history of the city, the first component of the diagnostic is a rapid assessment of the financial condition of the local government. However, the time it takes to complete this component depends on the sophistication of the current accounting system and the quality of the records. If the level of sophistication is low, then it will take considerable time to review the account details for each department. The desired data include city-wide summary of revenues and expenditures, as well as data broken down by department and service area. Data from multiple years (e.g., last 5 years) are essential to understand the financial trends of the city.

Other important information includes a list of assets owned by the local government (particularly properties) and the billing and collection rates for the various taxes and user charges. To determine collection rates, the total number of properties as well as the users of various municipal services should be inventoried. Comparing revenue figures against the full inventories reveals the revenue efficiency and performance. It also suggests areas for improvement.

The financial data should be benchmarked against other cities of similar size and characteristics. They can also be compared to normative standards within the sector (e.g., 85% collection rate on property taxes) (see Annex 4-1). The trends demonstrate the financial viability of the city, and can be used to form a "shadow credit report," which assists analysts in developing commercially viable infrastructure projects (see Chapter 5).

2. Organizational structure and operation. Along with department-level financial analysis, understanding the overall functioning structure of the local government helps determine performance efficiency and constraints. A basic organization chart shows departmental/office responsibilities, the number of staff (professional and clerical) who work in each department, and where each is located in the overall structure. A more in-depth BPR maps the decision-making process for all the critical functions of the local government, such as service provision, budget preparation, market borrowing, and citizen grievance redressal. A BPR documents how a local government actually operates.

3. Legal provisions concerning fiscal and functional powers. It is difficult to recommend changing an institutional structure without knowing what legal powers the local government has, with regard to raising revenues, staff administration, and providing services. For example, it may be helpful to reward staff for good performance, but compensatory bonuses may not be allowed under the current administrative rules of the local government.

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In a financially viable city (one that does not rely on intergovernmental transfers for basic operations and maintenance [O&M]), the fiscal powers of the local government need to match the functional areas of responsibility. A resource mobilization project needs to be mindful of this, particularly concerning capping tax rates, setting user fees, preparing development plans, and investing in services.

4. **Discussions with senior staff.** It is important to incorporate the priorities of staff and their perspectives on the problem areas of the local government. They might also have insight into how certain functional areas could be improved, through new technology, professional development, or policy reforms.

5. **Action plan for first year implementation.** The near-term interventions should focus on priority areas that can produce relatively quick benefits. The findings from the first four steps in this methodology determine which areas are most important to the local government and which areas are underperforming. Typically, property taxes, user fees, hoarding/advertising licenses, and leasing of municipal properties (if the local government is a large owner) are major areas for revenue generation. Also, significant cost savings can result from departmental reorganization, simplifying rules and procedures, improving financial management systems, and integrating data into a networked computer system.

   Above all, the action plan has to be practical for the local government to implement, and therefore should take into account political sensitivity and ease of sequencing/phasing. It should identify the main constraints that need to be fixed and how staff should approach the work. Some of the work can be undertaken by local government staff, while other aspects, like training or system programming, will likely require external support. If the local government has a reform cell/unit in place, it can coordinate implementation of the action plan; otherwise, a consultant should be hired.

6. **Communication strategy.** Reforms that will increase user fees or start a tax collection campaign can be particularly sensitive to the public. Most likely, the local government should not try to make sensitive changes without building awareness and consensus within government and among citizens. A communication strategy needs to explain why the local government is engaging in these reforms, specifically referencing the link between better service provision and the accompanying user fees. The strategy should also test the reforms with certain stakeholders on a pilot basis, and then make appropriate adjustments based on feedback. Reaching citizens throughout the city takes a combination of methods, including neighborhood "camps," radio and loudspeaker announcements, and media advertisements. Another good way to prepare for reforms is for local government officials to participate in a site visit/study tour to other cities that have had success.

Implementing a Resource Mobilization Project

Short-term (12 months) and medium-term (2–5 years) implementation strategies vary depending on the specific reform (see resource section of Article 4.1 for examples). For each recommended area, a detailed strategy should be written and approved by the local government (see box for sample outline). The strategy includes changes to the organizational structure of departments, staffing requirement assessment (number and skills), description of the streamlined process for delivering services, more productive ways to interact with citizens, and new technology and systems. The strategy needs to specify the resources and time frame required to implement each reform. It is possible that detailed studies, such as an energy audit for water supply services or a commercial valuation of properties owned by the local government, are required before implementation can begin. Some elements that help maintain momentum during implementation include:

- Coordination of all activities by a local government reform cell or external consultants
- Assignment of specific implementation responsibilities to municipal staff, consultants, and software providers
- Procurement of expert assistance for hand-holding (onsite) throughout the reform process
- Evaluation of software/computer needs and procurement of equipment
- Regularly monitoring and evaluation of the progress and standard performance indicators
- Preparation of a roadmap for carrying the effort forward over the medium and long terms

Elements of Improving Property Tax Administration

1. *Reorganize the local government revenue department with clearly defined roles for senior and junior staff*
2. *Enhance and simplify assessment methodology*
3. *Improve billing, collections, and receivables system*
4. *Set up a stronger enforcement mechanism*
5. *Develop a comprehensive database MIS (possibly linking property data to geographic information system maps)*
6. *Improve other related functions, such as accounting and building registration systems*

Institutional Reform Strengthens Local Capacity and Decentralization in Jabalpur

After working with IMC, the FIRE (D) Program began working with the Municipal Corporation of Jabalpur (MCJ) with a focus on institutional reform instead of financial strengthening. MCJ is the state's third largest city, following Indore and Bhopal, serving about 1 million people. It houses the state's High Court and Electricity Board and has prominent military establishments and manufacturing facilities. Yet its urban infrastructure had become inadequate, stemming from organizational, operational, and financial constraints.

In 2002, the FIRE (D) Program conducted a rapid assessment of the city's development challenges and existing management framework for delivering services. The assessment reviewed the many legal, institutional, financial, and technical requirements for managing urban growth. The outcome of the assessment turned into a strategy for improving the municipal organizational structure, decision-making processes, and financial management system.

Based on the assessment, the FIRE (D) Program developed an institutional strengthening project in partnership with NCR Consultants, Chennai. NCR Consultants assisted in developing a modern MIS, setting up a computer system for key municipal activities, and detailing an organizational flowchart with job descriptions of various staff.

Findings from the Municipal Assessment

Structures and functions. The corporation had recently divided its jurisdiction into eight zones, each with around seven wards. MCJ prepared a staged decentralization plan for gradual delegation of functions to the zonal offices. The goal was to create mini-corporations at the zonal level, with the central office focusing on policy, planning, and coordination of zonal activities. However, the zonal concept faced several constraints, such as staff assignments without appropriate qualifications, key positions left unfilled, inefficient reporting between zonal and central offices, poor work environments, and a human resource (HR) policy that did not reward innovation or advance careers.

Systems and procedures. The assessment found a burdensome decision-making process, cumbersome manual recordkeeping, and lack of communication between departments. Systems and procedures needed to be streamlined and information shared. Specific problems included:

- The budget lacked a narrative and was not effectively used for financial management and performance monitoring.
- The single-entry, cash-based accounting system did not appropriately capture grants/transfers from the state or provide useful financial reports. It also caused frequent delays in responding to audit inquiries.
- Incomplete and inaccurate records of taxes and fees were commonplace due to a dysfunctional self-assessment system for property taxes and poorly computerized records. No system existed to track collections and follow up with delinquencies.

Financial management. Only by excluding overdue liabilities did MCJ's revenue account achieve marginal surpluses from 1997 to 2001. For example, substantial amounts were owed to the state Electricity Board but were essentially written off by MCJ. Also, there were not enough funds allocated to the capital account, which consequently drew down the operating account. Other constraints included:

- Incomplete self-assessment of property taxes
- Low returns on municipal-owned leased land
- Poor tax/water charge collection
- No provision for debt service
- Provident fund (social security) contributions in arrears

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Project Implementation

The FIRE (D) Program team focused on three major aspects of intuitional strengthening: modernizing municipal functions, particularly the accounting systems; updating the HR policy; and providing on-the-job training. Each aspect progressed simultaneously over 11 months. Some of the deliverables included the computerization of certain municipal systems and procedures, reconciliation of income records, creation of an asset inventory, and preparation of a new HR policy.

For the new financial management system, NCR Consultants developed a software application called IDEAS (Intelligent Double Entry Accounting System)[1] and provided on-the-job training for it. The staff required additional technical training on double-entry, accrual-based accounting, record-keeping, and preparation of financial statements.

The HR activities sought to clarify job responsibilities, streamline reporting relationships between staff, and identify training needs for different classes of staff. Job descriptions for over 250 staff involved in managing MIS (at both the zones and headquarters) were written and laid into the organizational chart of MCJ. And a new HR policy was written to cover recruitment, hiring, training, and promotion.

Results and outlook. With substantial leadership from MCJ, the new IDEAS accounting system became operational in all the zonal offices and in the headquarters' accounts, revenue, and computer departments. The zonal offices usually collect and record the revenues in the system, while headquarters processes payments and vouchers. The computer department monitors the whole system and keeps records for public works activities. MCJ appointed an independent chartered accountant to value corporation assets and prepare its opening balance for FY 2005.

The accounting system requires further adjustments, since the project finished before the National Municipal Accounting Manual and other financial reporting standards were issued by the Government of India (see Article 4.2). While this project focused on institutional reforms and automated financial management, it did not explicitly cover financial strengthening of MCJ's resource base. Nevertheless, the cost savings and efficiency gains from this initiative improved the overall financial performance of the local government.

1 The software modules utilized an Oracle 9i platform with Visual Basic at the front end and Crystal Reports for output generation.

ARTICLE 4.4

Institutional Restructuring and Corporatization: Water and Sewerage Sector Reform in Orissa

This article shows how a multipronged reform program contributes to improved financial viability. For sustained and comprehensive change, an organization's structure, financial management, financial mobilization, and service regulation all need to reinforce one another. The FIRE (D) Program assisted the State of Orissa in reforming its water and sewerage sector by taking each of these aspects into consideration.

The State of Orissa faces several service provision challenges, including low household incomes, decentralized populations in small towns and villages, weak local government capacity, and a low percentage of water and sanitation coverage compared to other states.

In 2006, the FIRE (D) Program began working with Orissa's Housing and Urban Development Department (HUDD), which oversees the state's Public Health Engineering Organization (PHEO), to create a *Strategic Roadmap for Institutional Restructuring of the Urban Water and Sewerage Services*. The roadmap examined five options for restructuring PHEO, from full privatization to a department within the local governments. After careful analysis and deliberation with all the key stakeholders, the Government of Orissa (GoO) decided to reorganize PHEO into regional water corporations that would be owned by the state government but operated autonomously. The corporations would provide asset management, i.e., operations and management of water and sewer systems, on behalf of local governments, which do not have the experience or manpower to operate a water network. At the same time, under India's urban reforms agenda, local governments have to become responsible and accountable for these services. The key stakeholders (PHEO staff and the state and local governments) felt most comfortable using a performance contract as a means for local governments to regulate and oversee the new corporations.

To pursue this option in detail, the FIRE (D) Program began working in the capital city of Bhubaneswar as a pilot project. The FIRE (D) Program analyzed PHEO's institutional and financial operations, its track record in delivering services, and all the constraints affecting the initiative's main objectives:

- Autonomous corporations that are structured to deliver improved water and sewerage services
- Accountability to the local government
- Regulation through a contracting framework
- Financially viable operations, with declining financial support (subsidy) from the GoO over the medium to long term

Current Institutional Framework for Water and Sewerage Services

The overall administrative responsibility for water supply and sewerage in the State of Orissa currently lies with HUDD. PHEO is a government department under HUDD, and is the functional agency responsible for providing urban and rural water and sewerage services throughout the state. Another organization, the Orissa Water Supply and Sanitation Board (OWSSB), undertakes large capital projects with funding directly provided by the state government.

During 2003, GoO enacted the Orissa Municipal Corporation Act to begin decentralizing responsibility for delivering urban services to the local governments, in accordance with the 74th Constitution Amendment Act (CAA). Decentralization is a long process, in part because HUDD and the state legislature do not have a clear idea of the best way to proceed and in part because local governments have limited capacity. The institutional restructuring recommended by the FIRE (D) Program helps implement the decentralization initiative, while at the same time improving the water and sewerage services in Bhubaneswar.

Bhubaneswar city water services. The situation assessment of existing infrastructure services in Bhubaneswar revealed that PHEO connects 42% of the population to water supply, while only 35% of the population has sewerage services. Apart from inadequate services, the main weaknesses under the existing PHEO structure include (1) no accountability to municipal corporations, (2) minimal focus on consumer satisfaction, (3) little emphasis on individual connections, (4) high level of unaccounted-for water (both leaking pipes and commercial losses), (5) a large number of staff (especially ministerial staff), (6) high energy costs, (7) no incentive-based remuneration system, (8) low cost recovery and poor collection efficiency of user charges, (9) lack of autonomy and excessive centralization that delays decision making, and (10) dependence on state government for subsidizing operations and maintenance (O&M). These problems are interconnected and similar in nature to ones faced by many local governments. They stem from a restrictive policy environment that has created weak governance structures and consequently low institutional capacity. A systematic approach to address the underlying structural issues can begin to encourage better and more sustainable service delivery.

Benefits of Institutional Reforms

The pilot initiative is transforming the portion of PHEO that serves Bhubaneswar into a government-owned corporate entity. A corporate structure allows the entity to develop a business model most suitable for the services to be provided. It disentangles the core competencies of water and sewerage provision from the wide-ranging activities that a state government undertakes. As a result, the corporation can focus on its specific mandate and strengthen the skills, systems, and finance to provide better coverage and to increase efficiencies. Several important benefits should accrue.

- For the state government, the process should free financial resources over time. The potential savings could be Rs. 82 crore (US$18.2 million) over an 8-year period (based on the draft business plan). This figure stems from a gradual reduction in water and sewerage subsidies that can be reinvested in other services, such as housing, education, and livelihoods training for the poor.
- For the local government, greater control over infrastructure planning and service delivery improves its ability to guide development and be responsive to citizens' concerns.
- For customers, improved coverage and service quality leads to better public health. Greater customer satisfaction also arises from more professional management and better service levels.
- For PHEO staff, professional management and autonomy improves the work environment. A corporate structure can also reward employees (through bonuses and promotions) far more easily than can the government.

Whereas the above benefits stem from improved management and governance, specific operational initiatives, such as energy audits and optimization programs (electricity is currently 50% of operations costs), are more encouraged in a corporate structure to save costs and improve efficiencies.

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Transferring responsibility to the local government. The decentralization plan has several components. The state transfers all the water and sewerage "undertakings" (assets, liabilities, rights, claims, and proceedings) to the Bhubaneswar Municipal Corporation, which becomes the owner and responsible party for providing the infrastructure services. Considering the inadequate expertise of local governments in managing these services, GoO decided to corporatize the PHEO by setting up a state government-owned water utility corporation, as an asset management company for operating the infrastructure services on behalf of the local government. This is a much more feasible and easier process than trying to depute PHEO engineers to local governments. Furthermore, it is unrealistic for every small city or town to manage its own water and sewerage systems in the near term. A corporation can provide asset management services to more than one city. Based on geographical considerations, PHEO could be divided into three or more regional water corporations. The regional water corporations then operate and maintain the infrastructure through a performance-based contractual arrangement with the respective local governments, not unlike a private company. The local government and any other regulatory authority review the prescribed performance indicators regularly and periodically rebid the work. Over the long term, other companies could bid on the service contracts, and this competition encourages better performance. At the same time, the water corporations could work in other jurisdictions needing similar assistance.

Transition plan. The steps for creating a corporatized entity take considerable time to fully implement, and therefore should be divided into several phases. In Bhubaneswar, the FIRE (D) Program divided the process into five steps:

1. Ring fence the portion of PHEO that serves the Bhubaneswar area (i.e., separate out the budget, accounts, staff, and infrastructure assets from the overall organization)
2. Create a separate business unit within PHEO dedicated to managing the ring-fenced area
3. Based on specific attributes of the ring-fenced portion of PHEO, develop a business plan and organizational structure for the corporation
4. Undertake the legal process of corporatization, while working with all stakeholders on the performance contract mechanism
5. Begin corporate operations while providing continued institutional development support (for both the new water corporation and the local government, which needs to manage the contracts)

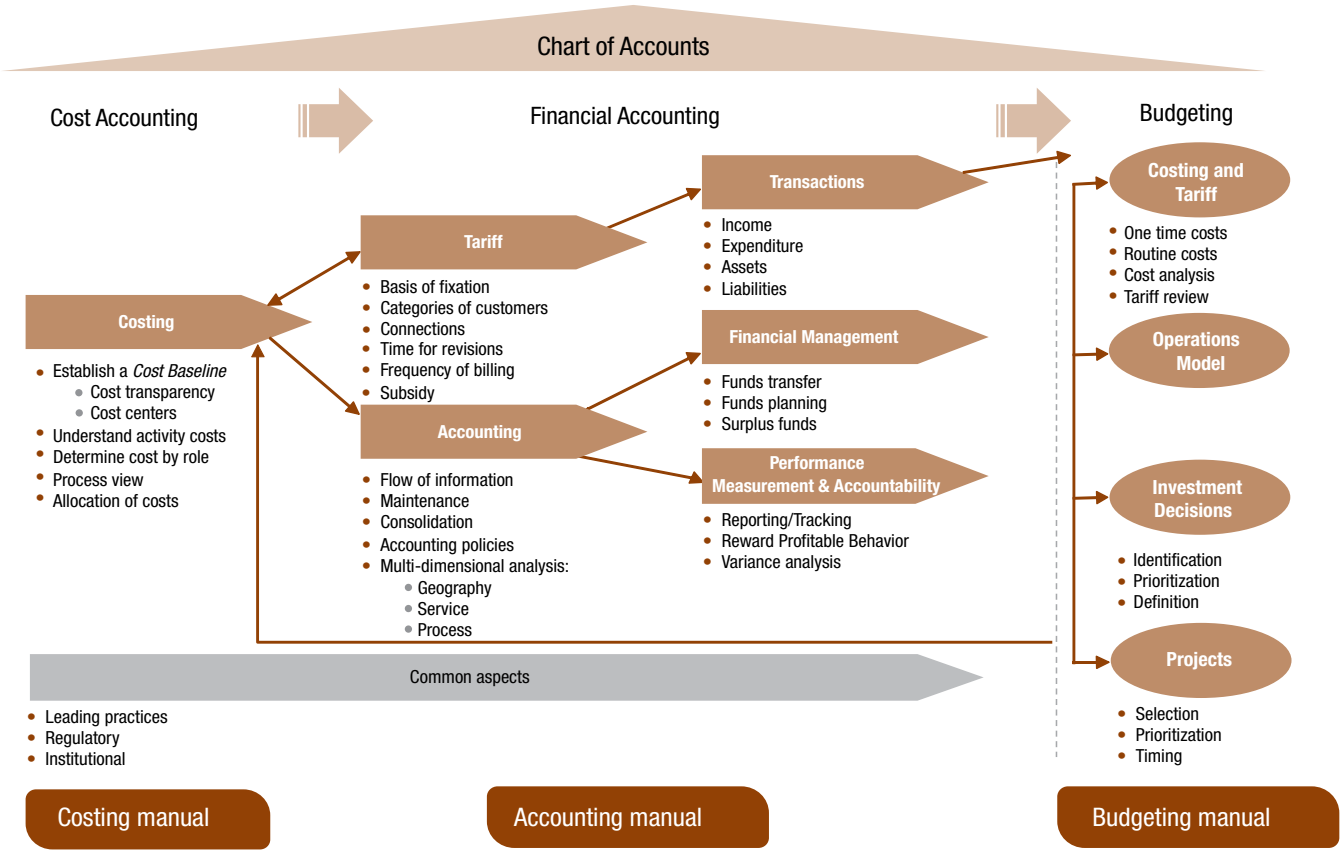
Financial Management System

The financial management system of PHEO is regulated by the Central Public Works Accounts Code and Orissa Public Works Department Code (both state-level legislations). They focus mainly on internal financial control, by recording transactions and ensuring that spending matches the sanctioned budget of the state government. A cash-based system of accounting has been the norm, as described in Article 4.2.

The accounts of the PHEO are compiled every month at the division level (accounts rendering unit) by accountants posted by the State of Orissa Accountant General for consolidation. The monthly accounts include a statement of receipts and expenditures, a schedule of work expenditures, and details of depository works. However, the monthly accounts are not used in the organization's decision-making processes and are prepared mainly for complying with statutory requirements. In contrast, a modern management accounting system (costing system) and the budgeting system would help allocate resources efficiently, help plan future work, and reveal areas of financial concern. Improving the financial management system became a key reform parameter while establishing the new corporate entity (see Figure 4-5).

- The new accounting and reporting system should be aligned with the local government reforms and appropriate for the proposed business model (customized to suit the requirements of the water and sewerage sectors).
- A clear water and sewerage costing system monitors costs and identifies sustainable tariff structures.
- A budgeting system based on actual accounting and costing information helps maintain infrastructure effectively.
- The opening balance sheet identifies and values all fixed assets (all pipes, pumping stations, and buildings) for the first time.

Figure 4-5. Financial Management Reforms



Costing accounting system. The cost accounting system records all costs and provides the relevant information to decision makers on a regular basis. An important first step in setting up the cost accounting system is to compile a list of key management decisions and tasks that need to be completed. Typical priorities in a costing system include (1) tariff setting, (2) ascertaining subsidies for each class of consumers, (3) controlling costs and monitoring efficiency within the organization, (4) estimating and better identifying losses, and (5) planning and forecasting (link to budgeting system).

The new cost accounting system is detailed but simple and flexible to use. It is based on the "full cost" principle, which includes accrual-based accounting and asset depreciation. It also follows "process costing" to determine costs at each stage of the service delivery process. To assist the users in implementing the proposed system, the FIRE (D) Program prepared an *Orissa Water Utility Costing Manual*.

Budgeting system. To be effective and factually based, the budgeting system has to be interconnected with the accounting and costing systems. The transition to an accrual accounting system also requires reforms in the budgeting process. For this purpose, an *Orissa Water Utility Budgeting Manual* contains the forms and formats of the proposed budget statements. It also follows an accrual basis link to the accounting system. It has to correspond with the proposed operations model and the final organization structure of the corporation.

Performance-based contract to regulate service provision. Because local governments are not-for-profit business entities, a strictly private sector focus on profit and financial disclosure is not sufficient to assess government performance and service delivery. No single, overall measure of performance exists for local governments, such as net income or the earnings per share. Instead, performance should be evaluated on a variety of measures for particular activities that demonstrate efficiency and effectiveness. The most appropriate performance measures and indicators directly relate to the objectives of the enterprise. The objectives may be "ranked" to reflect agreed-to priorities or other criteria.

Moreover, performance indicators should gauge progress over time, like whether actual results match the budgeted (target) amount. Performance indicators generally indicate financial conditions, monitor output and quality of service, and capture outcome of services and efficiency in achieving them. With regard to water and sanitation services, a robust contract can define specific performance indicators that can be objectively monitored on a set schedule. In this way, local governments can pay the service operator based on performance to create an incentive/penalty system that rewards good results. The performance-based contracts need to be comprehensive, since they help regulate the sector (see Table 4-5).

Table 4-5. Elements of a Performance-Based Contract

- Definition of parties
- Recitals
- Definitions
- Obligations of parties
- Financial protocols
- Incentives, liquidated damages
- Human resources—staff hired by the corporation and those deputed from PHEO
- Performance targets
- Operating service levels
- Reporting requirements
- Monitoring and regulatory requirements
- Force majeure
- Dispute resolution
- Arbitration

The contract shall be very closely monitored by both the local government and the water corporation. The water corporation usually collects revenue (user charges) from the customers and remits them to the local government. In turn, the corporation shall receive a performance fee based on agreed-to indicators specified in the contract.

Conclusion

While better institutional structures set the stage for better service delivery and financial viability, these objectives will not be realized without also improving financial management, incentivizing better performance, and providing objective regulation and oversight. Improved financial management on a sustainable basis is a challenging task. Training and communication strategies will play a major role in changing the staff mindset. Furthermore, institutional reforms need to be used in tandem with a number of other investments to achieve the desired improvement in decision making and service delivery.

ARTICLE 4.5

Using E-governance Combined with Administrative Reforms to Improve Governance

E-governance combines good governance reforms with new information and communication technologies (ICT) to improve management processes and communication within government, and to make service delivery and the public interface with citizens more effective. Implementation of e-governance is one of the reforms for local governments under the Jawarharlal Nehru National Urban Renewal Mission (JNNURM).

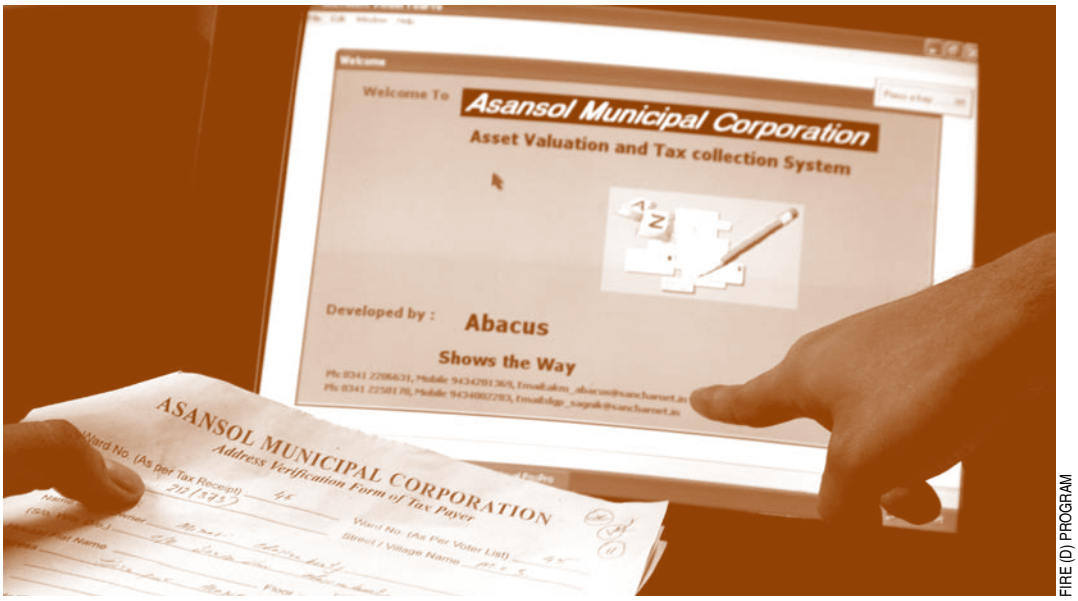
The organizational design of many Indian municipalities is antiquated and inefficient. The core functions and services of local governments can be performed more economically, efficiently, and effectively with the use of ICT. By streamlining data flow and decision-making processes, e-governance enhances the capacity to improve a range of management outcomes. This is critical for financial viability not only because e-governance can reduce costs, but because it also has the potential to increase revenues if the payment of taxes and fees becomes more convenient and easier to enforce.

E-governance can integrate data flow across departments and transform how government officials interact. But even more importantly, advances in ICT can help transform the relationship between government and citizens in ways that improve services and increase both accountability and transparency.

While there are real benefits to be gained from employing state-of-the-art technology to enhance communications between government and its citizens, one of the more important benefits of municipal e-governance is the opportunity to modernize government processes and streamline operations.

Background. Over the last several years, governments worldwide have launched major e-governance initiatives. In India, various state governments have taken independent steps to promote e-governance, focusing primarily on automation of their existing work.[1] Realizing the limits of an approach that merely automates existing workflows and decision making, the prime minister announced, in August 2002, that "India would implement a comprehensive program to accelerate e-governance at all levels of government to improve efficiency, transparency and accountability at the government-citizen interface."[2]

1 States of Andhra Pradesh, Himachal, Maharashtra, and Karnataka.
2 http://www.niua.org/Publications/newsletter/urb_fin_sep_04.pdf.



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The prime minister's office set up a high-powered task force on ICT and software development. Parliament created a Ministry of Information Technology (MIT) to promote and coordinate the use of ICT in the country. Following that, the central government launched a National E-Governance Plan (NeGP) for implementation during 2003–2007. The plan laid the foundation and provided the impetus for long-term growth of e-governance within the country.

The vision of NeGP is to "make all government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs."[3] NeGP aims to set up the appropriate institutional mechanisms, policies, and core technology infrastructure, through which a number of Mission Mode Projects (i.e., top-priority, short-term, government projects) will be implemented.

NeGP identified 27 Mission Mode Projects for central government ministries and state governments, as well as integrated projects spanning multiple agencies. It also defines a Mission Mode Project for municipalities.

Recommendations from the Assessment Phase

- Design the system and processes at the state level to enhance uniformity for local government
- Focus on analyzing and improving the existing systems for delivering services to citizens and on providing better information
- Create a centralized database across various services of the local government
- To bring down cost, integrate with other information technology initiatives in the state and leverage core technology infrastructure, rather than create new systems
- Implement in phases based on the needs and requirements of local governments
- Adopt core standards to ensure interoperability of applications across agencies
- Identify project champions to lead the initiative
- Explore new areas of public-private partnerships
- Build flexibility in the system to meet local government needs
- Design the system to generate urban benchmarking and monitoring reports across the state

Mission Mode Project for Municipalities. The Mission is integral to NeGP. Because it will affect the interactions that citizens most regularly have with government, the Government of India (GoI) feels e-governance for municipalities should be a top priority. Municipal e-governance reform is coordinated by the Ministry of Urban Development (MoUD), in collaboration with the new MIT. Implementation is through state governments.

Recognizing the diverse governance reform work carried out by the FIRE (D) Program, MoUD requested support in designing of the Mission Mode Project for Municipalities. The objective was to formulate a design strategy for applying ICT to improve efficiencies and effectiveness in:

- The interaction between local government and its citizens
- The internal government operations to support and stimulate good governance

With MoUD, the FIRE (D) Program assessed various independent e-governance initiatives on the ground and then provided a technical design.[4] From that, the team designed an overall framework, as well as an implementation strategy in cities across the country. MoUD then formulated guidelines for municipal e-governance to be rolled out under the JNNURM scheme.[5] The first phase covers the 35 metropolitan cities with populations above 10 lakh (1 million), or approximately 37% of India's urban population. The approach emphasizes a phased, multiyear rollout that ensures the training of local government staff.

Objectives of e-governance. By leveraging the JNNRUM urban reforms with advances in ICT, MoUD aims to improve the efficiency and effectiveness of municipal service delivery to citizens. The framework proposed by the FIRE (D) Program to realize this vision identifies the following objectives:

- Deliver diverse government services and information to citizens via a single, integrated technology platform
- Simplify procedures and accessibility for citizens through multiple venues (citizen facilitation centers, public kiosks, Internet)
- Ensure the timely and reliable flow of management information to, from, and within government offices
- Increase efficiency in decision-making processes within and across departments
- Increase user-friendliness across departments through standardized computer and database interfaces

Developing the capacity to aggregate local government data at the state level is also a goal of the program. This will improve states' ability to monitor and benchmark local government performance, target intergovernmental transfers, and allocate resources.

A multidisciplinary team is needed at both the state and local government levels to pursue these reforms in a unified manner across departments and in coordination with other ICT initiatives. Computer system options include a custom software platform, off-the-shelf, open source, or hosted applications.[6] Support may be provided by dedicated state staff or through private sector contracts.[7]

Implementing E-Governance

Because historical data and traditional management processes cannot rapidly be incorporated into a comprehensive digital network, the FIRE (D) Program emphasizes a phased, multiyear rollout. The most complicated aspects might take 3–4 years to implement, considering likely changes in regulation, creation of large and interconnected databases, and training staff. This process will inevitably establish new standard operating procedures for the local government, and therefore requires coordination across departments. Responsibility for implementation has to stem from a dedicated and long-term official, with appropriate authority and accompanying technical support.

The first step in implementing e-governance is to comprehensively analyze the prevailing government structures and processes—including physical and electronic infrastructure—required to deliver discrete services to citizens and quantify them in terms of time and cost. Commonly referred to as "defining the business requirements," this step is not about procuring hardware or software, but rather focuses on establishing a baseline of how the local government operates and makes decisions.

3 http://www.mit.gov.in.
4 Karnataka, Maharashtra, Tamil Nadu, and Andhra Pradesh.
5 JNNURM, Ministry of Information Technology, "Guidelines on National Mission Mode Project (NMMP) on e-Governance in Municipalities as part of JNNURM," http://jnnurm.nic.in/nurmudweb/e-Gov/guidelineegov.pdf. Ministry of Information Technology.
6 Whichever application is selected by the local government, it needs to meet the specified functional requirements and receive a standardization, testing, and quality certification from MIT.
7 Examples are e-Seva, Suvidha, Saukaryam of Andhra Pradesh; KD Net Kalyan Municipal Corporation; and Bangalore One Project.

In addition, there needs to be a clear sense of what the local and state governments want to accomplish with e-governance, i.e., what services will be automated, networked through multiple departments, and accessible to citizens. A mere injection of technology into the existing processes will not guarantee the desired result.

The Mission Mode Project for Municipalities recommends that the following local government services be incorporated in the e-governance program:

- **Basic citizen services:** birth and death registration, health programs
- **Revenue earning services:** property tax, licenses
- **Development services: water** supply and other utilities, building plan approval
- **Efficiency improvement services:** procurement and monitoring of projects
- **Back office improvements:** accounting, personnel management system
- **Monitoring:** citizen grievance redressal

The prerequisite for successful implementation of any e-governance initiative is the availability of adequate infrastructure for the system. A state-wide approach for system design and rollout can bring uniformity across the state, and can achieve cost and time optimization. The system should have a central architecture with a common database structure and an integrated web-based application for communication, maintenance, and reporting.

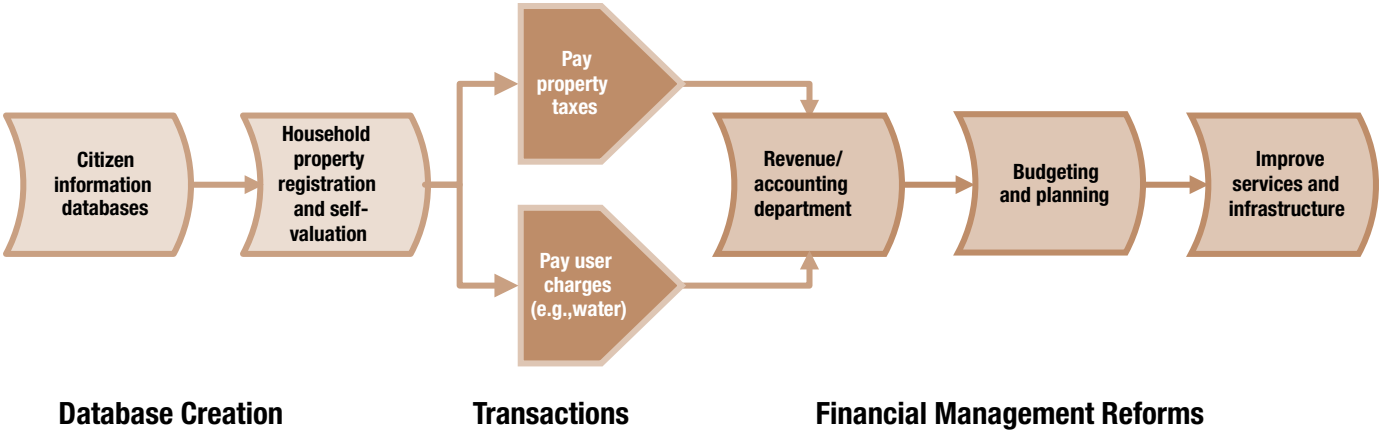
Implementation phases. The Mission Mode Project for Municipalities design document recommends implementing e-governance in three waves, from the most simple but visible, to the more complex and transaction-based. Citizen centers and kiosks, which offer "one-stop shops" for e-governance services, can be built in convenient locations during the first wave.

1. Raise visibility. Establish a website with useful information for both businesses and citizens (e.g., licenses, financial statements, municipal acts, and economic data). Computerize data for storage and integration into a city-wide computer network.

2. Build critical transactional services. Link information from the first wave to the revenue and accounting departments, allowing transactional services (e.g., paying user charges for water, licenses, property taxes, or other fees) to be automated via the computer network. Each department must be linked securely to a single network. Services implemented as a part of this wave have moderate visibility and more complex systems. Figure 4-6 is one example.

8 For example, the e-governance system might be linked with the accounting system to simplify procedures, such as tax billing.

Figure 4-6. Example of E-Governance Workflow and Network



3. Sustained Value. This includes the most complicated transactions that are often the least visible to the public, such as bank transactions, employee files, salary payments, and benefits records. Furthermore, e-procurement allows firms to submit qualifications and proposals electronically. Services implemented as part of this wave will generally have low customer visibility, but potentially high impact in terms of improved efficiency.

Benefits of E-Governance

For citizens

- Single-window access to various local services
- Better delivery of services and information
- Quick service delivery at a decentralized level
- Improved communications
- Simplified procedures and approval processes
- Greater participation in decision making
- Improved interaction with local government
- Track performance of local governments
- Transparency and accountability in local government functions
- Quick redressal of grievances

For local governments

- Common information base across departments, on a single integrated platform
- Better coordination between departments and agencies
- Improved communications
- Creation of effective MIS
- Better mobilization and utilization of resources
- Improved revenue collection
- Efficient citizen grievance redressal
- Overall improvement in governance, delivery of services, and citizen interface
- More objectiveness in decision making

For management *(mayor, commissioner, council)*

- Availability of standardized and meaningful MIS on timely basis across all departments
- Appropriate and timely analysis, and decision-support mechanism
- Ability to monitor and track programs, services, and revenues effectively and on a timely basis

Conclusion

Implementing e-governance is a highly complex process requiring hardware and software inputs and network and system design. Ideally, this process is based on the reengineering of service delivery processes and local government management procedures. When all these elements are managed and staged effectively, local governments can dramatically improve transparency, reduce bureaucratic controls, and increase efficiency.

MoUD has developed service-level benchmarks for cities to carry out this activity, and local governments will be monitored per these benchmarks.[9] MoUD has also laid down broad rules to access funding under the Mission Mode Project for Municipalities.[10] As part of JNNURM reform, the cities of Hyderabad, Vijayawada, Vishakapatnam, Ahmedabad, Rajkot, Surat, Greater Mumbai, Coimbatore, Madurai, Chennai, and Kolkata are all carrying out e-governance initiatives.[11]

In the end, successful implementation of e-governance reforms depends on establishing a shared vision of the desired outcomes, exercising strong organizational leadership, installing the capacity to create the new system, and keeping the commitment to ongoing improvement as new challenges and opportunities arise.

9 http://jnnurm.nic.in/nurmudweb/e-Gov/guidelineegov.pdf. For example, 25% growth in own-source revenues, 80% resolution of grievances received, etc.

10 For cities with populations of more than 4 million, 50% of the costs are through central and state grants, while the local government pays the remaining 50%. For cities with fewer than 4 million but more than 1 million people, the central and state grant is for 70% of the cost and local government pays 30%.

11 These cities have had varied success in implementing e-governance. Most of these projects are at Wave 1, in the language of the Design Report.

ARTICLE 4.6

Reforming the Central-State-Municipal Fiscal Relationship: India's Central and State Finance Commissions

In India, with 28 states and approximately 5,000 urban local governments, the center, state, and municipal fiscal relations are quite diverse and complex. As elsewhere in the developing world, India is undergoing a process of decentralization, one of whose principal tenets is to address this complex issue. Various policy initiatives, beginning with the 74th Constitution Amendment Act (CAA) of 1992, have guided decentralization and supported longer-term reform, including the municipal finance system.

Fiscal decentralization is seen as a tool to reduce the mismatch between funds, functions, and functionaries at the municipal level, and to help local governments carry out their mandates more effectively. This article discusses the challenges of fiscal decentralization in India, with regard to the central and state finance commissions. A few other countries have institutions similar to the finance commissions of India,[1] and these unique institutions can contribute significantly to city financial viability.

Municipal Fiscal Imbalance

Local governments in India suffer from fiscal imbalances due to challenges in raising requisite funds to meet their mandated functions. Even though urban local governments should be able to raise revenues to fund public services, at this time, they neither have adequate revenue assignments (i.e., sharing of certain revenues) nor a sufficiently large tax base to generate required revenues. They are, therefore, dependent on intergovernmental transfers from higher levels of government to meet their expenses. India's constitution specifies that taxes are divided between the central and state governments, but does not specify a revenue base for the third tier of government, the municipality.

While the 12th Schedule of the 74th CAA demarcates the functional domain of local governments, it does not provide a corresponding "municipal finance list." The assignment of finances has been completely left to state government discretion. This has resulted in patterns of municipal finances that vary widely across states. Local governments depend on their respective state government for assignment of revenue sources, the provision of intergovernmental transfers, and approvals for borrowing (with or without accompanying state guarantees). Imbalances in the functions and finances eventually reflect the high dependency of local governments on state governments, and of the state governments on the central government. These factors have led to rising fiscal gaps in these institutions, with resources drastically falling short of the requirements to meet the current backlog and future growth needs of infrastructure services.

1 Both Australia and Canada do have similar governmental entities.

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Recent estimates given by the 13th Central Finance Commission (CFC) suggest that barely half of local government expenditures is financed through own sources. Furthermore, the size of local government expenditures, as a percentage of gross domestic product (GDP), has declined from 1.7% in 2003–2004 to 1.5% in 2007–2008. The share of the local government budget in the total budget of central, states, and local governments is around 4%, as compared to 10%–15% in other countries of a similar stage of development. On the other hand, cities contribute nearly two-thirds to the GDP and a vast majority of taxes and fees. Therefore, the overall economy is not financing the urban sector to its full potential. This represents a considerable fiscal imbalance.

Central-State-Municipal Fiscal Relations in India

Given the fiscal mismatch that exists between the different levels of government in India, two positive features in the 74th CAA help strengthen municipal finances: (1) a provision for creating state finance commissions (SFCs) every 5 years; and (2) for the CFC to start suggesting how to augment the consolidated fund of the states, which supplements the resources of local governments. SFCs are supposed to recommend to state governments how to allocate the consolidated funds among the many local governments. As a result, these provisions are designed to establish better revenue sharing among the local, state, and central governments. In this capacity, the CFC and SFCs perform a critical role in determining the size and volume of vertical transfers and fiscal powers to be earmarked for local governments.

Intergovernmental transfers are largely seen as correcting fiscal imbalances and equipping local governments with resources to operate and maintain services at acceptable or normative levels. The intergovernmental transfer mechanisms through the CFC, SFCs, the Indian Planning Commission, centrally sponsored grant schemes, and the state planning boards attempt to correct this imbalance so that local governments can perform their assigned mandates. However, the vertical fiscal imbalances remain in-built, without pursuing reforms to strengthen city financial viability, as described throughout this chapter.

The Central Finance Commission. The CFC has existed for more than 50 years and has been appointed by the president of India every 5 years, starting in 1951. Before 1992, the CFC was not required to comment on municipal finance at all. The CFC addresses overall allocations of nonplanned revenue resources (resources that the Planning Commission does not prescribe) for the subsequent 5-year period. The functions of the CFC are described as follows:

- The distribution of taxes to be shared between the center and states, and the allocation of proceeds between the states
- The principles that should govern grants-in-aid by the center to the states, out of the Consolidated Fund of India
- The measures needed to augment the consolidated fund of a state, to supplement the resources of the panchayats (small towns) and the local governments
- Any other matter referred to it by the president of India in the interests of sound finance

Each CFC holds a series of consultations with experts and other stakeholders, and solicits technical studies on public finance from various agencies. Since the approval of 74th CAA, the financial situation of local governments has gradually taken increasing weight within CFC reports. For instance, starting with the 11th CFC (2000–2005), detailed criteria have been used for allocating funds to local governments. The transfer of funds from central government to states has become more transparent and formula-based. The recommendations of the CFC are presented to the Indian parliament and normally implemented by the central government without modification.

Increasing central funds for local governments. Direct earmarking by CFCs for local governments began with the 10th CFC after clause 280(c) was inserted into the Constitution of India. The CFC allocated local governments Rs. 1,000 crore (US$222 million) for 1996–2000, calculated on the basis of (1) slum populations in each state, (2) matching investments from local governments for service costs, and (3) the funds needed for the non-establishment portion of operations and maintenance (O&M) of services. The 11th CFC increased the amount to Rs. 2,000 crore (US$444 million) for 2006–2005 on the basis of the urban population of states, per capita nonagriculture income, own-revenue efforts, and a decentralization index. Subsequently, the 12th CFC increased the amount further to Rs. 5,000 crore (US$1.1 billion) for 2006–2010. The 12th CFC made an important departure from previous practices by earmarking 50% of the grants for implementing solid waste management projects through public-private partnerships (PPPs). It marked a specific effort to advance infrastructure development and leverage private resources.

The president constituted the 13th CFC (2011–1015) in November 2007 and presented its report in January 2010.[2] The 13th CFC has, for the first time, linked the local government earmark to a share of total central government revenue, rather than a set amount. For this reason, the 13th CFC earmark is a quantum leap in resources for local government—5 times higher than the previous CFC of Rs. 1,000 crore (US$222 million) per annum. At the same time, it emphasizes a wide range of administrative and financial viability challenges that will need to be dealt with during the coming 5-year period.[3]

2 The entire record of the 13th CFC, including the technical studies that were prepared, is available at http://fincomindia.nic.in/default.aspx.

3 The 13th CFC, 2009, "Report of the 13th Finance Commission," Chapter 10, Local Bodies, http://fincomindia.nic.in/writereaddata/html_en_files/tfc/Chapter10.pdf.

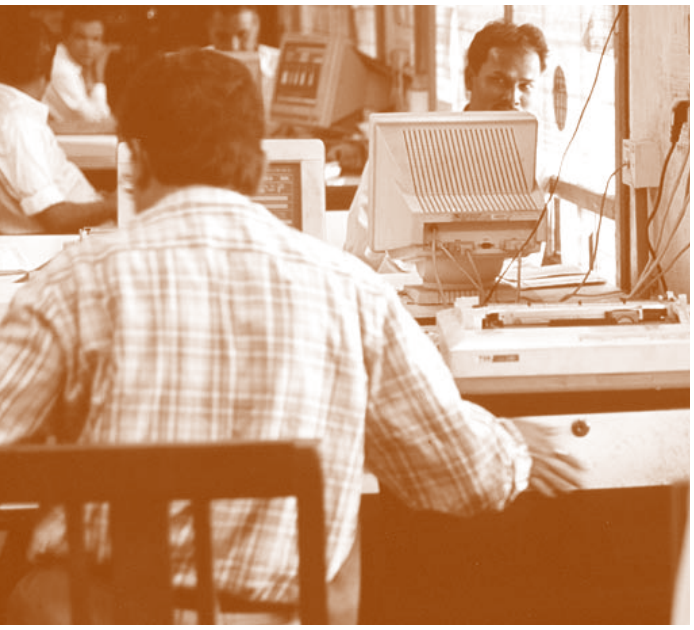
13th CFC reform agenda. It is important to recall that the 13th CFC views are consistent with the Ministry of Urban Development (MoUD), which had made a strong plea for higher allocations. The 13th CFC recommends grants-in-aid to local bodies to the tune of Rs. 87,500 crore (US$19.4 billion). Thirty-four percent of the fund is contingent on a reform agenda at the state and local levels during the first year of the 5-year period. The objective of these reforms is to create a better enabling environment for municipal finance:

- Introduce double-entry, accrual accounting, based on the National Municipal Accounting Manual
- Improve municipal auditing by assigning greater oversight to the Comptroller and Auditor General (C&AG)
- Appoint an independent ombudsman to check corruption and malpractices in local governments
- Set up electronic banking so grants are transferred with greater transparency and timeliness
- Specify qualifications for all members serving on SFCs
- Levy property tax on all urban properties, including central and state government-owned properties
- Constitute a state property tax board that establishes norms for the property tax system to promote more complete coverage and revenue enhancement
- Set service standards to be accomplished during the subsequent financial year, particularly in relationship to core municipal services, such as water supply, sewerage, storm water drainage, and solid waste management
- Establish a local government fire fighting service in all cities over 1 million people

State Finance Commissions. SFCs are relatively new entities in India; they were established by the 74th CAA in 1992 and function for 5 years. SFCs are supposed to provide a bottom-up mechanism for assessing municipal finance requirements, by collecting data from all the local governments in the state. SFCs summarize this information in a development plan (DP), which covers the physical infrastructure and financial backlogs of each district and metropolitan area. Although the DPs have been implemented only to a limited extent, they serve as the basis for making recommendations to the state legislature.

The recommendations cover the 5-year term of SFCs and should focus on (1) the principles for determining the state-local government distribution of taxes, duties, tolls, and fees levied by the state; (2) the types of fiscal powers that should be devolved to local governments; (3) the grants-in-aid to be transferred to local governments from the consolidated fund of the state (and any conditions therein); (4) the measures needed to improve the financial viability of local governments; and (5) any other matters referred by the governor in the interests of sound municipal finance.

Even though the mandate for SFCs is clear in the Constitution of India, state governments determine their actual functioning and whether the recommendations get implemented. The states have discretion over the composition of SFCs, the qualifications of their members, and the manner in which the members are selected. A SFC conducts its analysis based on the powers stipulated by the state legislature. The state governor presents the SFC recommendations to the state legislature in an action taken report (ATR) for implementation.



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However, while reviewing the progress of SFCs, the 12th CFC concluded that several states did not appoint SFCs on a regular basis; the recommendations of SFCs are not acted on by many states; and even when the recommendations are accepted by the state governments, annual budget allocations are not adequate. This has contributed to an ad hoc transfer system in many states, without taking into consideration the expenditure needs of local governments. In reality, the fiscal situation of many state governments has been very weak, with high deficits and outstanding liabilities. State governments have not been in a position to provide sufficient funds to their local governments, per the recommendations of SFCs.

While the SFC reports may be seen as critical inputs for the CFC's own work, there is no coordination of the 5-year periods or of the timing of report submissions. While most states constituted the first and second

SFCs, after the ratification of the 74th CAA, far fewer did so for the third SFCs—those that should have provided input into the 13th CFC. Only nine states submitted reports to the 13th CFC. Five challenges summarize the current situation of most SFCs that need to be resolved.[4]

1. Delays in constituting SFCs and completing their reports
2. Lack of coordination with the CFC
3. Limited data on state and municipal finance
4. Inconsistent analytical methodologies across local governments and states
5. Ad hoc acceptance of SFC recommendations by state governments, unlike the CFC reports by the central government

Center-state-municipal finance relations would benefit from an intergovernmental transfer system based on prespecified principles and objective/measurable indicators. However, the issues of intergovernmental transfers to local governments have not received sufficient attention in India. Moreover, most transfers from states to local governments are at the states' discretion. As these are not determined based on any normative analysis, they are highly unpredictable sources of revenue for local governments. This contrasts with the transfers from the center to states, which are based on the recommendations of the CFCs and objective formulas.

Strengthening the Role of State Finance Commissions

The intergovernmental transfer system needs restructuring. Intergovernmental transfers from state governments should be based on principles of objectivity, transparency and predictability. The FIRE (D) Program advocates the following criteria.

- Transfers must either relate to a hard budget constraint of a local government or to specific grant schemes, like infrastructure development or pro-poor activities.
- The amount and frequency of transfers must be predictable.
- Transfers must be transparent through explicit and identifiable entries in government budgets.
- Allocations must be predetermined rather than open-ended.
- Transfer schemes must include incentives for promoting city financial viability and effective public service delivery.

A simple distribution formula that gives due weight to these considerations, as well as the provision of minimum basic services, should be designed.

The fiscal decentralization process in India is undergoing a systematic reform to minimize the gap among funds, functions, and functionaries. Recognizing that the financial requirement of local governments is huge and cannot be met by government grants alone, both the CFC and SFCs have emphasized financial management reform and measures to strengthen the revenue base of local governments.

Since urban development is a state subject, SFCs need to play a more crucial role in developing a framework for fiscal reform. For example, SFCs would be suitable institutions for implementing a standardized urban indicator system, to be aggregated within a national-level database. This would not only help SFCs fulfill their core mandate, but it would also provide important benchmarking for progress in the sector and allow external scrutiny by credit rating agencies, potential investors in infrastructure projects, and the public.

As an extension of these roles—as data collector, performance monitor, and advisor on fiscal relations/transfers—SFCs, or complementary state institutions, could serve as municipal finance regulators (i.e., municipal commissions).[5] This statutory role, currently absent in India, could significantly strengthen the urban reform agenda and efforts to improve city financial viability. It would require making SFCs more permanent institutions and giving them enforcement powers, based on agreed-to standards, to convert some of SFC recommendations into formal fiscal mechanisms. This potential role further underscores the importance of first developing a transparent and objective transfer system that relies on specific indicators and conditions.

4 Om Prakash Mathur and George Peterson, 2006, "State Finance Commissions and Urban Fiscal Decentralization in India," USAID: New Delhi, India, http://www.usaid.gov/in/our_work/publications. html.

5 There is tremendous need for (1) bottom-up assessments of real fiscal situations to improve transfers, (2) assigning of suitable revenue powers to local governments, (3) monitoring of fiscal performance based on objective data, (4) encouragement of local governments to have more authority to levy taxes and user charges, and (5) allowance of local governments to borrow, as required, so long as they confirm to a debt limitation policy.

Chapter 4 Annexes

Annex 4-1. Minimum Physical Standards of Service

Service	Population/Area Target	Service Level Target
Water supply	• 100% population to be covered	• Piped water supply with sewerage: 150/135 lpcd • Piped water supply without sewerage: 70 lpcd • Public stand posts in the low-income settlements with minimum supply of 40 lpcd
Sanitation/sewerage	• 100% city area to be covered by sewerage system with treatment facilities in large urban centers • Low-cost sanitation methods for other urban areas	• Large city: Full coverage of sewerage with treatment • Medium towns: Public sewers with partial coverage by septic tanks • Small town: Low-cost sanitation methods • In low-income areas of large cities, community latrines may be provided
Solid waste collection disposal	• All the solid waste generated should be collected and disposed of	• 100% collection of generated waste, with its proper disposal • Hazardous wastes, such as hospital wastes, must be incinerated in all cases, whereas mechanized composing and incineration is recommended for large urban centers, sanitary landfill method of disposal may be used in small and medium towns

Primary education	• Fulfillment of national goal of universal elementary education for children up to 14 years of age	• Provision of primary school in all areas of country as per the following guidelines:
		  ◦ At least three reasonably large all-weather rooms with teaching materials
		  ◦ At least one teacher per class room/section
		  ◦ One primary school for every 3,000-4,000 population; area: 3 acres; seats/school: 300-400
		  ◦ To improve enrollments at the upper primary stage, especially for girls, the walking distance of school should normally be 2 km; in case of primary schools this standard is 1 km

Primary health care	• Health for all	• Basic health and family welfare services within 1-2 km distance of residents • One health center for 20,000 population

Source: M.P. Mathur et al., 2007, "Norms and Standards of Municipal Basic Services," New Delhi: National Institute of Urban Affairs (NIUA), Working Paper 07-01, p. 4.

Annex 4-2. Prioritizing Core Processes for Reform and BPR under E-Governance

The following is an excerpt from the FIRE (D) Program, 2005, Assessment Phase: Synthesis of Principal Findings and Conclusions and Inputs for Design of National Mission Mode Project E-Governance in Municipalities, New Delhi: India, p. 62.

Prioritization

This annex outlines the prioritization in implementation of the modules, keeping in mind factors like criticality of the process to the working of the urban local governments and the extent of work involved in bringing about the transformation. The efforts should be directed to make the internal systems stronger before bringing about citizen-centric changes; otherwise, credibility issues in data could arise.

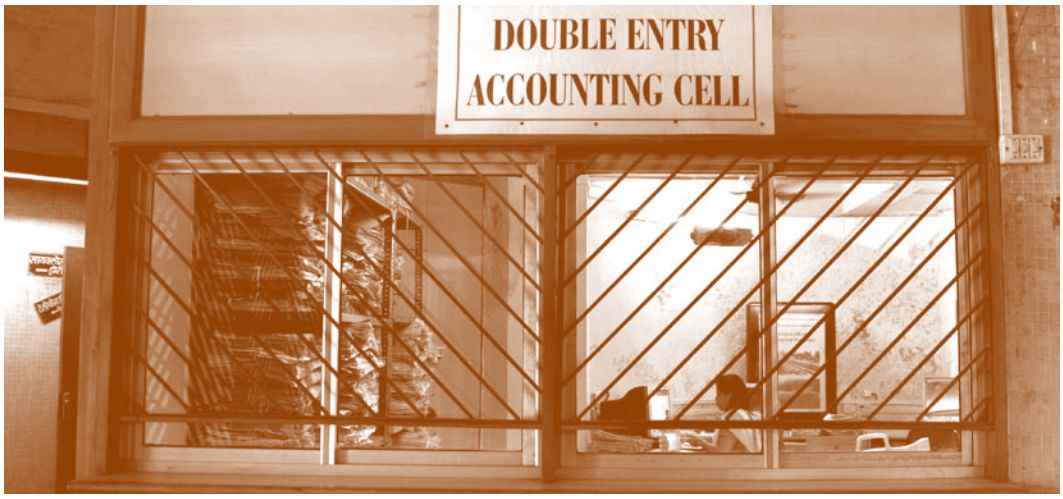
Another factor that needs to be taken into account is the use of "masters" (one-time, permanent sets of identifying information common to various modules) created in the modules and taken up for implementation in subsequent modules, with a view to help in integration of data. (For example, the database for properties is created in the module for property tax. The same properties are subject to water tax. The unique property ID created in the first module can be used in the module for water tax only if the water module is implemented in a subsequent phase.)

Rationale for Sequencing

The sequencing of various modules is shown in Figure 4A-1 below, taking into consideration realistic factors in implementation. The timeline shown is indicative of the relative volume for a medium-sized local government and the general status of records availability. The figure shows an indicative break-up of the time needed for basic data preparation/database creation, implementation, and internalization.

The following considerations are important in this regard.

- Taking accounting as the base and linking other modules to it provides credibility to the numbers and enhances the quality of information available for management decisions. Also, since a national-level common accounting framework is available through the National Accounting Manual, establishing the accounting system provides accepted norms and commonality at the national level.
- There is a need to initially focus on revenue modules, like property tax or issue of birth and death certificates, with a view to increase revenue flows. These increases could even fund some of the subsequent activities.
- Visibility of the initiatives is also important, and hence citizen interfaces, like web-enabled status updates of various citizen payments and complaints monitoring, could provide some popularity gains for the local government. However, ensuring availability of credible information in this regard is very crucial.



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Sequencing

1. **Property Tax** being the principal revenue item and having huge database creation and validation requirements has been taken up first. The data validation and cleaning efforts take time and need to be attempted first, as there would already be some basic data, though incomplete in many respects. This would also help create a master of addresses in the city. The occupant(s) of a property, where it is different from the owner, would also be captured, since the liability of tax is on the occupant. Also, the tax treatment changes in case of non-owner occupancy.

2. The focus then shifts to strengthening the **Financial Accounting System**, since all processes revolve around this module and most of them need to be linked to accounting. If such a linkage is not planned right at the beginning, there would be activities for which accounting heads may not match, or differences may arise in financial figures between various modules that may require additional reconciliation efforts, and so on. Hence, the credibility and integrity of the initiatives would depend on this linkage, which would need to be taken up along with the Property Tax module.

3. Internal performance assessment framework is considered the backbone for efficient management and needs to be addressed by the **Personnel Management System**, which is shown next. The initial focus would be to capture the organizational hierarchy. The posts would be linked to the various account codes so that the cost of providing services could be correctly determined. This would be followed by the assigning rights and privileges for access to the databases, as well as the duties/responsibilities. This would be followed by the database of the employees, which would be linked to a particular post in the organization hierarchy. The last activity would be to automate the payroll details and link them to the accounting system. The system would also help keep track of the liability toward employee dues and thus help in keeping the accounts up to date.

4. The **Birth and Death** modules are taken up next, since this would help create a master of residents of the city. In the case of births, the database would also capture the names of both parents. In the case of deaths, the name of the existing resident would be captured. The births and deaths module is also related to property addresses. Owners/occupants of properties should be linked to this database to increase the credibility of the data.

5. The **License** module, in the context of this assessment study, refers to Food License, which is part of the health services provided by a municipality. Various procedures that need to be followed for granting a Food License have been considered. Procedures in relation to granting of licenses generally follow a certain sequence, like application, verification, licensing, renewal, penalty, etc. Those suggested for Food Licensing can be adopted for other licenses also. License fee collection should be linked to the Financial Accounting System once it is in operation. Licensing can start operating as soon as databases are built. Various modules in this regard need to be linked to provide validation of different information. For instance, a license holder would be required to be on the resident master created in the Birth and Death database. This would also help in updating the residents' database in case the license holder is not already included in that database.

6. The **Water Supply** module is the next to be implemented. This module must link closely with the Property Tax and Financial Accounting System modules.

7. Once these core processes are built up, the **Citizen Grievance Monitoring** system can be implemented. The availability of the databases for the above six modules provides credibility when grievances are raised by citizens. The supply of information provided by the municipality (and its credibility) also needs to be established before triggering the demand for information needs of citizens/users. When lodging grievances, in the case where a resident does not already exist in the database, the name would be added before he/she can lodge a grievance. The module would closely link with the services (included in the Financial Accounting System module) that are provided by the local government. The employee responsible for taking care of grievances (who is the same as the employee responsible for providing the service) is also identified in the process.

8. The **Projects/Ward Works** management module can be taken up next. This module requires a lot of database creation and analysis of existing works and their statuses. This module can be started once the asset inventory is completed for the Financial Accounting System module. New asset creation, as well as repairs and maintenance, are linked to the expenditure accounting aspect of the accounting module. There would also be a close linkage of the Projects/Ward Works package with the Citizen Grievance Monitoring module. This would help trace the history of a work/service for which there is a grievance. Also, new works/repairs might have to be taken up to resolve a grievance.

9. The **E-Procurement** module is taken up once the Project/Ward Works module is complete. Linkage to the Financial Accounting System module would help in updating the liability of the local government toward its contractors.

10. The **Building Plan Approval** module is connected to the Property Tax and Financial Accounting System modules. This module is linked to the Property Tax module as approved properties become eligible for property tax levy. Also, since the existing buildings might come up for approval (due to modification, etc.), links to the Property Tax module have to be established properly.

11. **Solid Waste Management**, as an initiative, is taken up slightly later, assuming that various basic plans for infrastructure are not initially available in the municipality. Depending on the level of readiness, this module's launch can be accelerated. It will be advisable to link this module to the Financial Accounting System module.

These steps are only a suggested guideline. Actual sequencing needs to be based on actual field conditions. The integration with the Financial Accounting System module through proper accounting heads and establishing common databases are some of the key issues that need to be considered.

Timelines

Building up of databases for the Property Tax, Birth and Death, and Food Licensing Modules can start simultaneously, since there is an element of overlap in the type of data to be collected with specific regard to residents. Building one comprehensive database to serve all these modules would reduce duplication in data collection efforts. Implementation of the Financial Accounting System and Personnel Information System usually take the longest time, since implementation of the other modules involves changes to the processes in the Financial Accounting System and linkages to the Personnel Information System. Also, in most cases, there will be a shift from cash basis of accounting to double-entry, accrual accounting. This requires a systematic approach. The Projects/Ward Works module, which is also database intensive, could also consume significant time. In such cases like Property Tax, Projects/Ward Works, License, etc., the local government should commence database creation properly so that sequencing of modules and rollout happen as planned. The E-Procurement and Citizen Grievance Monitoring modules can operate once the web-enablement is ready. Depending on the volume and availability of data and their correctness and the preparedness of management, the timeline might vary.

Figure 4A-1. Prioritization of Core Processes for Reform and BPR under E-Governance