Urban Development through JNNURM
From Definition to Delivery

Background Paper
Cityscapes 2008:
Convention on Urban Infrastructure
April 16 & 17, 2008, Federation House, New Delhi

Report by
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1 BACKGROUND

The Jawaharlal Nehru Urban Renewal Mission (JNNURM) marks an important milestone in the reform agenda of the Government of India. The scheme launched in the end of 2005 recognizes that mere funding of infrastructure projects alone will not enable in transforming cities and what is required is a clear focus on a set of reforms to be undertaken both at the state and the Urban Local Body (ULB) level. The scheme was thus designed in a manner that supports the creation of infrastructure in cities through a Government of India assisted fund that would be provided as grant to a set of 63 large cities in the country for a seven year period commencing 2005-06.

Two years have passed by and the Mission has opened up an unparalleled window of opportunity in the urban space. What the country witnesses today is a large set of stakeholders running a race to create ‘transformed cities’ which offer urban services in a sustainable and efficient manner. The scheme emphasizes the necessity for the ULBs to re-engineer their processes to improve their service delivery levels and also reiterates the states to create a conducive environment for urban infrastructure investments. The first level of the scheme requirements has been fulfilled by the states and the mission cities (signing of a MoU between the centre, state and the ULB, identification of investment requirements through the city development plans and preparation of detailed project reports for accessing the funds) and many cities have moved further and deeper into their reform commitments. We stand at the right juncture to evaluate the progress the Mission has achieved, the levels of sanctions and disbursements of funds, evaluation processes and the improvements required to complete the Mission successfully.

Cityscapes is an event launched by FICCI which aims at creating a platform for deliberation amongst the stakeholders in the urban infrastructure space to identify the opportunities and challenges thrown up by the massive investment requirement in the sector. Cityscapes 2008 focuses on brainstorming the ways to meet the challenges of infrastructure investments in the urban sector by evaluating the JNNURM’s progress. This background paper prepared by CRISIL Infrastructure Advisory provides the salient features of the scheme, updates the progress in the past two years, evaluates the progress achieved, discusses the warning signals and dovetails a way forward to achieve the mission objectives.
2 OBJECTIVE AND STRUCTURE OF THE PAPER

Keeping in line with the JNNURM objectives of bringing about changes in the way investments and service delivery provision is planned by the urban local bodies, this paper is aligned towards understanding how far the mission objectives have been understood and implemented in the two years that have passed by. The paper underscores the importance of the mission and the challenges in implementation. The paper is restricted to the urban infrastructure component of the JNNURM.

The first part of the paper provides an overview of the mission in terms of its need, objectives and components. Chapter 3 details the composition and applicability of the central assistance, the funding pattern for projects undertaken by ULBs and the monitoring framework.

Chapter 4 of the paper provides an assessment of the progress of the mission and brings to fore certain bottlenecks from the practical perspective of project implementation. The last part of the paper (chapter 5) provides the way forward in terms of action points to be undertaken for successful completion of the mission objectives.
3 THE JNNURM FRAMEWORK

3.1 The need for a reform oriented scheme

There have been some schemes sponsored by the Centre like the Accelerated Urban Water Supply Programme, Integrated Low Cost Sanitation Programmes, Mega City Scheme, National Slum Development Programme, etc. However, they had some inherent deficiencies in operational issues like policy overlaps, lack of autonomy at ULB level and funding not based on the delivery outcomes.

Efforts were directed towards urban development during the last decade. The 74th Constitutional Amendment Act, 1992 is regarded as the key step in the urban development process. The objective was to provide constitutional status to ULBs and devolution of functional power and responsibilities to municipalities. It was aimed at making the ULBs responsible and accountable in the development chain by strengthening municipal governance. Other notable reforms introduced to improve financial management and accountability of ULBs include:

1. Urban Reforms Incentive Fund – Policy initiative aimed to encourage reforms in ULBs
2. Model Municipal Law – Guidelines for states to transform the municipal legal framework

Due to rapid urbanisation, the requirements for urban infrastructure were growing at a pace faster than expected. ULBs which are the responsible for service provision to the citizens were grappling with serious issues in terms of meeting the minimum service delivery standards. While on one hand huge investment requirements were to be met, on the other hand it was important to make the ULBs to commit to certain reforms so that their revenue streams could be improved. Therefore, the need to design a scheme combining these two requirements was felt.

The following sections detail the urbanisation trends and investment requirements which were crucial in designing such a scheme.
3.1.1 Urbanisation trends

About 285 million people in India (or 27.8\% of the total population) live in urban areas, as per 2001 Census. With a growth of around 2.7\% annually, India’s urban population would be world’s second largest and this is estimated to reach 41\%\(^1\) of the total population by 2030 adding additional 271 million people to its urban fabric. The importance of India’s urban sector doubles from the fact that the urban sector contributes an estimated 50\%-52\% to India’s net domestic product.

Urbanisation Trends in India

<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>2005</td>
<td>2005</td>
<td>1950</td>
<td>2030</td>
</tr>
<tr>
<td>1,096.90</td>
<td>315.3</td>
<td>17</td>
<td>29</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>41</td>
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<td></td>
<td></td>
<td></td>
<td>270.8</td>
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<td></td>
<td></td>
<td></td>
<td>86</td>
</tr>
</tbody>
</table>

Nevertheless, as per the ADB’s Technical Assistance Report on Support for the Jawaharlal Nehru National Urban Renewal Mission Project, “India’s cities are characterized by widespread poverty, inadequate urban infrastructure, and environmental degradation. The 2001 population census found that although 91\% of India’s urban dwellers had access to drinking water, only 49.7\% of households had tap water on their premises. Similarly, only 57.4\% of urban households had sanitation facilities on their premises. It must be noted that existence of the service does not imply its adequacy or quality, so the effective situation may be worse. Slums, another highly visible manifestation of urban poverty, housed approximately 40 million people, representing around 14.12\% of the total urban population in India in 2001. Urban poverty has declined from 52\% in 1972–1973 to 23.6\% in 1999–2000, but this percentage represents 65 million people who live in absolute poverty.” The numbers give a startling picture of the state of affairs of the urban infrastructure which require not only an immediate answer to redress the plight experienced but also seek long lasting solution that would help the urban bodies sustain the pressures put by the increasing population and demand for facilities.

\(^1\) Urbanization and Sustainability in Asia, ADB
Keeping in view the above statistics of rapid urbanization of Indian cities and the current levels of basic infrastructure in terms of transportation, water supply, sewerage and sanitation, amongst others would be glaringly inadequate and require huge funds.

### 3.1.2 Total requirements

As against the estimates quoted by the Planning Commission for the 11th Five Year Plan, CRISIL also estimated the requirement of investments in the Urban Infrastructure based on various sources\(^2\).

The 11th Five Year Plan, as evident from the report of Working Group Committee estimates the requirement for urban infrastructure of Rs.186,619 crores (USD 28.7 billion) based on the additional population growth expected by 2012 and augmentation of existing facilities to achieve 100% coverage. For individual sectors broad estimates of required investments are as follows:


<table>
<thead>
<tr>
<th>Description</th>
<th>Rs. Crores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Transport</td>
<td>57,400</td>
</tr>
<tr>
<td>Urban Water Supply</td>
<td>53,666</td>
</tr>
<tr>
<td>Sewerage &amp; Sanitation</td>
<td>53,168</td>
</tr>
<tr>
<td>Drainage</td>
<td>20,173</td>
</tr>
<tr>
<td>Solid Waste Management*</td>
<td>2,212</td>
</tr>
</tbody>
</table>

**Total Investment Required in 11th FYP** 186,619

* Additional investments of Rs.2,445 crores will be made from allocations under 12th Finance Commission

Source: Planning Commission

Due to the rise in urban population, RITES\(^3\) (1998) estimated that the travel demand would grow 3.5 times between 1991 and 2021. Based on this rising demand scenario, the

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\(^2\) Urban infrastructure faces paucity of data and thus CRISIL relies on estimates in different sub sectors made by different studies of Planning commission, World Bank, Finance Commission, ADB and CRISIL’s assessment of City Development Plans prepared for 25 cities under JNNURM. These 25 CDPs cover 42% of total urban population of 63 towns covered under JNNURM. These estimates differ on investment requirements because of difference in assumptions on costs, population, and coverage and thus will indicate the range of investment requirements.

\(^3\) RITES: Rail India Technical and Economic Services
Report of the Eleventh FYP’s Working Group on Urban Transport estimates that total investment requirements for the urban transport infrastructure to be nearly Rs.57,400 crores (USD 12.8 billion). Out of this, nearly 56% or Rs.32,000 crores is proposed for mass rapid transport system only. The working group recommends that funds to be channelled towards road infrastructure and facilities for pedestrians will have to come from the public budget. It suggests that only city bypasses may be constructed on a BOT basis, as toll collection in such cases is possible. Further, investments in parking facilities, terminals, bus operations, and high cost public transport systems (such as the MRTS/BRTS) may be encouraged through the PPP route.

The investment requirements for water supply and sanitation (includes sewerage, low cost sanitation and drainage) assuming the population of 36.5 crores and 100% coverage by the end of 2012 is estimated at Rs.127,007 crores (USD 28.2 billion). Of this investments in water supply would be Rs.53,600 crores and sanitation (including sewerage) facilities would be Rs.53,168 crores. Thus investments in water supply can anywhere between Rs.69,500-107,000 crores.

Similarly, based on standard cost estimates for modernization of solid waste management practices in various city categories a waste management scheme for 423 Class I cities\textsuperscript{4} indicating a need of approximately Rs.2,445 crores. This along with Planning Commission estimated to address the needs of increased urban population in class I towns and to cover the population in other towns would sum up to of Rs.4,600 crores.

At such a baffling point, the Government of India launched what is considered one of the most impact-oriented program wherein it tried not only to find and fund appropriate needs to create urban infrastructure (in select cities) but also innovate ways and measures where it ensured to create right kind of responsibilities at the local level to manage such assets created out of Central funds by linking disbursement of funds with promotion of reforms by local bodies on one hand and also making local bodies undertake responsibility to partially funding such infrastructure developments. Hence it aimed to address both sides of the coin by addressing financing as well as managing aspects of the much-needed problems. At the same time, the Central government also ensured to undertake such reforms at State-level giving urban local bodies (ULBs) enough lee way to assume responsibility, and execute reform programmes in the best interests of such local body. The thrust is on ensuring improvement in urban governance and service delivery so that ULBs become financially sound and sustainable.

\textsuperscript{4} Report of committee constituted by Ministry of Urban Development
for undertaking new programmes and create conducive environment to attract private players to undertake infrastructure building and managing activities at local body levels.

### 3.2 The framework of the scheme

The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched – in December 2005 – with the objective of development of infrastructure services in cities and building a linkage between asset-creation through projects and asset management through reforms on one hand and providing basic housing and other civic services to poor on the other. The program consists of two sub-missions – Urban Infrastructure and Governance (UIG) administered by the MoUD and Basic Services for Urban Poor (BSUP) by Ministry of Housing and Urban Poverty Alleviation (MoHUPA) – which cater to 63 identified cities. For such services in the rest of around 5000 cities and towns in the country, the government conceptualized the Urban Infrastructure Development Scheme for Small and Medium towns (UIDSSMT) and Integrated Housing and Slum Development Programme (IHSDP) with a total investment commitment of Rs. 20,000 crores from the centre. The JNNURM, on the other hand, envisages an investment of more than Rs 1,20,000 crores with a commitment of Rs 50,000 crores from the Central government in the form of grant and to be implemented in a time frame of seven years (2005-06 to 2011-12). The JNNURM will finance, on a grant basis, between 35% and 90% of the costs associated with urban infrastructure investments, depending on the classification of the city.

### Funding pattern under JNNURM

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
<th>No. of Cities</th>
<th>Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ULB's Centre</td>
<td>State</td>
</tr>
<tr>
<td>A</td>
<td>More than 4 million</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>More than 1 million and less than 4 million</td>
<td>28</td>
<td>50</td>
</tr>
<tr>
<td>B</td>
<td>Selected cities with less than 1 mln</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Cities in the North East and J&K  
  Admissible: 90
  Inadmissible: 10

- Others  
  Admissible: 80
  Inadmissible: 10

Desalination Plants (any city)  
  Admissible: 80
  Inadmissible: 10

### Components under JNNURM

<table>
<thead>
<tr>
<th>Urban Infrastructure &amp; Governance</th>
<th>Basic Services- Urban Poor</th>
<th>Inadmissible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Supply &amp; Sanitation</td>
<td>Slum Rehabilitation</td>
<td>Land Cost</td>
</tr>
<tr>
<td>Sewerage &amp; Solid Waste Management</td>
<td>Street Lighting</td>
<td>Power &amp; Telecom</td>
</tr>
<tr>
<td>Urban Transport</td>
<td>Provision of Civic amenities</td>
<td>Health &amp; Education</td>
</tr>
<tr>
<td>Urban Renewal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To ensure that the right kind of attention is given to the cities with highest concentration of population and need for infrastructure, Mumbai, Kolkata, Delhi, Bangalore, Chennai, Hyderabad and Ahmedabad – India’s cities with 4 million plus populations – have been allocated 47.5 percent of the funds. The government has also assigned 47.5 percent of funds to the next 28 largest cities, having a population over 1 million. The remaining 5 percent of funds has been provided to 28 other cities that are state capitals or have religious or other significance.

JNNURM estimated that 63 cities would require total investments of Rs.120,536 crores, over a seven-year period. However, the CDP analysis shows that only 25 cities (with total population of 5.05 crores) have estimated requirement of Rs.118,711 crores. When estimated in these lines the total investment requirements will be over Rs. 600,000 crores by 2012.
The Jawaharlal Nehru National Urban Renewal Mission (JnNURM) was launched – in December 2005 – with the objective of development of infrastructure services in cities and building a linkage between asset-creation through projects and asset management through reforms on one hand and providing basic housing and other civic services to poor on the other. The program consists of two sub-missions – Urban Infrastructure and Governance (UIG) administered by the MoUD and Basic Services for Urban Poor (BSUP) by Ministry of Housing and Urban Poverty Alleviation (MoHUPA) – which cater to 63 identified cities. For such services in the rest of around 5000 cities and towns in the country, the government conceptualized the Urban Infrastructure Development Scheme for Small and Medium towns (UIDSSMT) and Integrated Housing and Slum Development Programme (IHSDP) with a total investment commitment of Rs. 20,000 crores from the centre. The JNNURM, on the other hand, envisages an investment of more than Rs one lakh crores with a commitment of Rs 50,000 crores from the Central government and is to be implemented in a time frame of seven years (2005-06 to 2011-12).

Programmes under JNNURM

City Development Plan (CDP)

In order to be eligible for the grant assistance under JNNURM, the Government of India requires eligible cities to first formulate a medium-term City Development Plan (CDP). The CDP outlines policies, programs and strategies, and a financing plan for a timeline of 20-25 years. It includes identification and prioritisation of projects, under the various sectors of urban development such as roads, water supply and sanitation and housing. Consultation with stakeholders forms an integral part of development of the plan and also while preparing DPRs for the projects.

A CDP also studies current status of reforms in the ULB and proposes implementation of reforms as required by the Mission.
Projects pertaining to the following are admissible under the Sub-Mission on Urban Infrastructure and Governance:

1. Urban Renewal - redevelopment of old city areas like widening of narrow streets, shifting of industrial/commercial establishments from non-conforming to reduce congestion, replacement of old and worn-out water pipes by new/higher capacity ones, renewal of sewerage/drainage/solid waste disposal systems, etc
2. Water Supply (including de-salination plants) and sanitation
3. Sewerage and Solid Waste Management
4. Construction and improvement of drains/storm water drains
5. Urban Transport, including roads, highways, expressways, MRTS, etc
6. Parking lots/spaces on Public Private Partnership basis
7. Development of heritage areas
8. Prevention & rehabilitation of soil erosion/landslides only in case of Special Category States where such problems are common and Preservation of water bodies.

As part of the Mission, ULBs need to implement certain reforms. The main thrust of reforms implementation is to ensure improvement in urban governance so that ULBs become financially sound with enhanced credit rating and ability to access market capital for undertaking new programmes and expansion of services.

With the help of this improved environment, public-private participation models for provisioning of various services would also become feasible. To achieve this objective, State Governments, Urban Local Bodies and para-statal agencies will be required to accept implementation of an agenda of reforms.

All mandatory reforms need to be implemented by ULBs within the Mission period.
Detailed Project Reports (DPRs)

For the projects that are identified in the CDP, DPRs are prepared by the ULBs and submitted to the Centre for approval. The process of appraisal and approvals of the projects is presented in the next section.

Memorandum of Agreement (MoA)

As a part of the reforms implementation component of the Mission, a tripartite agreement called the Memorandum of Agreement (MoA) is signed by the State Government and the ULB with the Government of India indicating their commitment to implement identified reforms. This document would list out the specific milestones to be achieved for implementation of each reform. The signing of this agreement is a necessary condition to access Central assistance.

3.3 Institutional arrangements

The Centre has set-up a number of agencies which are assisting it at various level and capacities towards the implementation of the Mission.

National Steering Group (NSG)

The National Steering Group (NSG) is Chaired by the Minister of Urban Development and other members include the Secretaries of other ministries involved in the Mission. It has been set-up to provide policy oversight and evolve policies to facilitate the achievement of JNNURM objectives. It also reviews the agenda of reforms and progress of the Mission.

Sub-Mission Directorates (SMD)

It takes care of the operational issues of the Mission and has two sub-missions – SMD for Urban Infrastructure and Governance and SMD for Basic Services to the Urban Poor each of which takes care of the respective Mission components.

Central Sanctioning and Monitoring Committee (CSMC)

There are two such committees, one each for Urban Infrastructure and Governance and Basic Services to the Urban Poor. The objective of these CSMCs is to sanctioning of projects submitted by ULBs and the monitoring of the projects and associated reforms.

State-Level Steering Committee (SLSC)

It is a State-level apex body set-up in order to identify, decide and prioritise the projects for inclusion in JNNURM. The identified projects are recommended to the respective
CSMCs for sanction. Besides recommending projects for sanction, the SLSC monitors implementation of the projects and reviews the progress of urban reforms in the State. The SLSC is assisted by the State Level Nodal Agency (SLNA).

State Level Nodal Agency (SLNA)

The mission is implemented by a SLNA designated by the respective State governments. The SLNA performs a number of functions, such as:

1. Assisting ULBs in the preparation of CDPs and DPRs and in capacity building,
2. Appraising projects submitted by ULBs,
3. Obtaining sanction of State Level Sanctioning Committee,
4. Managing grants received from the Central and State governments,
5. Releasing funds to ULBs as grant,
6. Managing Revolving Funds,
7. Monitoring of physical and financial progress of sanctioned projects and ensuring receipt of utilisation and completion certificates,
8. Monitoring the implementation of reforms as committed in the MoA,
9. Submitting quarterly reports to MoUD/ MoUEPA.

The SLNA is an important agency responsible for the implementation of the Mission.

Technical Advisory Group (TAG)

The TAG comprises professionals across the legal, environment, social and urban infrastructure sectors. This group would assist the CSMCs, SLSC, SLNA and ULBs. The TAG should encourage private sector participation, citizen’s involvement in urban governance at the grass-root level and transparency in municipal governance.

### 3.4 Urban infrastructure component

The following sections present the process by which ULBs apply for funds for projects.

Appraisal of projects

DPRs prepared by ULBs are submitted to the Technical wings of the Ministry. These reports are scrutinized by teams and sometimes by specialized/technical agencies. The DPRs are then forwarded for sanction by Central Sanctioning and Monitoring Committee (CSMC).
Sanction of funds

The Ministries are the repositories of funds targeted for the JNNURM scheme. On approval and sanction of assistance by the CSMC, funds are released by the MoUD and MoUEPA. The funds are released in the form of four installments as Additional Central Assistance (100 per cent grant in respect of Central share) to the State Government or its designated State-level agencies.

The first installment of 25 per cent is released upon signing of the MoA. The balance amount is released in three installments upon receipt of Utilisation Certificates, from the ULBs, to the extent of 70% of the Central fund and also that of the State/ULB share. This release is subject to achievement of milestones agreed for implementation of mandatory and optional reforms at the State and ULB level as envisaged in the MoA.

3.4.1 Funding pattern

Based on the Census of 2001, the funding pattern for 63 cities has been arrived at, as indicated below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
<th>No. of cities</th>
<th>Funding Pattern (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Centre  State</td>
</tr>
<tr>
<td>A</td>
<td>More than 4 million</td>
<td>7</td>
<td>35 15 50</td>
</tr>
<tr>
<td>B</td>
<td>More than 1 million and less than 4 million</td>
<td>28</td>
<td>50 20 30</td>
</tr>
<tr>
<td>C</td>
<td>Selected cities with less than 1 million</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cities in North East and J&amp;K</td>
<td></td>
<td>90 10 0</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td></td>
<td>80 10 10</td>
</tr>
<tr>
<td></td>
<td>Desalination plants (any city)</td>
<td></td>
<td>80 10 10</td>
</tr>
</tbody>
</table>

3.5 Monitoring Framework

In order to have effective monitoring system in place, the Centre has evolved mechanisms by which ULBs submit progress reports to the SLNA as well as the Ministries.
1. MoUD/MoUEPA periodically monitor the schemes through designated representatives,

2. ULBs submit Monthly Progress Reports to the SLNA for review

3. ULBs submit Quarterly Progress Reports to the MoUD/MoUEPA through SLNA

4. Upon completion of a Project, the SLNA through the State Government submits a completion report of activities undertaken as a part of JNNURM

5. The CSMC meets regularly to sanction, review and monitor the progress of projects sanctioned under the Mission

6. Monitoring of progress and implementation of reforms is also outsourced to specialized/technical agencies.

### 3.5.1 Program Management Unit (PMU)

It has been observed that the current institutional capacities of SLNAs across states vary. In order to strengthen the capacity of SLNAs and assist them to manage and implement the various tasks associated with the Mission, the Ministry has proposed to support a Program Management Unit (PMU) at the SLNAs. It is expected that the PMUs would provide technical and advisory support to the state governments and ULBs, assist in monitoring the progress and report to the Mission Directorate in the Ministry and also help in transferring the lessons learnt to non-JNNURM cities in the state.

The PMU would operate as a unit under the SLNA and focus on Program Management and Monitoring. It would consist of experts from urban infrastructure development sectors with experience in policy-making as well as implementation practices.

### 3.5.2 Project Implementation Unit (PIU)

One of the main constraints faced by ULBs which is slowing down their progress towards urban development is lack of qualified professionals. The Ministry has therefore allowed cities which have signed MoAs to engage PIUs to enhance the overall capacity for implementation of the Mission objectives.

The PIU can be set-up by ULBs as an operations unit which would supplement and enhance the existing skill set of ULBs.
4 PROGRESS UPDATE AND EVALUATION OF MISSION

4.1 Progress update

The initial measures for accessing funds through the JNNURM have been completed. That is, all the 63 cities have submitted their CDPs and most of them have signed the MOA. The progress is detailed in the following table.

<table>
<thead>
<tr>
<th>Mission cities</th>
<th>63</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDPs submitted</td>
<td>63</td>
</tr>
<tr>
<td>MOA signed</td>
<td>62</td>
</tr>
<tr>
<td>No.of cities who submitted DPRs</td>
<td>57</td>
</tr>
</tbody>
</table>

Some states and cities have an inherent advantage in implementation of reforms as even prior to the commencement of the scheme, these states had completed certain critical activities which directly or indirectly improve their revenue streams. States like Tamil Nadu had a headstart in completing reforms in accounting, property tax, e-governance and user charges (for water). Hence the accessibility of the central assistance would be faster for such cities.

The status of reform implementation completed by the cities and the status of the DPRs submitted and sanctioned is presented in the following table.

It may be noted that amongst the cities which have completed the implementation of certain reforms (marked in green), most of them had implemented the reforms prior to the launch of the scheme itself. Based on the MOAs signed, it is observed that many ULBs have committed to reforms only during the 3rd and the 4th year.
### Status of implementation and project details in 63 Mission Cities as on 20.12. 07

<table>
<thead>
<tr>
<th>City</th>
<th>e-Gov</th>
<th>Mandatory Reforms</th>
<th>Optional Reforms</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agartala, Tripura</td>
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<tr>
<td>Agra, UP</td>
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<tr>
<td>Ahmedabad, GU</td>
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<tr>
<td>Allahabad, UP</td>
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**Footnote Text**

- Accomplished
- Not accomplished any reforms
- Not signed the MoA

**Projects**

- New Proposed projects
- DPRs submitted
- DPRs Approved
- Projects sanctioned
It has been observed that maximum DPRs received and approved are for the water sector. Sector-wise break up of the DPRs approved is presented in the following figure.

**Sector-wise break-up of the DPRs submitted and percentage approved.**

Maharashtra has submitted the maximum DPRs amongst all other mission states, followed by Andhra Pradesh, Gujarat and Karnataka. The state-wise approval of the DPR is presented in the figure below. The figure also indicates the percentage of projects for which DPRs have been submitted and that have been approved by the
Centre.

Sector-wise costs of DPRs submitted, of states

The following figure indicates that the water sector has seen more focus from all the states.
4.2 Evaluation

Judging the scheme as to whether it is a success model or not would not be possible as completion of the reform milestones are spread over the lifetime of the scheme. However, an evaluation of its progress could be made to the extent of the commitment that the ULBs have shown to reforms. In addition, a fair evaluation at this juncture would bring to fore the bottlenecks faced by the states and the cities in taking the reform agenda ahead and simultaneously using the additional central assistance as a means of financing the cities’ infrastructure development. This section analyses the importance the programme has gathered and the possible bottlenecks that need to be addressed for a successful rollout of the objectives.

4.2.1 What the scheme aims to achieve

Clearly, a paradigm shift in urban strategy. By linking access to the funds to reforms, the scheme has reoriented the way the urban sector thinks. The scheme aims to ‘deep root’ good governance practices at the city level by bringing in transparency, using information technology for strengthening governance and promoting pro-poor urban governance. It establishes linkage between asset creation and asset management in a manner that the ULBs are able to aim at cost recovery for their investments.

The results in some cases are clearly visible. The benefits accruing to Pimpri Chinchwad Municipal Corporation are many. During the financial year 2007-08, the corporation which collected just about 3% of its water demand has improved its collection efficiency to around 35% (collections were at Rs. 23.5 crores in 2007-08). The active participation of the ULB in taking the reform agenda forward and improving its service efficiency is a clear fall out of the reform based programme.

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5 Through the CRISIL Awards for Excellence in Municipal Initiatives Programme 2006-07, CRISIL Infrastructure Advisory, in partnership with Ministry of Urban Development (MoUD), Government of India, has recognized and awarded those ULBs which have shown “commitment to reforms” under the JNNURM framework. Chennai, Ahmedabad, Visakhapatnam, Vijayawada, Madurai, Ajmer and Raipur were the winners under various categories.
Pimpri-Chinchwad Municipal Corporation (PCMC), Pune agglomeration

Pimpri-Chinchwad is a major industrial centre of the Pune region and also the entire country. It has witnessed a high population growth rate of around 100% in the last two decades. With a current estimated population of about 1.2 million which is fast growing, the city is focused on providing quality services to its citizens. Traditionally, the city of Pimpri-Chinchwad has been the place of work for people living in neighboring Pune. However, in the last few years, this city has started gaining its own recognition due to its citizen-friendly approach to administration. Pimpri-Chinchwad Municipal Corporation (PCMC) is the Urban Local Body of the city.

JNNURM has enabled large scale investments towards development of infrastructure facilities in the city. From being one of the first ULBs to sign the MoA for the Mission, PCMC has been working towards meeting the requirements of the Mission in order to apply for funds for its projects.

So far, projects amounting to about Rs 1,665 cores have been sanctioned by the Centre under JNNURM, and Rs 170 crores have been disbursed (including PCMC’s contribution). These projects are in the sectors of Water Supply and Sewerage, Municipal solid Waste, Slum Rehabilitation, Urban Transport and EWS. PCMC is also working towards implementation of reforms which form part of the Mission and has made good progress in the last one year. This has also helped PCMC in getting second installments for its Slum Rehabilitation projects. PCMC has also been the recipient of the award - “Improvement in Municipal Financial Management” for the year 2007 - from the Ministry for its efforts towards reforms implementation.

It is one of the few Mission cities to have set-up a Project Implementation Unit (PIU) to assist it in the overall implementation of Mission objectives. The PIU is assisting PCMC in monitoring the implementation of JNNURM projects, implementing of reform commitments in the Memorandum of Agreement (MoA), coordinating activities of PCMC with the various agencies involved in the Mission, and supporting PCMC in all JNNURM related activities. By driving the reforms implementation process, the PIU has ensured steady flows of funds for implementation of projects. The PIU has completed its one year with PCMC and has played a very important and active role in the progress made by the ULB in the mission. The guidelines suggested by Centre for smooth implementation of reforms have been tried out by PCMC and found to be successful to a large extent.

What pulls the ULBs to strictly adhere to the processes laid out in the programme is the large quantum of unlimited funds that is accessible, though with conditions. But for those states and cities which already have a head-start over reforms, is the programme actually beneficial? For example, some ULBs had their reforms agenda laid out even prior to the launch of the JNNURM, thus having an advantage over other ULBs at the start itself. Since the launch, they have aggressively committed to the reforms like definition of service standards and targeting of subsidies for basic municipal services. Unfortunately, they have not been able to meet these during the past two years and thus it becomes critical that the milestones are met this year.

4.2.2 Wide ranging acceptability

The fact that all the 63 ULBs have submitted the City Development Plan within the first two years is a reflection of the acceptability of the reform oriented, performance based scheme. Similarly, 62 of the 63 appraised cities (for the CDP) have signed the tripatriate
MOA, which is the next requirement for accessing the additional central assistance. This is a commendable achievement not only at the ULB level for preparing the CDPs, but also at the central level for creating the awareness for fast track, reform based performance amongst the ULBs.

The programme has been recognized as the only reform based programme with a large corpus and long term focus in enabling the ULBs in achieving self sustenance.

"the JNNURM programme is the only scheme that has been conceived with an integrated approach and with a strong footing. It makes the ULBs to commit to several reforms at one go. The grant allocation is also high. If certain operational issues are sorted out, then the scheme will be a major success”

- 6Opinion survey

4.2.3 Accuracy of investment estimates

While the CDPs were prepared and submitted to MoUD in record time, the investment requirements identified through the CDP rather depict a picture that is far too stretched for the ULBs to meet, both in terms of meeting the investment requirements and in achieving the reform activities as a fall out of the CDP preparation. Thus the quality of the CDPs prepared (with exceptions) would require to be revisited in order to arrive at a more realistic estimate. This would clearly mean that the Financial Operating Plan of all the entities concerned which provide the basic services need to be taken into account.

For example, the capital investment plan of the newly formed Bruhat Bangalore Mahanagara Palike included investment estimates of the infrastructure service providers like Bangalore Water Supply and Sewerage Board and the Bangalore Development Authority. This was then translated into a multi year financial operating plan after considering the investment sustenance capacity of all the agencies individually. This provided a meaningful picture of the way the investments would be staggered over a period of time.

“the overall planning of projects and reforms implementation is very important. In the current scheme of things, the ULBs are in a frenzy to achieve ambitious and unrealistic targets. Projects have to be seen in a global perspective, with integration to other components in the regional plan instead of being taken up as independent activities”

- From opinion survey

6 Opinion survey conducted in a sample of ULBs, PIU, SLNAs and State governments for the purpose of this background paper.
It is important that this starting point is clear for channelising the investments in an accurate way. If possible, the mission should allow the ULBs to revisit the FOPs prepared in light of taking them closer to realistic figures.

### 4.2.4 Framework implementation issues

There seems to be a gap between what was conceived at the scheme level and what takes place at the ground level, on a few counts. The practicality of implementation of the framework is discussed in the subsequent sub-sections.

- **Matching the cost escalations**

  A critical evaluation of the framework brings to light the inability of the ULBs to bear the cost escalations. Typically, preparation of a DPR takes anywhere between one and two years. As per the framework, upon signing the MOA, the time the first installment of 25% of the committed central assistance for that respective project is made available to the ULBs. This amount is calculated on the project cost. Subsequently, the remaining instalments would be paid to the ULBs. However, in practice, from the time the actual works commence and even by the time the second instalment becomes due, there could be cost escalations which peg up the total project cost. In the recent past, the prices of cement and steel have shot up the project cost upwards by around 20% to 30%. Similarly, tender premium quoted by the contractors would again peg up the total estimate of works. Put together, finally as a share of total works, the central assistance grant component would in effect be only around 30% of the total cost of works as compared to 50% of the project cost. In quantum terms, this would be a large sum for the ULBs to bear.

  This can be countered in two ways – firstly, the ULBs should incorporate realistic cost escalations at the time of project preparation and seek the additional central assistance required including this component. Secondly, the framework should accommodate for such huge cost escalations by making its share a part of the total contract works rather and also assessing the alternative of increasing its share of assistance.

- **Aggressive reform agenda**

  The ULBs and states have set for themselves aggressive reform milestones, which though not impossible to achieve, would take longer than the committed timelines. Certain milestones committed for completion by the third year (2008) have not seen much progress even by the end of the second year. By linking the fund release to achievement of committed milestones, projects already commenced are likely to
suffer due to the timeline delays in release of funds. Even if the MOA were to be re-negotiated with a revised set of reform milestones, the process would again become cumbersome to handle.

Currently, the mandatory set of reforms is restricted to the ULBs committing to undertake the reform measures within the seven year period. Barring a few cities, it would be impractical to expect them to achieve all the milestones, as many of the cities have just begun to look beyond their routine activities. Take the case of mandatory reform to achieve 85% coverage in property tax collections. As the property base of the ULB is expected to expand, achieving 85% will be a far stretching milestone to achieve. It would be difficult for the ULB to leverage the incremental demand arising out of the expanded property base due to data availability constraints. For this, survey of properties should be undertaken frequently to capture the additional revenue. The ability of the ULB to continuously monitor this incremental demand and leverage the additional revenue will be a cumbersome process. The mission has attempted a good beginning and it is imperative that the next wave of reforms should extend the same set of reform agenda in addition to any new areas that it may identify.

Attaining the reform milestones seems to be the most critical component for release of funds. Holding the second and further installments of the central assistance for non fulfillment of the reform commitments would put severe strain on the progress of the project. Huge sums of money already invested would get locked. There is no clarity on how the centre / state / ULBs will address this issue.

4.2.5 Mismatch in investment requirements and investment sustenance

The MOUD had estimated that around Rs. 1,20,536 crores would be the investment requirements for the identified 63 cities over 7 years and that Rs. 50,000 crores would be made available as central assistance. However, based on the CDPs submitted by a select list of 25 cities, the investment proposed is Rs. 97,638 crores. This figure would cross the MOUD estimates if the remaining cities were added. As a response to meeting this gap in the envisaged investment requirements between MOUD estimates and CDP estimates, the centre may want to increase the corpus availability from Rs. 50,000 crores to a higher amount. But even with the existing estimates, will the ULBs be in a position to garner their own share component given their financial health should be assessed. Most of the ULBs will not have the financial sustainability for such large investment estimates. As release of funds is linked to physical progress of the project and improvements in service delivery, investments should happen in line with the absorption capacity of the ULBs. It would be worthwhile to revisit the estimates and prepare projects in line with the ability of the ULBs to sustain such investments.
“An important component of financial planning of the ULBs is the funding of O&M of the infrastructure that is being created. Though ULBs may manage to fund the capital expenditure, in the long term, O&M expenses have to be addressed”.

- from Opinion Survey

A proactive approach wherein the ULBs prepare their revenue mobilization measures over the long term (not restricting only to the mission period) is required in order to assess the capacity to bear the investments. For instance, a progressive city with a population of around 1.2 million is in the process of preparing a DPR for a mass rapid transport system in its city and the rough estimates reveal that around Rs. 900 crores is required as its own contribution to the project cost. Taking this project in silo, it would be possible for the city to undertake this kind of investment. However, there are other investments that it would need to undertake including its regular capital works and there exists certain projects in the pipeline with committed investments. Put together, the ability of the ULB to sustain the investments could remain a question. Therefore, it is imperative that the ULB quickly identifies other revenue streams and puts in concerted efforts to improve its existing revenue streams.

4.2.6 ULB’s ability to borrow

The large own component requirements of the ULBs should force ULBs to look for raising debt. But the borrowing proposed out of the capex requirements is minimal. For instance, of the total investment proposals which have crossed the Rs. 2,00,000 crore mark, the proposed borrowing is minimal, as depicted in the adjacent figure.

Some factors that can be attributed to this phenomenon include:

- The appetite for borrowing is less even amongst the investment grade categories of borrowers; other ULBs are credit averse
- Capital investments require long tenure products and the absence of such products in the market are reducing the borrowing power of the ULBs.
- The market provides high cost loans to low investment grade borrowers and short term products to high investment grade borrowers
In order to instill the borrowing culture amongst ULBs, it is imperative that low cost long tenure products are made available. ULBs in turn must turn towards credit enhancement measures that would reasonably peg up their financial strength and improve their ability to borrow. Credit Rating is one such mechanism through which investors and market participants get confidence in the sector thereby creating a deeper and more efficient market for municipal borrowing. Alternate financing mechanisms could be explored including pooled finance.

4.2.7 Timelines for project implementation

It has been mentioned by the Central government that no funds would be disbursed for projects that will request for instalments beyond the mission period of 2011-12. If a project is not implemented before the completion of the mission period, the instalments for remaining part of the project will not be released by the Ministry. This has lead to the ULBs to prepare time-lines which are very ambitious and aggressive so that the projects are completed such that all the funding from the government is received. The ULBs definitely do not have the capacity in terms of man-power, expertise or even the financial resources to undertake the projects that are in the pipeline.

An important execution issue highlighted by some ULBs is the lack of project planning and management. ULBs set aggressive deadlines which are often unrealistic and due to poor planning, lead to complications for both the ULB as well as the contractors. The number of projects available to private contractors is fast increasing which leads to ULBs finding it difficult even to find qualified contractors for executing the projects. Unavailability of technically qualified man-power to supervise execution of projects has been a constraint for the by ULBs.

4.2.8 PPP options

The likely inability of the ULBs to match their share of the project cost thorough borrowing leads one to think in terms of conceiving projects on a Public Private Partnership basis. If substantial components of the project were to be implemented with private sector participation (like O&M) or if the entire project were to be designed on say a Design-Finance-Build-Operate basis, the burden on the ULB would substantially be reduced. While the MoUD encourages PPP and also forces ULBs to look for PPP options as part of the proposal submission process, lack of technical capacity in the ULB to conceive such projects remains to be addressed.
Urban sector globally also has not been able to attract private sector as much as other sectors have been able to do so. In India, only about 1% of the total investments in public private initiatives are in the urban infrastructure sector. This clearly brings out the fact that the public funding still occupies the biggest share in the total investments. Therefore, the public funding route will continue till such time projects become attractive for PSP. For this situation to change, there are several other factors that need to change. For example, the project structure should accommodate PPP options (currently, only sectors like solid waste management, urban transport and water supply (to a limited extent) are attractive).

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5 WAY FORWARD

The JNNURM is a catalyst to urban development and for the first time, the combination of reforms and funding are being undertaken at such a massive scale in the country. Reform commitment and adherence to the same are critical factors for the ULBs for availing the central assistance grants. While this is a great step forward the measures for addressing the investment sustenance capacity of the ULBs needs to be identified.

Revisiting the financing plans prepared by the cities and making them more realistic and sustainable is one such measure that could be adopted. At the central level, probably a phased release of funds (rather than a fixed percentage release for projects as installments upon fulfillment of the reforms) could be adopted wherein based on the sustenance levels of the ULBs grants could be made available. Or alternatively, a combination of these could be examined.

A methodology could be developed for directly and more objectively linking reforms implementation to the disbursement of funds for development projects. A scoring methodology can be formulated for assessing the progress made by ULBs in terms of reforms implementation. Based on the cut-off scores attained by ULBs which indicates the status of certain reforms implementation, funds disbursement for projects could be undertaken. For example, funds for the second and third installments for projects related to water supply and sanitation can be released only if the ULB has achieved a certain level of implementation of the User Charges reform.

Parallely, addressing the bottlenecks as discussed in the previous section would enable successful completion of the scheme. This however requires efforts from all the stakeholders –

- the central government in terms of addressing the practicality aspects of implementation and fine - tuning the framework;
- the state government in garnering the funds to meet their respective share of assistance;
- the ULBs to mobilize enough resources from their part such that the additional assistance funds are actually put to use; and
- the citizens in ensuring that their participation continues in order to create a transformed city.

Extension of the mission period beyond seven years is imperative. The opinion survey unanimously brings out the need for extending the scheme, as historically, ULBs have taken a lot of time to implement reforms and projects. The scale of projects and reforms demanded by the JNNURM is definitely much larger than any of the earlier projects.
and it has a lesser time frame. Experts see this as an impossible task to be accomplished within the timeframe. Unless the Mission is extended beyond the seven years, many projects may be left incomplete.