Financing Urban Infrastructure For Implementing Urban Resilience

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Introduction

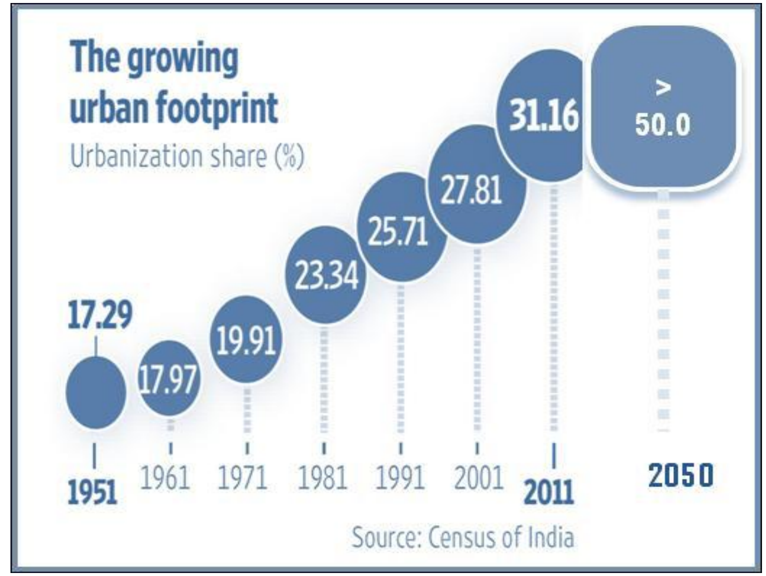
- **Rapid urbanisation** - tremendous pressure on urban infrastructure and its delivery system.

- Fast economic growth and growing population have led to huge demand-supply infrastructure deficit

- Lack of adequate and quality infrastructure is proving to be a binding constraint in sustaining, deepening and expanding India's economic growth and global competitiveness

Urbanization & Economic Growth

- 31% of Indian's Population lives in urban areas.
- **Cities with population of 1 million are increasing** - *35 in 2001 to 50 in 2011 and is expected to increase further to 87 by 2031.*
- Cities and towns of India are deficient in the quality of services.
- Investment for urban infrastructure over the 20 year period – *INR 39.2 lakh crore at 2009 – 10 prices (HPEC)*
- McKinsey Report (2010) has estimated an investment requirement of INR. 53.1 lakh crore.



Urban population likely to increase from present ***377 million*** *to* ***600 million*** *by 2030 &* ***900 million by*** *2050*

53 Million Plus cities

Status of Urban Services in India

- Drinking Water availability within the premises is **71.2%**;
- **32.7%** of the urban population has access to piped sewer system;
- Average duration of water supply ranges from **1 - 6 hours;**
- **21%** of waste water is treated ;
- Waste collection efficiency ranges between **70%** and **90%** in major Metro cities;
- Segregation of solid waste is around **30%**;
- Organized public transport system operational in more than **65** class-I cities; and
- BRTS and Metro projects are operational in various **Mega and Metropolitan cities.**




Service Level Gaps

Service Indicators	National Benchmark	India Status
Water Supply		
Per Capita supply of water	135 lpcd	69 lpcd
Extent of metering of water connections	100%	13%
Extent of non revenue water (NRW)	20%	32%
Cost recovery in water supply services	100%	39%
Sewerage		
Coverage of toilets	100%	70%
Collection efficiency of the sewage network	100%	10%
SWM		
Household level coverage	100%	35%
Extent of scientific disposal of municipal solid waste	100%	10%
Storm Water Drainage		
Coverage of storm water drainage network	100%	46%

Source: Service Levels in Urban Water and Sanitation Sector-Status Report(2010-2011) Ministry of Urban Development

Ground Issues & Key Challenges

Cities are not self reliant	• Depend on grants from Central/State Governments, which are reducing • ULBs need to be provided 3Fs (Funds, Functions & Functionaries) • Devolution of funds is not predictable and timely
ULBs caught in a low equilibrium cycle	• Generating less revenues and spending even less on services and infrastructure. • Lack of Regulator & Std. Concession agreement
Lack financial viability	• Cities lack financial viability and internal accruals are insufficient. • ULBs should be strengthened in financial management to enable own-source revenue generation.
Inadequate infrastructure in cities	• Inadequate infrastructure in cities; Cities unable to meet rising demand for services and unable to raise resources.
Weak credit worthiness	• ULBs' revenue sources inadequately capture the economic buoyancy in the local area - *leading to overall weak credit worthiness.*
Planning	• Absence of financial investment plans • Lack of stakeholder consultation • Weak Asset Management • Absence of data availability and mapping
Lack of Private Investors	• Lack of Regulator • Lack of Standard Concessionaire Agreement

Other Constrains

- Inadequate availability of long term finance (10 year plus tenor) both equity and debt
- Availability of Information - While plain service contracts may require limited information on an existing system and minimal monitoring capacity; whereas, options such as BOOT and concession require high political support, a good information base about the existing system and a strong regulatory framework;
- Concerns on low user charges recovery remain high;
- Inadequate shelf of bankable infrastructure projects that can be bid out to the private sector;
- Inadequate advocacy to create greater acceptance of PPPs by the public; and
- Lack of clarity during project planning and execution by the ULBs.

What are the other sources of funding for ULBs?

- State finance commission (SFC) fund
- Central finance commission (CFC) fund
- Pool finance development fund
- State level urban infrastructure fund
- Institutional fund
- Municipal bonds
- Public private partnership (PPP)

Institutional Finance- Avenues & Suitability

Parameter	Suitability of funding from various avenues of Institutional Finance				
	Banks	Financial Institution	Bi-Lateral & Multi-Lateral bodies	Municipal Bonds	National/ State level infrastruc-ture funds
Availability of funding for capital projects	L	H	H	H	H
Getting interest rates lower than commercial borrowings	M	H	H	H	H
Loan term commensurate with gestation period	M	H	H	H	H
Ease of procedures in accessing finance	M	M	L	L	M
Need for escrow account	H	H	L	H	H
Need for credit rating	H	H	M	H	H
Funding for project preparatory expense	L	M	H	L	M
Availability of grant component for capacity building	L	L	H	L	M
Requirement of Techno Economic Feasibility Report	H	H	H	H	H
Close monitoring fund utilization & project implementation	H	H	H	M	H

Source: Toolkit for Accessing Institutional Finance, Jan 2011

L=Low, M=Medium, H=High

Process for Institutional Finance

Internal Decision of ULB

- Purpose of loan
- Amount of loan
- Preferred model of execution- PPP, Govt.: http://jnnurm.nic.in/wp-content/uploads/2011/01/10.ToolkitPP.pdf
- Loan preparation expenses
- Tentative time for repayment
- Person authorized to represent the ULB, negotiate & sign
- Time limit for closing deal
- Necessary approvals from State Govt. & other authorities

Accessing Institutional Finance

- Credit rating
- Approaching financing institution
- Preparing Techno Economic Feasibility Report: http://jnnurm.nic.in/wp-content/uploads/2011/01/JNNURM_Toolkit_DPRs.pdf
- Appraisal of project
- Negotiation
- Signing agreement
- Funding
- Implementation of loan covenants- escrow account, SPV etc.

Infrastructure Financing

Sources of Infrastructure Financing:

Local government capital budget allocation	Bank and Institutional loans	Grants from State and Central Government
Long-term municipal funds/Bonds	Leveraging municipal assets and private equity	Pooled bonds issued by urban infrastructure funds

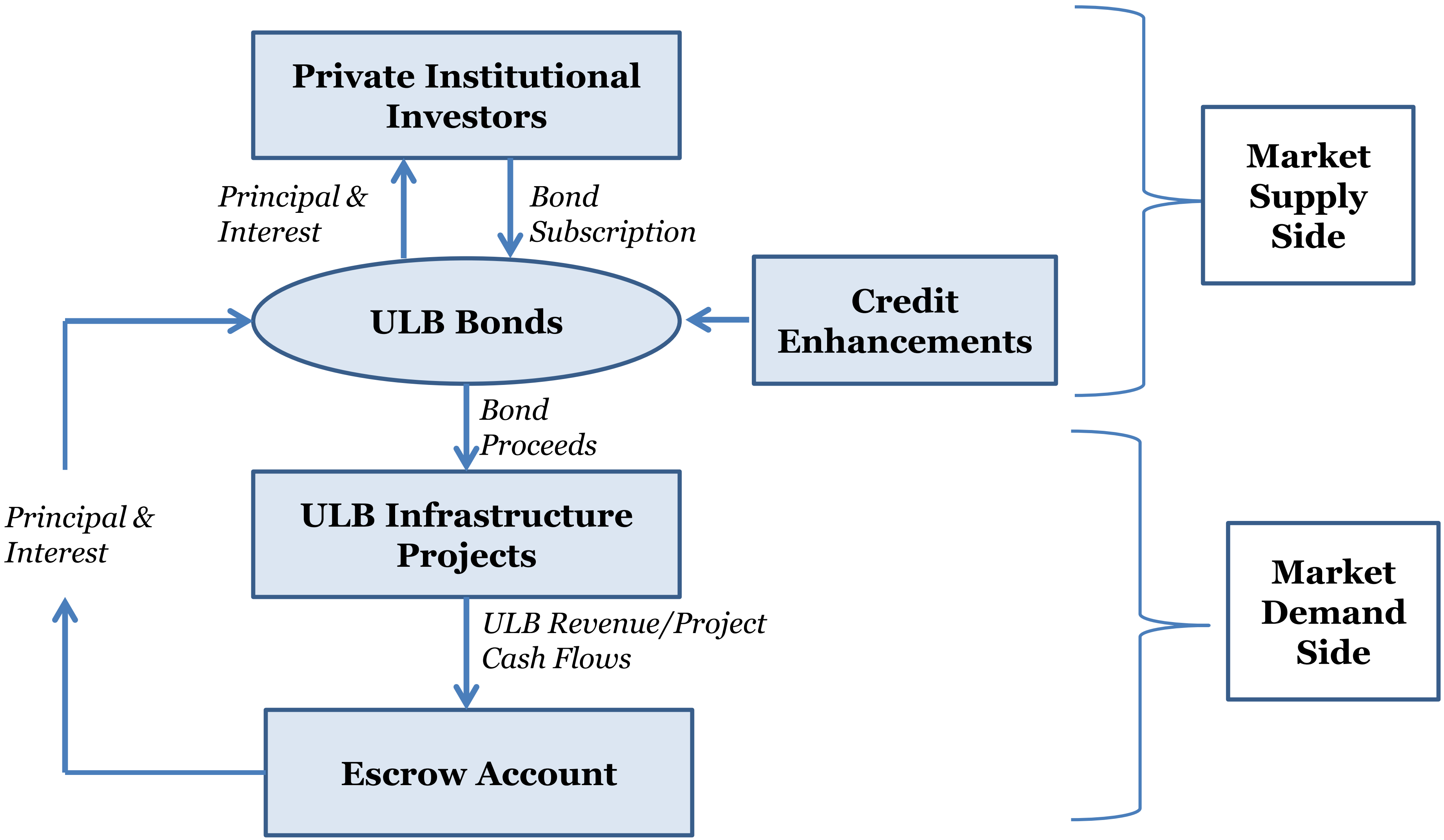
Infrastructure Financing Options

Infrastructure Finance

- Municipal Bonds
- Public Private Partnership
- Public Financing Institution/Bank Finance
- Multilateral Financial Institutions

Municipal Bonds

Process



Municipal Bonds

- Municipal Bonds issued by the ULBs, are **redeemable after a specific period** and have a definite rate of interest.
- **Municipal bonds are appropriate instruments** - raising resources, channeling funds from the capital market into infrastructure development.
- **Long term in nature**, unlike bank loans that are of shorter tenure.
- Provides opportunities for long gestation infrastructure development projects.

Municipal Bond Issues in India		
Type of Bonds	**No. of Bonds**	**Amount (in Rs. Crore)**
Taxable bonds	11	437.84
Tax-free bonds	12	905.30
Pooled finance (one tax-free)	2	206.00
Total	**25**	**1,549.14**

- About **11 ULBs** out of 65 **continued their reliance on institutional and bank borrowings** to finance urban infrastructure projects from commercial banks.
- Agra , Allahabad, Lucknow , Varanasi, Kanpur, Meerut are using JnNURM revolving fund to fund the capex for their projects.

Public Private Partnership (PPP)
Experience

Public Sector

- Facilitator
- Enabler
- Concessioning
- Monitoring and Supervision

Private Partner

- Management and Technical Skills/Innovative Technologies
- Operational Efficiency
- Financing
- Builder/Operator

Collaboration

- Public funding with private service delivery and private management.
- Public as well as private funding with private service delivery and private management.
- Public as well as private funding with public/private service delivery and public/private/joint management.

The Public-Private Partnership (PPP) Project means a project based on contract or concession agreement between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges.

Infrastructure Financing Options

Public Private Partnership

Experience

- Nearly **48 projects** have reportedly been supported through PPP with almost **19%** of the project-cost been leveraged through private sector participation under JnNURM ;
- SWM, Water Supply and Transportation sectors have been found to be most amenable sectors related to PPP.

Constraints

Regulatory Framework	• No tariff regulatory mechanism for determining the principles of tariff fixation, regulate service delivery standards and implementation of reforms under PPP. • No framework for evaluating the revenue and return of the project.
Funding Requirements	• Need for long-term funding at concessional rates/or provide credit enhancements for the urban PPP projects.
Capacity Constraints	• Lack of capacity at the State and city levels to engage with Department of Economic Affairs (DEA), shortlist transaction advisors and manage them.
Financial Constraints	• Need for rules and standardized procedures to regulate and guide PPP projects and an enabling provision for PPP in the General Financial Rules.

Public Financing Institution/Bank Financing

- These Institutions provide short term, medium term and long term credit.

- Banks are permitted to finance SPVs, registered under the Companies Act, set up for financing infrastructure projects .

Multilateral Financing Institution (MFIs)

- MFIs refers to World Bank and regional development bank such as ADB.

Institute	Type of Financing	Type of Borrower
World Bank Group		
International Bank for Reconstruction and Development (IBRD)	Non-concessional loans and loan guarantees	Primarily middle-income governments, also some creditworthy low-income countries
International Development Association (IDA)	Concessional loans and grants	Low-income governments
International Finance Corporation (IFC)	Non concessional loans, equity investments, and loan guarantees	Private sectors firms in developing countries
Asian Development Bank	Concessional and Non-concessional loans, equity investment, grants and loan guarantees	Middle-income governments, some creditworthy low income governments, and private sector firms in the Region.

JnNURM – *A Catalyst*

Jawaharlal **N**ehru **N**ational **U**rban **R**enewal **M**ission (JnNURM) was launched by the Government of India on 3rd **December 2005**

*To encourage **reforms** and fast track **planned development** of identified cities as prioritized by States*

*Focus is to create **economically productive, efficient, equitable** and **responsive cities***

The program was planned to operate on a mission mode by facilitating large scale investments in the urban sector, policy change and institutional reforms for strengthening

- Policy Framework
- Institutional Framework
- Financial Framework
- Project Development
- Monitoring & Evaluation

Municipal Finance agenda & JnNURM

- Essential to expand the investment envelope by mobilizing long-term debt financing from the financial markets;
- Improved credit-worthiness shall help create interface between capital market/FIs and municipal finance;
- Need to develop bankable projects and leverage from market;
- Need for better expenditure management;
- Urgent need for improving revenue mobilization/ innovative use of assets; and
- There is an urgent need for supplementing institutional capacity by capacity building measures.

Several JnNURM reforms, such as accounting reforms, property tax system, user charges on basic services and reengineering and computerization (e-Governance) of key municipal functions are important initiatives that will help enable the local bodies to access the capital market.

JnNURM Financial Reforms

Municipal Accounting Reform

- *Preparation of State Municipal Accounting Manual*
- *Manual Approval & Adoption by the Local Body*
- *Listing the Assets and Liabilities at ULB level*
- *Valuation of Assets*
- *Preparation of Opening Balance Sheet*
- *Migration to DEAS*
- *Appointment of Audit Officers/CA/Cadre*

JnNURM Financial Reforms
Property Tax Reform

- *Notification/Amendment of Act on Collection of Property Tax*
- *Extending of property tax to all properties*
- *Posting of tax details in the public domain & migration to standardized self-assessment system of property taxation on the basis of periodic revisions and review of rates*
- *Setting up non-discretionary method for determination of property tax (unit area method or capital value method)*
- *Coverage (85%)*
- *Collection Efficiency (90%)*

JnNURM Financial Reforms
O&M Cost Recovery

- 100% O&M cost recovery is one of the **ULB level** reforms;
- **40 UIG cities** are collecting more than **50% O&M** cost recovery in water supply;
- **23 UIG cities** are collecting more than **50% O&M** cost recovery in SWM;
- **758** water supply projects have been sanctioned under the Mission of which **344** have been completed;
- **108** Solid waste management projects have been sanctioned of which **30** have been completed;
- Some of the completed projects: **Kanpur, Nashik, Madurai, Navi Mumbai, Asansol, Durgapur, Surat, Pune ,etc;**
- Impact of service levels yet to be seen as projects are yet to be completed;
- More cities are **introducing water meters**;

Need for Credit Rating

- Independent and credible evaluation of **credit quality;**
- **Independent financial analysis of city finances;**
- Benchmarking/Comparative analysis with other municipal entities - **highlights strengths and weaknesses; and**
- External credit assessment encourages **financial discipline amongst rated cities.**

Access to wider set of investors:

1. *Increased accessibility to capital markets-helps investors in pricing the debt offer;*
2. *Increased marketability of debt issues by municipal entities;*
3. *Improved visibility-attracts international capital; and*
4. *Eases risk identification and diversification for investors.*

JnNURM Financial Reforms
Credit Rating of ULBs

- MoUD commissioned **4 agencies** to rate the JnNURM cities (general obligation debt and not any specific bond/issue);
- **Initial credit rating exercise completed for 65** cities (8 UIG cities not rated);
- Surveillance rating undertaken for **63 ULBs***
- Initial Ratings were assigned during January 2008-February 2011, and Surveillance Ratings were assigned during January 2010-February 2012;
- Ratings are generally live for 12-15 months from the date on which rating is assigned;
- **35 ULBs have received investment grade rating** (BBB- and above)

**Jamshedpur & Panaji*

Overall Financial Performance

Less financially burdened and positive progress	Stability shown by	Slow progress and financially burdened ULBs
10 Cities	7 Cities	12 Cities

- ULBs with octroi income have achieved investment grade rating
- Only 55% of ULBs without octroi income made it to investment grade category.
- Revenue expenditure was dominated by establishment expenditure (salary, pension, etc.) followed by spending on operations and maintenance
- For BB and B category rated municipalities, establishment and O&M expenditure together accounted for more than 95% of the total revenue expenditure.
- **Income from own sources contributes approximately 59% on average across all ULBs.**
- **ULBs in metro cities generate over 70% of their revenue income from own sources**
- ULBs with population lesser or closer to a million only generate slightly more than half of their revenue income from own sources

JnNURM and Leveraging
Municipal Borrowings

- About **11 ULBs** out of 65 **continued their reliance on institutional and bank borrowings** to finance urban infrastructure projects from commercial banks

- Agra , Allahabad, Lucknow , Varanasi , Kanpur, Meerut are using JnNURM revolving fund to fund the capex for their projects

Key Highlights – Municipal Borrowings

- World Bank Survey conducted for 19 cities for report on 'Developing a Regulatory Framework for Municipal Borrowing in India', reveals:
  - ***Rajkot, Nanded, Bhopal, and Madurai have already exhausted their borrowing limits*** assessed on the basis of past financial performance;
  - Since **Nanded, Bhopal and Madurai have low investment grade ratings** they **might struggle to service the existing debt** in a timely manner;
  - Cities such as **Chennai, Coimbatore, Jabalpur, Kalyan-Dombivili, Nanded and Nagpur may be burdened** to meet their commitments on projects already approved under JNNURM through borrowings; and
  - Data for ULBs such as **MCGM, Navi Mumbai, Pune, Nashik, Vadodara and Surat** reveals that they have the **ability to fund the ULB share.**

Ahmedabad
Vadodara
Surat
Rajkot
Nagpur
Nanded
Nashik
Kalyan Dombivilli
Thane
Pune
Navi-Mumbai
M.C. of Greater Mumbai
Bhopal
Indore
Jabalpur
Chennai
Coimbatore
Madurai

Overall Financial Performance (1/2)

↑ Progressing ULB and not burdened with Outstanding Debt

↔ ULB is stable in terms of revenues, expenditure and repaying the debt

↓ ULB not progressing well and burdened with debt

Cities	Trend
Coimbatore	↑
Amritsar	↑
Bangalore	↓
Chennai	↑
Faridabad	↓
Mysore	↓
Shimla	↓
Srinagar	↔
Delhi	↑
Navi Mumbai	↔

Cities	Trend
Cochin	↓
Chandigarh	↑
Ajmer	↔
Bhopal	↓
Gr. Mumbai	↑
Guwahati	↔
Indore	↑
Jabalpur	↓
Jaipur	↔
Asansol	↓

Overall Financial Performance (2/2)

↑ Progressing ULB and not burdened with Outstanding Debt

↔ ULB is stable in terms of revenues, expenditure and repaying the debt

↓ ULB not progressing well and burdened with debt

Cities	Trend
Pune	↔
Ahmedabad	↑
Vadodra	↔
Nagpur	↓
Nanded	↓

Cities	Trend
Rajkot	↓
Surat	↑
Kolkata	↔
Lucknow	↓
Vijaywada	↑

- **Less financially burdened and positive progress** : Coimbatore, Amritsar, Chandigarh, Chennai, Greater Mumbai, Indore, Delhi, Ahmedabad, Surat and Vijayawada.
- **Stability shown by:** Ajmer, Guwahati, Jaipur, Srinagar, Navi Mumbai, Pune, Vadodara and Kolkata.
- **Slow progress and financially burdened ULBs:** Bangalore, Faridabad, Mysore, Shimla, Cochin, Bhopal, Jabalpur, Asansol, Rajkot, Nagpur, Nanded and Lucknow

Issues

- Volatility in assigned credit rating
- 22 cities had proposed market borrowing in their CDPs submitted to JnNURM. However, availability of grants has reduced incentive for borrowing
- Credit worthy ULBs are usually cash rich; hence, reluctant to borrow
- Theoretically inv. grade entities may not find investors till they attain good rating on specific issue; requires commercially viable projects

Way Forward:

- Need to assess willingness to borrow by ULBs and lend to ULBs
- Cash rich entities should be encouraged to develop good projects & meet funding requirements from accessing institutional finance
- Setting up of specialized state level urban financing intermediaries such as TNUDF, KUIDFC- provides comfort to lenders that municipal borrowing will not exceed prudent limits

Action Taken by Ministry

- New insights in Municipal debt market and the Pooled Finance Development Fund (PFDF) Scheme
  - Removal of 8% cap on tax free instruments;
  - Separate regulatory and disclosure requirements for ULBs may be made by SEBI;
  - Allow credit enhancement of Municipalities by Multilateral agencies;
  - JnNURM and other Central schemes to be linked with raising resources from the market;
  - Simplify Pooled Finance Development Fund (PFDF) requirements to enable utility and implementation of the scheme.

Action Taken by Ministry

- Model Concession Agreement for SWM;
- A set of guidelines regarding solid waste management project development with several case studies;
- PPP in Solid Waste Management - Procurement Guideline; and
- Capacity Building programme through Regional Capacity Building Hubs (RCBH's).

Way Forward

- Resources are available in the capital market and FIs.
  - Essential to expand the investment envelope by mobilizing long-term debt financing from the financial markets. Need to increase the overall funding for infrastructure by leveraging varied sources against one another.
  - Improved credit-worthiness shall help create interface between capital market/FIs and municipal finance
  - **Mainstream Climate Resilience , DPR to incorporate elements**
  - **Insurance Component**
  - **Need for Capital Investment Planning and better Financial Management Need to develop bankable projects** and leverage from market.
  - Develop a commercially viable project with detailed engineering, costing, procurement plan, etc.
  - Attempt reducing capital cost through appropriate credit enhancement measures to facilitate leveraging

Way Forward

- Need for better expenditure management like –
  - Appropriate costing of services and better targeting of subsidies,
  - Revenue rationalization and
  - Asset management helping mobilize resources - translating to better services
- Urgent need for improving revenue mobilization/innovative use of assets:
  - Considerable scope for increasing revenue especially from property tax
  - Levy Development Charges
  - Non-tax sources such as use of land monetization may be used
  - Commercial utilization of land/property through PPP

Way Forward (3/3)

- **There is an urgent need for supplementing institutional capacity by capacity building measures**
- **Timely progress in the implementation of reforms** under JNNURM such as the
  - Introduction of an accrual based accounting system,
  - Self-assessment of property tax,
  - 100% cost recovery of key urban services,
  - Public private participation and
  - Implementation of e-Governance

Will help improve credit worthiness of ULBs

To reveal the fresh progress made by ULBs in their financial and overall performance in the past couple of years and in future years, the Ministry is in process of commissioning the second annual Surveillance Rating exercise for all JnNURM UIG cities

Thank you!