Innovative Financial Architecture for Sustainable Financing of Urban Infrastructure – GNN’s Perspective

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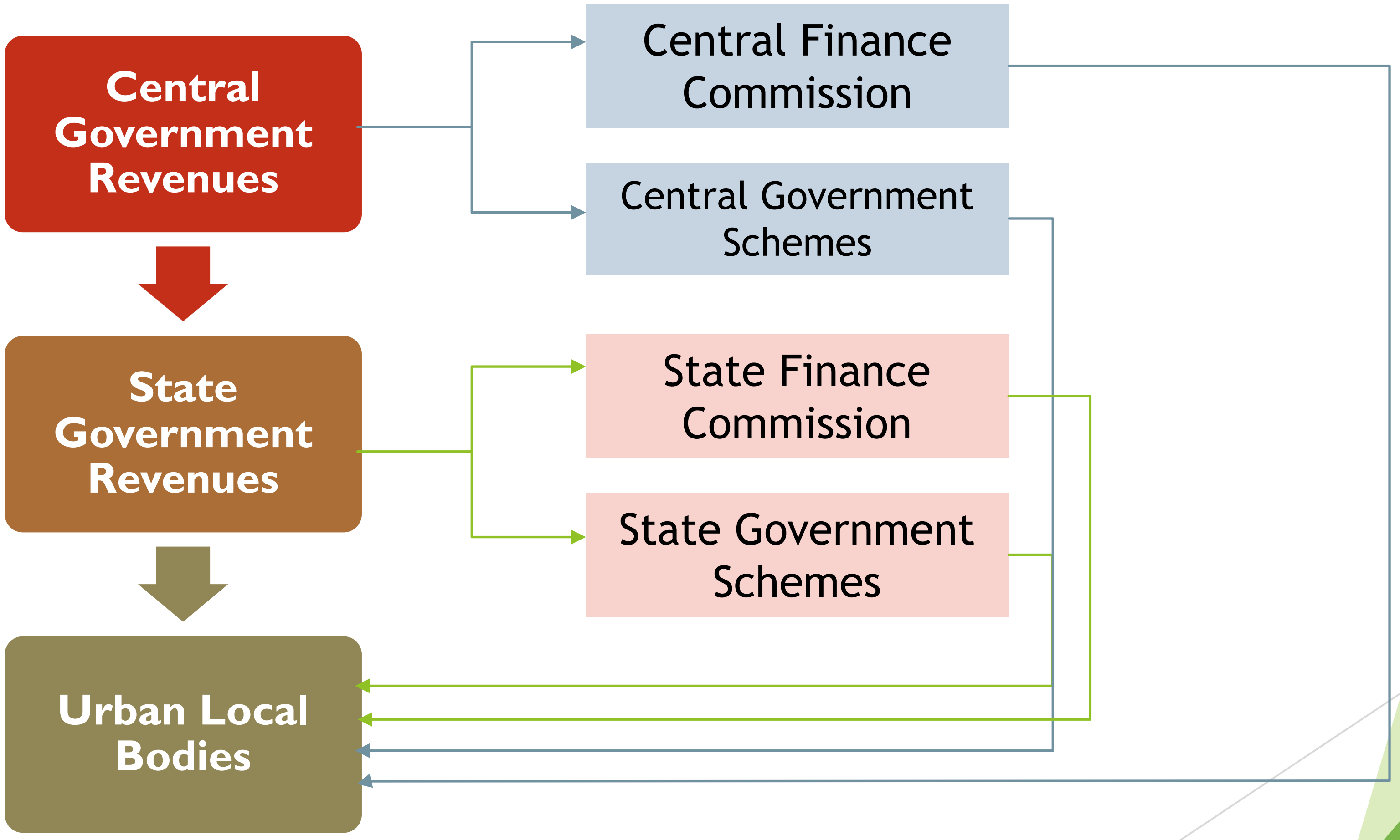
Setting The Context : Fiscal Interdependence



Setting The Context : Constraints To Increasing Own Source of Revenues

Factors Responsible for the Tiny Size of the Urban Sector

- A Property Tax Dominated Municipal System
- Low or Near Zero Productivity of Many Municipal Taxes
- State Policies Towards Property Taxation
- Inefficiencies in the Internal Management of Resources
- Large Scale Subsidies in Service Provision
- Irregular State Transfers

Current Fiscal Status of ULBs

- ULBs work in a complex and ever-changing fiscal policy environment; a significant portion of ULB receipts come through state and central government transfers and schemes.
- Own-source revenues are dynamic, changing from year to year
- There are financial and political impacts for all capital project decisions—there is never enough funding!
- For this reason key elements of fiscal planning are outside direct control of ULBs, but it is still possible to look at alternate mechanisms for resource mobilization and funding for urban infrastructure projects.

Funding Sources

- ULBs need to evaluate long-term financing goals and make sure they are maximizing all the funding sources that are available to them: this will mean taking full advantage of all revenue sources that the city controls.
  - Are essential services able to fund operations and maintenance from the user fees?
  - Can proposed projects or existing revenue sources generate additional revenues that can be used to finance projects that do not generate receipts from fees and charges?

Stronger “creditworthiness” improves a city’s ability to access different financing resources

- All lenders, domestic and international have criteria for lending to local governments to support capital projects; “credit quality” can mark a cut-off point.
- Creditworthiness is a positive quality, and it takes work and commitment to maintain it
- Look at available funding sources: own-source revenues, grants and subsidies from the state or central, and borrowing
- Borrow only what is needed and what the city can realistically repay

Commercial Sources Of Borrowing

COMMERCIAL SOURCES OF BORROWING

GOVERNMENT INSTITUTIONS	Housing & Urban Development Corporation (HUDCO) The Life Insurance Company of India (LIC) India Infrastructure Finance Company Ltd (IIFCL)
SCHEDULED COMMERCIAL BANKS	Public Sector Banks Private Sector Banks
SECTOR SPECIFIC MUNICIPAL DEVELOPMENT FUNDS/ FACILITIES	State Specific Tamil Nadu Urban Development Fund (TNUDF) Active State Level Financial Intermediaries – Karnataka Urban Infrastructure Development Finance Corporation , Madhya Pradesh Infrastructure Finance Company Limited
CAPITAL MARKETS	Municipal Bonds Green Bonds | Pooled Finance

Urban Infrastructure Term Loan Market

- Traditionally, ULBs borrowed from LIC and HUDCO backed by State Government guarantee
- Over time, LIC's incremental lending to this sector has come down
- HUDCO continues to lend to ULBs and urban infrastructure projects (Sabarmati Riverfront Project SPV), though the relative quantum of loans to this sector has gradually reduced.
- HUDCO has used revenue escrow arrangements as part of the security mechanism to support municipal debt repayments.
- However, HUDCO has preferred to rely on State Government guarantees as credit enhancement for loan repayment, in addition.
- Greater Hyderabad Municipal Corporation(GHMC) has upgraded major municipal roads during the pandemic shutdowns using a 4000 Cr. Term loan from State Bank of India(SBI) which had a State Government guarantee as credit enhancement. Recently, GHMC has raised additional 800 Cr. Term loan from SBI with State Government guarantee.

Borrowing Through State Level Financial Intermediaries

- **Tamil-Nadu Urban Development Fund** (TNUDF) was established in November 1996 as a trust fund by the Government of Tamil Nadu
  - TNUDF has borrowed from the World Bank and bilateral agencies such as KfW for on-lending to urban infrastructure projects implemented by ULBs as well as PPP projects in the sector.
  - TNUDF has funded more than 250 projects till date.
- **Karnataka Urban Infrastructure Development and Finance Corporation** (KUIDFC)
  - was incorporated as a public limited company in 1993.
  - KUIDFC procures funds from Government of Karnataka, Government of India, World Bank, ADB and from financial markets and provides financial and technical assistance in the form of loans and grants to ULBs, development authorities and water supply boards.
- **Madhya Pradesh Urban Development Company Limited** (MPUDC) – Assist ULBs in raising funding from development partners, future goal includes providing assistance in accessing capital markets.
- **Other State Level Intermediaries:**
  - Orissa Urban Infrastructure Development Fund(OUIDF),
  - Andhra Pradesh Urban Finance and Infrastructure Development Corporation Limited ,
  - Rajasthan Urban Infrastructure Finance & Development Corporation Limited,
  - Bihar Urban Infrastructure Development Corporation Limited etc.

Leveraging Through Municipal Bonds

Promoted by Government of India and governed under the SEBI Issue & Listing of Debt Securities by Municipalities, 2015

Debt instruments issued by a civic body to finance capital with fixed amount of principal with interest to be repaid over a time

Bonds are mostly secured with well- defined timelines for meeting interest and principal repayment obligations

Just like other bonds, municipal bonds are also given credit rating, showcasing their investment worthiness. ranging from AAA to D,

Money raised generally used to fund city development, including the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and smart cities and other infrastructure projects

These bonds are listed on the Stock Exchange i.e. NSE or BSE and are tradeable

Municipal Bonds – Major Benefits

Financial incentive by Government of India

Government of India has come out with an incentive scheme wherein financial incentive is being provided to the ULBs amounting to Rs 13 Crores for every Rs 100 Crores of bond issued and the incentive to each ULB is limited to Rs 26 Crore.

This incentive scheme was first brought in FY 2018-19. In FY 2020-21,the incentive will be given to first 7 ULBs coming out with its bond issuance

Timely completion of projects

The immediate availability of funds shall help in timely completion of

projects for which funds are being raised which may otherwise get delayed due to delay in availability of funds

Benefit to public at large

The timely completion of the projects

shall also benefit the general public at large who will be the main

beneficiaries from completion of the projects for which funds are being raised by getting better and improved facilities.

Generation of incremental revenues

The timely completion of projects may also help the Corporation to generate incremental revenues either directly or indirectly.

Improvement in financial discipline

The process of issuance of Municipal Bond increases the financial discipline and also improves the professionalism in delivering services by the Municipal Corporations.

Credit Rating – Assessing The Credit Quality

Credit Rating Scale for Bonds

- ✓**AAA : Highest Safety**
- ✓**AA: High Safety**
- ✓**A: Adequate Safety**
- ✓**BBB: Moderate Safety**
- ✓BB: Inadequate Safety
- ✓B: High Risk
- ✓C: Substantial Risk
- ✓D: Default

Investment Grade

Sub Investment Grade

"+" or "-" sign is given in bonds for AA and below rated bonds to reflect comparative standing within the category. Example: AA+, AA, AA-

VARIOUS INVESTOR CLASS

Provident/ Superannuation/ Gratuity/ Pension Funds

Banks, FIs and Insurance Companies etc.

Mutual Funds

Merchant Banker / Trader etc

Foreign Portfolio Investors

Various Investor Class & Investment Criteria

DOMESTIC INVESTORS

Provident/ Superannuation/ Gratuity/ Pension Funds

Retirement benefits trusts are governed by Ministry of Finance & Labor which clearly directs that

Bonds shall be rated as AA by two rating agencies or

Bonds shall be guaranteed by State/Central Government

Mutual Funds

Banks, FIs and Insurance Companies etc.

In case of other investors like Mutual funds, Insurance companies & Banks, they have their internal investment guidelines

Normally such investors invest in standalone AA bonds or A/A+/AA- State/Central Government guaranteed Bonds

International Investors increasingly looking at Climate impact of projects investments as an important criteria.

Municipal Bonds in India

- Municipal bonds exist in India since the year 1997.
- Bangalore and Ahmedabad Municipal Corporations were the initial urban local bodies to issue municipal bonds in India.
- Between 1997 and 2010, these cities experimented with bond issues but barely managed to raise Rs. 1,400 crore.
- The poor investor response was due to the fact that these bonds were not easily tradable and lacked regulatory clarity.
- Securities and Exchange Board of India (SEBI)'s detailed guidelines for the issue and listing of municipal bonds in March 2015, clarified their regulatory status and rendered them safer for investors.
- Since 2017, cities like Pune, Ahmedabad, Hyderabad, Visakhapatnam, Indore, Bhopal, Vadodara, etc have issued bonds.
- In Uttar Pradesh, Lucknow & Ghaziabad has issued their first municipal bonds.
- Moreover, Ghaziabad issued India's First Green Municipal Bond.

Recent Municipal Bond Issues – 2017 Onwards

S.No.	Issuer	Issue Opening Date	Issue Amount (Rs. in crore)	Tenure (in years)	Put/ Call Option (in years)	Coupon Rate	Interest Payment	Credit Rating
1.	Pune MC	20/06/2017	200.00	10 years	None	7.59%	Semi-annual	AA+
2.	GHMC	16/02/2018	200.00	10 years	None	8.90%	Semi-annual	AA
3.	Indore MC	28/06/2018	139.90	10 years	7 years	9.25%	Semi-annual	AA(SO)
4.	GHMC	14/08/2018	195.00	10 years	None	9.38%	Semi-annual	AA
5.	APCRDA	16/08/2018	2000.00	10 years (5 STRPPs)	None	10.32%	Quarterly	A+(SO) & AA- (SO)
6.	Bhopal MC	25/09/2018	175.00	10 years	7 years	9.55%	Semi-annual	AA(SO)
7.	GVMC	21/12/2018	80.00	10 years	None	10.00%	Semi-annual	AA(SO)
8.	Ahmedabad MC	11/01/2019	200.00	5 years	None	8.70%	Semi-annual	AA+(SO)
9.	Surat MC	27/02/2019	200.00	5 years	None	8.68%	Semi-annual	AA+(SO)
10.	GHMC	20/08/2019	100.00	10 years	None	10.23%	Semi-annual	AA
11.	Lucknow MC	13/11/2020	200.00	10 years	None	8.50%	Semi-annual	AA & AA(CE)
12.	Ghaziabad MC(2021)	08/04/2020	150.00	10 years	None	8.1%	Semi-annual	AA & AA(CE)
13.	Vadodara MC (2022)	24/03/2022	100.00	5 years	NA	7.15%	NA	AA+ & AA

Potential Issues In Bond Financing

Enabling Bond Financing

- Regulatory framework
- Perception issues

General Obligation	Structured Debt Obligation
Revenue	Pooled Finance Scheme Bond

Preparedness pointers

- Credit enhancement is no substitute to project development at ULB level
- If bonds issued, but project is delayed, payment clock already started
- Proceeds kept in Treasury/ permissible assets: would earn less than Bond payment obligations

- **Efficient project development& management at core**
- **Bond finance could otherwise end up being high cost option**

Potential Issues In Bond Financing

Enabling Bond Financing: Municipality focus

- Double entry accrual accounting in place
  - Computerised accounts
- Audit and disclosures in place
- Property tax coverage and current collection efficiencies ideally > 90%
- Ringfencing mechanisms in place supporting projects & repayment
  - Ideally with clear cost recovery models from designated project portfolio
  - Credit enhancement/escrow mechanisms: support the framework: should not be seen as constituting the framework

Green Municipal Bonds

Green Municipal bonds are fixed income debt instruments like any other bond. They offer a stated return, and a promise to use the proceeds to finance or refinance, in part or fully, new or existing sustainable projects. Generally, green municipal bonds fund environmental, social and governance improvements or projects, and are issued by the public, private or multilateral entities to finance projects related to a more sustainable economy and that generate identifiable climate, environmental or other benefits.

Green Municipal Bonds are a new concept in India and Ghaziabad Nagar Nigam (GNN) got the distinction of issuing the 1st certified Green Municipal Bond in the Country.

GNN issued bonds worth Rs. 150 Crores in March 2021, with allotment to Investors on 6th April 2021, at a semi annual coupon rate of 8.10% p. a., probably the lowest coupon rate in similar rated Municipal Corporations.

The proceeds of the Bond Issue is being used for part financing the construction of 40 MLD TSTP Plant over an existing 56 MLD STP in Indirapuram, Ghaziabad, for supply and sale of Industrial Grade Water to the Industries situated under the area of Sahibabad Industrial Association.

The industries in the area are currently facing severe water crunch due to less availability of water as well as the NGT order of not using the ground water for Industrial purposes.

This project, once operational, is expected to substantially reduce the water shortage problem in the Industrial area as well as helping the environment by recycling and reusing the sewage water, which otherwise would have been wasted by going in the drain and also polluted the existing ground water. This would also free the existing ground water from industrial use and thus can be used for potable purposes.

Green Municipal Bonds

There were no clear cut SEBI guidelines for issuance of Green Municipal Bonds but the success of Ghaziabad issue prompted SEBI to look into this sector and they came out with a circular dated 24th November 2022, detailing some new features for issuance of Green Municipal Bonds.

“Green Debt Security” means a debt security issued for raising funds that are to be utilised for project(s) and / or asset(s) falling under any of the following categories, subject to the conditions as may be specified by the Board from time to time:

(i) Renewable and sustainable energy including wind, solar, bioenergy, other sources of energy which use clean technology,

(ii) Clean transportation including mass/public transportation,

(iii) Sustainable water management including clean and/or drinking water, water recycling,

(iv) Climate change adaptation,

(v) Energy efficiency including efficient and green buildings,

(vi) Sustainable waste management including recycling, waste to energy, efficient disposal of wastage,

(vii) Sustainable land use including sustainable forestry and agriculture, afforestation,

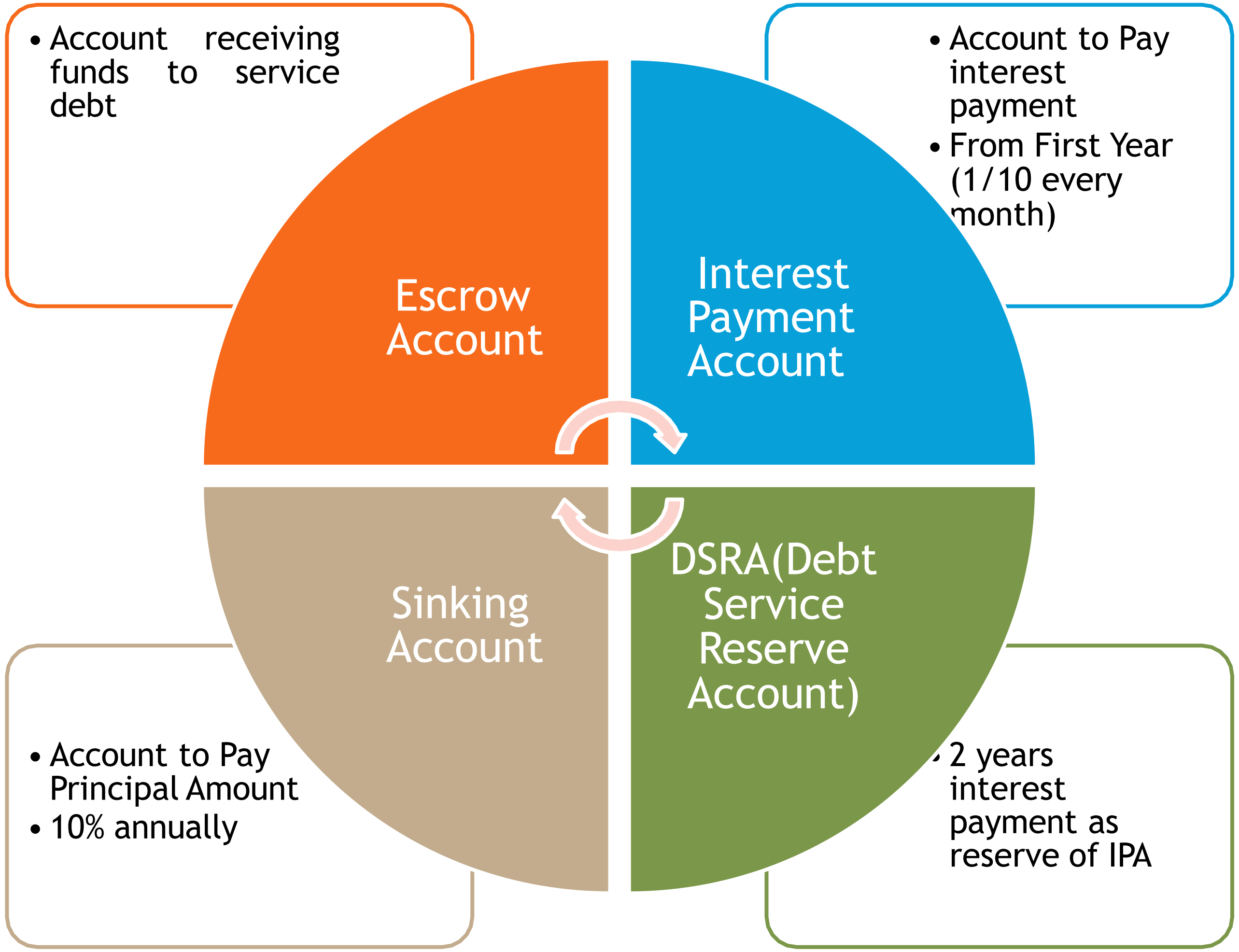
(viii) Biodiversity conservation,

or

(ix) a category as may be specified by the Board, from time to time.

Process of Listing Municipal Bonds

Municipal Bonds: Understanding Structure



Brief about GNN-India's First Green Municipal Bond

- Ghaziabad Nagar Nigam successfully raised Rs 150 Cr.
- The issue had a Base Size of 100 Cr with Green Shoe Option of 50 Cr.
- The coupon rate is 8.10% which can be termed as a highly competitive rate in the history of Municipal Bonds in India.
- The issue was over-subscribed by more than four times with 40 bids totaling to Rs 401 Cr on BSE's EBP platform.
- GoI has incentivized us by contributing Rs. 19.50 Cr as grant for issuance of bonds worth Rs. 150 Crore. GoUP has also incentivized the issue giving IDF backing.
- Bid Date: 31st March, Listing Date: 8th April
- Our Project: 40 mld TSTP (320Cr) under HAM model

Challenges, Learnings and Expectations

- Challenges

1. Convincing the Political Body & Head of Departments for approving the Issuance but with logical discussions, we could do it.
2. Gathering of all the documents and information in time was a big challenge, considering the less digitalization at that point of time but with the efforts of all concerned, it was made possible.

- Learnings

1. The issuance has helped us in streamlining our financial reporting process.
2. Now, we are preparing our quarterly unaudited financials as well as the yearly audited financials, within the prescribed timelines, whereas, previously, it used to take almost an additional year to get the accounts audited.
3. This has also helped us in identifying any loopholes or shortcomings immediately.
4. Introduced us to the new financial and technical world, of which we were practically unaware, like Listing, Compliances, HAM model of working, etc.
5. We have slowly started to move from "***Not Possible***" to "***Trying to get it done***" and ultimately aim to move towards "***Already Done***" model of working.

- Expectations

1. Regulators and Governing Bodies are requested to treat a Municipal Corporation as an extended arm of government, engaged in public service oriented works. It is not a company hence should not be treated like a company and compliances needs to be softened a bit accordingly.
2. The major investor in a Bond Issue is the Retirement Fund Segment like Provident Funds, Gratuity Funds, etc. Under there investment guidelines issued by GoI, they have to mandatorily invest in the riskier investment (possibly most rewarding also) like Share Market, wherein they have to invest a minimum of 5% of investible corpus. Considering the safeguards enforced by SEBI on Municipal Bonds, ideally, Investment Regulators should also think of carving out a small mandatory quota of investment in Municipal Bonds, from there investible surplus. This will improve the demand, lower the borrowing cost and also help in improving the liquidity of these bonds in the secondary markets.

Challenges, Learnings and Expectations

Please note that all these timelines start from the Zero Date, wherein, the Zero Date means the date before which the Corporation has obtained the approval of their General Body & Govt. for Project, its DPR, Bond Issuance & Security Covenants like pledging of any fixed assets and/or revenue streams, appointment of the relevant Intermediaries, etc.

Tentative Activities	Tentative Timeframe
Credit Rating by Two Rating Agencies	Approx. 30 Days
Due Diligence by the Merchant Banker	Approx. 30 Days
Agreements Preparation by the Legal Counsel	Approx. 30 Days
Preparation of the Preliminary Placement Memorandum	Approx. 30 Days
The above work can be carried out simultaneously	
Application to Stock Exchange for In - Principle Approval & EPB, Application to NSDL & CDSL for De-Mat	Approx. 15 Days
Approval and vetting of the proposed agreements by GoUP & subsequently, signing of the agreements.	Varies
Application to SEBI for submission of the Preliminary Placement Memorandum for their observation and comments	Approx. 25 Days
Setting up of the Issue of the EBP and Investor Meeting and Presentation	Approx. 7 Days
Issue Opening, Closing and Allotment	Approx. 2 Days
Application to Stock Exchange for Final Listing	Approx. 4 Days
Listing Ceremony (upon Receipt of the Final Listing Approval)	Same Day or Next Day

The total process from the Zero Date is approx. 50-70 days for completion of the process, depending upon the timely approvals and constant and active support from the concerned parties.

In Conclusion

- **Raising municipal spending to levels necessary for maintaining urban services delivery benchmarks – a challenge**
  - declining own revenues
  - limits of a property tax dominated municipal tax system
  - providing subsidies in service deliveries
  - irregular transfers and grants from higher levels of government.
- Reforms in fiscal transfer mechanisms from higher levels of government in terms of increased quantum of transfers and transparency/ timeliness to have positive impact on municipal finance.
- As fiscal transfers alone will not be sufficient to meet municipal service delivery requirements therefore promotion of local revenue sources assumes importance.
- Municipal Corporation and other ULBs need to focus not only on improving own revenue sources but also tap into new and alternative sources capturing value from land based developments.
- The urban planning process needs to take into account prospects for generating additional municipal revenues. Development authorities in many states need to assume more responsibility for supporting urban infrastructure development and operations and maintenance of assets.
- **In conclusion, Municipal Corporations and other ULBs need to assume the primary responsibility for economic activity if cities are to emerge as engines of economic growth.**


THANK
YOU !