

Financing Urban Infrastructure: Some Innovative Practices of Local Resource Mobilisation

Introduction

The India Infrastructure Report (Rakesh Mohan Committee) estimates the requirement of funds for urban infrastructure at Rs.250 billion per annum. This figure does not take into account the needs of capital-intensive Light Rail and Mass Rapid Transit and New Township Development Projects. If the requirements of LRTS/MRTS projects in two-million-plus cities are included, Urban India would need a staggering amount of about Rs.400 billion per year. Obviously a sum of this magnitude cannot be found from the budgets of Central and State Governments in the presence of their pressing needs of structural adjustment, price stabilisation, poverty alleviation and social welfare. Thus an imperative has arisen to search for innovative strategies of resource mobilisation outside the budgetary channels, including facilitating private sector participation and public-private partnerships in the production and provision of civic infrastructure and services. In this regard policy makers are increasingly focusing attention on strengthening of municipal finances and promoting access of Municipalities and other urban infrastructure financing agencies to financial institutions, banks, long-tenor funds and the capital market. As cities and towns are the generators of national wealth, there is a growing recognition that the resources needed for urban development be generated from within the urban economies by use of principles like "beneficiaries pay", "users pay" and "polluters pay".

Faced with the problems of massive urban growth and concentration on one hand and increasing costs of services on the other, many Municipalities, Urban Development Authorities, Water Supply and Sewerage Boards in the country have experimented with new ways of strengthening their resource base in the recent past. The Constitution (74th Amendment) Act, 1992 has also provided a push to local efforts by according a constitutional status to the Municipalities as the third tier of Government. This Act mandates an institutional framework in which the Municipalities are to function as effective democratic institutions of local self-government, preparing and implementing plans for economic development and social justice. The emphasis placed on decentralisation as a means to improve service delivery is a key factor responsible for the recent surge of local efforts to improve the system of urban development financing. This paper summarises some of the best practices of local resource mobilisation for the financing of urban infrastructure and services in India. Some of the practices are new while others are well-established, with a history of success.

Internal Resource Mobilisation: Ahmedabad Municipal Corporation

The Ahmedabad Municipal Corporation was in severe financial crisis till about 6 years ago. It had a deficit of about Rs.35 crores and a bank overdraft of Rs.22 crores. However, due to considerable efforts by the Corporation for intensification of tax collection, the city was able to tide over its financial difficulties and generate a considerable surplus within a limited time period. Effective leadership and a strong focus on professionalism were among the key factors responsible for bringing in a major turn-around, enabling the Corporation to wipe off all its cash losses and overdrafts between November 1994 and March 1995 and become financially sound. The efforts by the Corporation primarily consisted of improving the base of Octroi through updating of

tax records, plugging of leakages and evasion, efficient handling of Property Tax disputes and enhancing tax compliance through strengthening of enforcement mechanisms.

The data below shows some comparative figures regarding the achievements in the collection of Octroi and Property Tax by the Ahmedabad Municipal Corporation between 1993-94 and 1996-97.

Year	1993-94	1996-97	% Increase
	(Rs. in lakhs)		
Octroi	13,211.08	22,738.32	72.11%
Property Tax	4,708.72	9,448.51	100.66%

The income, expenditure and budget surplus generated by the Corporation during 1994-97 can be seen from the following figures:

Year	1994-95	1995-96	1996-97
	(Rs. in lakhs)		
Income (Rs. crore)	285.46	354.21	387.20
Expenditure	247.67	294.85	325.97
Surplus	37.78	59.36	65.25

The major steps taken by the Ahmedabad Municipal Corporation in 1993 and subsequently to improve the Octroi collections include the following:

- Establishment of a market research cell in the Octroi Department at the Corporation for preparation of valuation books on the basis of prevailing market prices to eliminate under-invoicing by importers;
- Creation and updating of Octroi valuation records with the help of professionals like Chartered Accountants and Cost Accountants and posting them to man important check posts for some time to have a first hand knowledge of the buoyancy of Octroi
- Systematically undertaking measures to tackle tax defaulters, including using police force to arrest anti-social elements who abet the evasion of Octroi by goods vehicles at check-posts and intimidated officials;
- Introduction of a system of random checks by senior officers of the Corporation at multiple points and opening of trucks carrying goods into the city to deal with the problem of bogus bills;
- Deployment of additional vigilance squads for round-the-clock duty to intercept vehicles entering into the city and make spot physical verification; and
- Equipping the Octroi check posts with wireless system to facilitate rapid communication.

Prior to 1993, the collection of Octroi in Ahmedabad was plagued by two major problems: (i) operation of mafia gangs aiding considerable tax evasion at check-posts and (ii) low level of assessment due to non-updating of tax base. To address the first problem, the Administrator deputed all senior officers of the Corporation to personally manage check-posts and intercept vehicles at alternative points: roads, check-posts, and unloading and storing locations. The objective was to ensure that there was no under-invoicing of goods liable to pay Octroi. Additional staff and police personnel were

deployed at important check-posts, which contributed the bulk of the city's Octroi revenues. Complaints were promptly forwarded to the police against tax evaders and their vehicles were seized. Many anti-social elements were arrested and put behind bars. The communication systems at check-posts were considerably improved. The Administrator himself managed some check-posts and personally checked vehicles carrying goods into the city. A system of incentives for the tax collection staff to promote good performance was also designed. The various measures adopted by the Administrator enhanced the morale of the tax collection machinery and acted as disincentives for tax evaders.

The second major problem, i.e., the low tax base of Octroi was tackled by updating the valuation books. The values of goods adopted for calculation of Octroi had not been revised for years and were outdated. The Administrator hired a number of professional accountants to rewrite the valuation books. New valuation schedules were printed showing updated values and were circulated to check-posts for calculation of Octroi to be levied on various types of goods. This resulted in a spontaneous increase in Octroi collections even if the tax rate was not raised.

The major steps taken by Ahmedabad Municipal Corporation during 1993 and subsequently to improve the Property Tax collections include the following:

- Hiring of reputed lawyers to handle some important court cases at the Gujarat High Court and the Supreme Court of India, which resulted in decisions in favour of the Corporation;
- Disconnection of water supply and drainage services for properties whose owners defaulted in the payment of property tax;
- Issue of warrants for confiscation of moveable properties and attachment of immovable properties; and
- Auctioning of property for tax recovery.

The Bombay Provincial Municipal Corporation (BPMC) Act, 1949 stipulates the adoption of annual rateable value (ARV) as the basis of Property Tax. ARV is determined as the difference between the annual letting value and 10% allowance provided for repairs, etc. The annual letting value for a property is defined as the expected annual rent if the property were let in the market from year to year. The BPMC Act provides for three methods to calculate this annual rent for the purpose of property tax fixation as follows:

- (a) The "standard rent" defined under the Rent Control Act is to be taken as annual rent in respect of properties subject to rent control if such rent does not exceed the standard rent;
- (b) If in the opinion of the Municipal Commissioner, the annual rent received from any rent control property is more than the standard rent, the actual rent received can be construed as the annual rent;
- (c) In case of any property, which is not ordinarily let and the annual rent of which, in the opinion of the Municipal Commissioner, cannot be easily estimated, the annual rent will be equal to 6% of the market value of the property at the time of assessment.

The provisions stated at (b) and (c) above, which were introduced by way of amendment to BPMC Act in 1984, were challenged in a number of litigations in the Small Causes Court.

As provided by the BPMC Act, every litigant is required to deposit 100% of the property tax in dispute before preferring an appeal. The appellate court has jurisdiction to reduce the requirement to 75% only in special hardship cases. However, this provision was ignored by the Small Causes Court, resulting in a loss of considerable revenues to Ahmedabad Municipal Corporation. Most of the judgements in the lower court had gone against the Corporation on procedural grounds related to what was the basis of the tax, who issued the tax notice, and who was liable to make payment. The important legal point involved was whether the actual rent paid could be taken as the basis for annual rent in the case of tenanted properties for which standard rent was not fixed. In 1992-93, the Corporation preferred some 1500 appeals in the Gujarat High Court against the decisions of the Small Causes Court. The Corporation handled these cases effectively by appointing eminent lawyers to present its case before the High Court and making the topmost officers responsible for tracking the case matters. The Deputy Municipal Commissioner (Revenue) was himself present at the trial for months and personally presented the important facts before the Court. Ultimately, the High Court decided the cases in favour of the Ahmedabad Municipal Corporation in the judgement dated September 8, 1994. It held that so far as the Municipal Corporation is concerned, the annual rent is the actual rent received where standard rent is not fixed under the Rent Act and it constitutes the basis for determining annual letting value, rateable value and property tax. The High Court also observed that the property tax paid must be added to rent for the purpose of calculation of the tax base.

The judgement of the Gujarat High Court was challenged in the Supreme Court vide Civil Appeal No.5405 of 1995 in the case of Assistant General Manager, Central Bank of India etc. vs. Commissioner, Municipal Corporation for the city of Ahmedabad. The Corporation again engaged the services of eminent lawyers of national standing. Ultimately, the Supreme Court decided the case in favour of the Corporation. The Ahmedabad Municipal Corporation was in a position to recover sizeable property tax revenues from tenanted properties due to the favourable decisions of the High Court and Supreme Court.

Had the Ahmedabad Municipal Corporation tried to save money in fees payable to lawyers as is done by most local bodies to avoid public criticism, perhaps the Property Tax dispute cases would have been lost. Here again it was effective leadership provided by the Administrator and focus on professionalism that paid rich dividends.

Charges for Institution and Change of Land Use: Andhra Pradesh

Section 28 of the Andhra Pradesh Urban Areas (Development) Act, 1975 prescribes for the imposition of Development Charges on persons instituting or changing any land use, and undertaking or carrying any development. The use of land and buildings are classified into the following categories: Industrial, Commercial, Residential, Agricultural and Miscellaneous. It is further stipulated that:

- (a) the development charges payable in respect of any land or building shall be a

- first charge on such land or building, subject to the prior payment of land revenue, if any, due to the Government thereon; and
- (b) all development charges payable in respect of any land or building by any person shall, together with interest due up to the date of realisation, be recoverable from such person or his successor in-interest in such land or building as arrears of land revenue.

In spite of the above legal provisions, the State Government had not evolved systematic procedures for the determination of Development Charges till recently. In fact, there are some Urban Development Authorities/Municipal Corporations in the country today which do not levy charges to tap a part of the increments in land values due to planning permissions by way of institution of or change to higher value use.

The Government of Andhra Pradesh took some important initiatives in the urban development sector in 1996 for using urban land as resource, especially by streamlining the levy of Development Charges. Order No.51 of the Municipal Administration and Urban Development Department, dated 5th February, 1996, streamlined the levy of Development Charges in the large cities of the State to cover all possible cases of institution and change of land use, say, from residential to commercial, vacant to residential, etc. The rates were enhanced significantly to bring in some correspondence between the value gains due to planning permissions and the development charges paid. Further, the Government ordered that the amounts of Development Charges, which are to be collected by the concerned Urban Development Authorities, be kept in a separate account. Also 85% of the income from these charges would have to be spent on the implementation of Master Plan provisions, viz., (a) traffic improvement, (b) construction of bridges, (c) development of green belts and parks, etc. The remaining 15% only could be utilised for administration and maintenance expenses. Each Urban Development Authority was required to prepare an action plan every year for the implementation of Master Plan proposals, utilising the amounts received on account of Development Charges.

The rates of Development Charges as fixed by the Government of Andhra Pradesh for various categories of institution and change of land use are shown in Annexure 1. These provide indicative guidelines for the levy of charges in connection with institution and change of land use in other cities/States of the country. The concept of betterment due to planning permission is well-grounded in the Town Planning Acts of many countries and there is a strong case for tapping a part of the unearned increments in land values due to planning gains and using the same for decongestion programmes, acquiring and developing land for conservation purposes, etc. This way, funds can be generated for programmes such as flyovers, outer and inner ring roads, LRTS and MRTS and creation of lung space including city forests and preservation of ecologically-sensitive resources. The Hyderabad Urban Development Authority is able to mobilise about Rs.15 crores per annum from Development Charges made possible on account of the Government Order issued in 1996. Most of the 16 flyover construction works that were started by MCH are completed and the flyovers have become functional.

Transferable Development Right: Mumbai Municipal Corporation

The Municipal Corporation of Greater Mumbai has been adopting a practice of Transferable Development Right (TDR) under Regulation 34 of the Development

Control Regulations for Greater Bombay, 1991. These Regulations were framed in accordance with the provisions of the Maharashtra Regional and Town Planning Act, 1966. Under the TDR concept, the development potential of a plot of land partly or fully reserved for public purpose can be separated from the land itself and be made available to the owner of the land by way of TDR in the form of Floor Space Index. Such award entitles the owner a Development Right Certificate (DRC), which he may himself use or transfer to another person. The TDR Regulations take into account the long experience of the Municipal Corporation of Greater Mumbai in the practice of the instrument of Floating FSI. Annexure 2 provides the sample *pro forma* of Development Rights Certificate.

The TDR Regulations describe the salient features of a Development Right Certificate and specify certain conditions for the grant such instruments as follows:

1. Development Rights Certificates (DRCs) will be granted to an owner or a lessee only for reserved lands which are retainable/non-retainable under the Urban Land (Ceiling and Regulations) Act, 1976 and are available only for prospective development of reservations;
2. DRCs will be issued by the Municipal Commissioner himself. They will state, in figures and in words, the FSI credit in square metres of the built-up area to which the owner or lessee of the reserved plot in question is entitled, the place and user zone in which the Development Rights (DRs) are earned and the areas in which such credit may be utilised;
3. The built-up area for the purpose of FSI credit in the form of a DRC shall be equal to the gross area of the reserved plot to be surrendered and will proportionately increase or decrease according to the permissible FSI of the zone where from the TDR has originated;
4. When an owner or lessee also develops or constructs the amenity on the surrendered plot at his cost and hands over the amenity to the Corporation free of cost, he may be granted a further DR in the form of FSI equivalent to the area of the construction/development done by him;
5. If a holder of a DRC intends to transfer it to any other person, he will submit the DRC to the Commissioner with an appropriate application for an endorsement of the new holder's name, i.e., transferee on the said Certificate;
6. Irrespective of the location of the land in which they originate, the DRCs shall not be used in the densely developed Island City;
7. The user who will be permitted for utilisation of the DRCs on account of Transfer of Development Rights will be as under:

Zone in which designated/ reserved plot is situated	User to be permitted in receiving areas
(a) Residential (R)	Only residential users and in Residential Zones only.
(b) Commercial (C-2)	Commercial (C-2) users if the plot where the FSI is to be utilised is situated in C-2 Zone. Commercial (C-1) if the plot where the FSI is to be utilised is situated in C-1 Zone.

	Residential only in Residential Zones.
(c) Commercial (C-1)	Commercial (C-1) if the plot where the FSI is to be utilised is situated in C-1 Zone. Residential in Residential Zones.
(d) Industrial (I-1), (I-2), (I-3)	Residential only in Residential Zones.

8. DRs will be granted and DRCs issued only after the reserved land is surrendered to the Municipal Corporation or State Government;
9. A DRC will be a transferable "negotiable instrument" after due authentication by the Commissioner;
10. The surrendered reserved land for which a DRC is to be issued shall vest in the Corporation or the State Government and such land shall be transferred in the City Survey Records in the name of the Corporation or the State Government, as the case may be.

The Municipal Corporation of Greater Mumbai insists on the following actions by land-owners before a DRC is granted:

- (a) Levelling of ground by land filling or cutting;
- (b) Construction of compound wall as per municipal specification;
- (c) Exhibition of name board indicating the reservation and ownership of the Municipal Corporation; and
- (d) Transfer of the land to the Municipal Corporation or Government by way of indemnity bond-cum-declaration.

By use of the innovative concept of Transferable Development Right, the Municipal Corporation of Greater Mumbai has so far been able to acquire about 900,000 square metres of space reserved for public purpose as per the Development Plan without paying any cash compensation whatsoever. On a conservative value of land at Rs.3,000 per square metre, the cost of the land obtained free of cost works out to about Rs.270 crores. This is certainly a very impressive achievement for the city of Mumbai and the practice needs to be introduced in other major cities of the country.

Regularisation of Unauthorised Constructions: Andhra Pradesh

Unauthorised constructions have come up in large numbers in Hyderabad and other cities of Andhra Pradesh as in their counterparts elsewhere due to various reasons. These unauthorised buildings are not brought to municipal accounts. Accordingly, the Municipalities lose revenues on two counts: non-payment of development charges and fees linked to construction permission and non-collection of property taxes. Surveys reveal that in bulk of the cases of unauthorised developments, the violations are not critical and could be compounded subject to appropriate safeguards. Considering this, the Government of Andhra Pradesh vide Government Order No.243, Municipal Administration and Urban Development Department, dated 22.5.96 has issued orders prescribing certain ranges of penal amount for regularisation of unauthorised constructions by Municipal Corporations, Urban Development Authorities and Municipalities in the State as a one-time offer. The orders were revised vide Government Order No.382 Municipal Administration and Urban Development Department, dated 27.7.96 fixing the rates of regularisation charges as follows:

1. Residential Buildings

(a) Upto Ground + 2 floors			
		Area Upto 100 Sq.m. Plot Area	101 to 200 Sq.m. Plot Area
1.	Intensive developed and Populated area	Rs.10,000	Rs.15,000
2.	Central Administrative area	Rs.7,500	Rs.10,000
3.	Other areas	Rs.5,000	Rs.7,500
(b) Every additional floor over and above Ground + 2 floors		Rs.5,000/- per each floor (upto 200 Sq.m. of plot area)	

2. Commercial Buildings

(a) Upto Ground + 2 floors		
	Area Upto 200 Sq.m. Plot area	
1.	Intensive developed and populated areas	Rs.20,000/-
2.	Central Administrative areas	Rs.15,000/-
3.	Other areas	Rs.10,000/-
(b) Every Additional floor over and above Ground + 2 floors		Rs.10,000/- per each floor (upto 200 sqm Plot area)

The Order by the Government of Andhra Pradesh stipulated that unauthorised constructions would be removed effectively if their owners did not come forward to regularise such constructions before the stipulated date (30.3.1997). Committees were also constituted to monitor the progress of the detection and regularisation of unauthorised constructions at the District Level with the District Collector as Chairman and at the Municipality level with Mayor/Municipal Chief as the Chairman. As a result of the effective implementation of the Government Order, many Municipalities in the State of Andhra Pradesh were able to mobilise considerable amounts for undertaking development programmes.

External Development Charges: Haryana Urban Development Authority

Section 2 of the Haryana Development and Regulation of Urban Areas Act, 1975 includes both internal and external development projects in the definition of "development works". "External development works" include: sewerage, drains, roads and electrical works, which may have to be executed in the periphery of, or outside, a colony for the joint benefit of two or more colonies. "Internal development works" mean: i) metalling of roads and paving of footpaths; ii) turfing and plantation of trees with open spaces; iii) street lighting; iv) adequate and wholesome water supply; v) sewers and drains, both for storm and sullage water and necessary provision for their treatment and disposal; and vi) any other work that the Director, Town and Country Planning, Haryana may think necessary in the interest of proper development of a colony.

The Act defines a "colony" as an area of land divided or proposed to be divided into plots or flats for residential, commercial or industrial purposes, but an area of land divided or proposed to be divided (a) for the purpose of agriculture; or (b) as a result of family partition, inheritance, succession or partition of joint holding not with the motive of earning profit; or (c) in furtherance of any scheme sanctioned under any other law; or (d)

by the owner of a factory for the labourers or the employees working in the factory, provided there is no profit motive; or (e) when it does not exceed one thousand square metres, shall not be considered a 'colony'. A coloniser is defined under the Act as an individual, company or association body of individuals, whether incorporated or not, owning or acquiring or agreeing to own or acquire, whether by purchase or otherwise, land for converting it into a colony and to whom a license has been granted under the Act.

As per Section 3 of the Haryana Development and Regulation of Urban Areas Act, 1975 any owner (includes a person in whose favour a lease of land for a period of not less than ninety nine years has been granted) desiring to convert his land into a colony is mandatorily required to obtain a license from the Director, Town and Country Planning, Haryana for setting up a colony. The coloniser to whom a license is to be granted will have to enter into an agreement with the Director, on prescribed form LC-IV and a bilateral agreement. One of the conditions of the agreements is regarding the payment of "proportionate development charges" if the main lines of roads, drainage, sewerage, water supply and electricity are to be laid out and constructed by the Government or any other local authority. The proportion in which, and the time within which such payment is to be made is required to be determined by the Director.

The provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 make it mandatory on the part of every colony/sector/plot-holder to bear the burden of internal and external development services. The external development charges (EDC) in respect of a development area are levied to meet the costs of Master or city-wide infrastructure facilities required to be laid or developed as per the stipulations of the Development Plan. External development works include: (1) Water supply; (2) Sewerage; (3) Storm water drainage; (4) Roads; (5) Electrification including 26.5% operation and maintenance and supervision charges; (6) Street lighting; (7) Community buildings; (8) Diversion of high tension (HT) lines; (9) Horticulture including first five years maintenance; (10) Conservancy; (11) Nominal maintenance of roads: first five years; (12) Nominal maintenance of roads: second five years; (13) Resurfacing of roads after five years; (14) Resurfacing of roads after 10 years; (15) (a) Maintenance of public health Services for first five years; (b) Maintenance of public health services beyond five years and upto 10 years; (16) (a) Maintenance of street lights for first five years; (b) Maintenance of street lights beyond five years and upto 10 years; (17) (a) Horticulture after 5 to 10 years; (b) Beautification of entry points, junction improvements and levelling; (18) Development of recreational and communication zones; (19) Protection works, etc. External development charges, meant to meet the costs of external development works, are calculated on project basis for the total urban estate.

In Haryana, the Haryana Urban Development Authority (HUDA) is the main executing agency for development works in urban areas. Accordingly, the external development works connected with city level physical and social infrastructure for a colony are executed by HUDA based on the proportionate charges deposited by the coloniser with the Development Authority. The rough cost estimates for the external development services are prepared by the Haryana Urban Development Authority and distributed over the gross saleable area, which is approximately 50% of the total land available in an urban estate. This provides the per acre development cost on gross area basis. The technical parameters on the basis of which these estimates are prepared are as follows:

- i. Density of population of residential plotted area is taken as 100 persons per acre for the purpose of designing services;
- ii. In the case of group housing, the services are designed on the basis of population density of 400 persons per acre;
- iii. In respect of an industrial area, the services are designed on the basis of equivalent residential area having a population density of 100 persons per acre. Thus, the norms of external services for residential and industrial areas are the same.

The cost estimates for external development works as prepared by the Engineering Wing of HUDA are loaded on saleable land with 49% overhead having the following components:

Escalation Charges	25.00%
Departmental Charges	15.00%
25% Escalation on 15% Departmental Charges	3.75%
Sub total	43.75% or 44%
Unforeseen Charges on Works	5.00%
Total	49.00%

As far as the land components are concerned, the land escalation cost + 10% Administrative Charges are added to the development cost per acre. The above external development charges are added to internal development costs and the land costs for a scheme are distributed over the saleable area which gives the price of plot per square metre. The external development charges (EDC) are updated every year on the 1st of January by adding 10% over the previous year's charges. The total cost is reviewed after every two to three years.

At present the following external development charges are being levied by the Haryana Urban Development Authority for plotted development and group housing colony in Gurgaon and Faridabad (see Appendix 3):

A. Gurgaon

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|------|--|--------------------------------|
| i) | Residential plotted colony | Rs.10.63 lakhs per gross acre |
| ii) | Group housing scheme constituted at independent location | Rs.44.228 lakhs per gross acre |
| iii) | Group housing scheme located within licensed colony of the same developers | Rs.35.43 lakhs per gross acre |

B. Faridabad

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|------|--|-------------------------------|
| i) | Residential plotted colony | Rs.8.724 lakhs per gross acre |
| ii) | Group housing scheme constituted at independent location | Rs.44.58 lakhs per gross acre |
| iii) | Group housing scheme located within licensed colony of the same developers | Rs.36.24 lakhs per gross acre |

Till 25.6.1998, the Haryana Urban Development Authority was able to recover a sum of Rs.560 crores from the private colonisers on account of external development charges.

Land Disposal Policy: City and Industrial Development Corporation

The City and Industrial Development Corporation (CIDCO) was set up by the Government of Maharashtra in March 1970 as a fully-owned Government Company with the following primary objectives:

- (a) To progressively decongest Mumbai by shifting as many economic activities as possible, particularly out of the old island city;
- (b) To create attractive urban centres to act as new countermagnets by drawing away new migrants who would otherwise flock to the core cities and also the existing population.

Since its creation, CIDCO has successfully undertaken a number of new township development projects including Navi Mumbai on a self-financing basis by the use of land as a resource to promote orderly urban development.

CIDCO has used land pricing as the key important instrument to promote development while recovering the cost of land as well as infrastructure facilities. The Reserve Price of land in a development node is worked out by CIDCO as under:

1. The past cash flow is worked out based on year-wise expenditure and receipt from land sale as per annual accounts. Thereafter, the net expenditure for each year is compounded to its present worth at CIDCO's borrowing rate (@ 13%).
2. The future expenditure on infrastructure works is phased out over the remaining project period. After loading escalation, overheads, interest, etc., the yearly expenditures are discounted to their present worth (@ 13%).

The net position emerging from past cash flow is either added or deducted from the discounted value of future expenditure. The total present worth is then divided by the balance saleable area to get the Reserve Price.

CIDCO has been following a judicious land pricing and disposal policy in Navi Mumbai with an appropriate cross-subsidisation policy and to meet the twin objectives of promoting the implementation of the Navi Mumbai Development Plan and generating adequate resources for infrastructure development. Annexure 4 describes the land pricing and disposal policy of CIDCO as approved in 1995.

CIDCO started an innovative scheme in November 1994 called the “12.5% scheme”. Under the “12.5% scheme,” the landowners whose lands have been acquired are enabled to have both land compensation and 12.5% of developed land re-conveyed to them for residential use at 2 times the land acquisition cost plus Rs.5 per square metre towards recouping of development cost. This scheme was designed to counter the resistance of landowners in the cases of acquisition of their land.

Dedicated Fund for Urban Mass Transit: Case of Bangalore

Bangalore has been growing at a phenomenal pace over the past two decades. In 1997, the population of Bangalore was estimated at about 5 million; the figure is expected to cross the 7 million mark by 2011. Its infrastructure systems are under severe pressure, due to massive growth in the city's population, transportation being the worst-hit.

Bangalore depends entirely on roads for all its transport needs. However, due to considerable growth in the number of motor vehicles, the traffic congestion in the city roads is growing from bad to worse with the passage of each year. To deal with these problems, the Government of Karnataka has decided in 1995, vide Order dated 5.1.1995, to implement a modern Elevated Light Rail Transit System (ELRTS) for Bangalore as a joint venture partnership with the private sector under a Build-Own-Operate-Transfer (BOOT) arrangement. The Government also decided vide Order dated 31.3.95 to set up a "Mass Rapid Transit System Fund" for the implementation of the transit system. The receipts for this Fund are to be generated out of cess to be levied on various taxes collected in the city.

Proposals for expression of interest in the ELRTS were invited by the Government of Karnataka globally from Indian/International consortia. Vide Government Order dated 1.1.1996, the Government approved the selection of UB Group Consortium comprising of the following partners to implement the Bangalore Elevated Light Rail Transit System comprising six routes, with Phase-I being taken up first:

- (a) The UB Group
- (b) ICF-Kaiser International Ltd.
- (c) Nippon Sharyo Ltd.
- (d) T.T.K. Inc.
- (e) GE Transportation Ltd.

Subsequently vide Government Order dated 13.1.97 the Government of Karnataka has approved the modified composition of the UB Group Consortium (UBGC) as indicated below:

- (a) M/s UB Group represented by UB Transit System Ltd (UBTSL)
- (b) ICF-Kaiser Engineers Inc.
- (c) Nippon-Sharyo Ltd.
- (d) Transportation & Transit Association Inc.

UBGC has set up a new company called UB Transit Systems Ltd. (UBTSL) to actually implement the project.

As per the order of Government of Karnataka the following cesses/duties/fees are levied in the Bangalore City Planning Area to create the BMRTS Fund:

Commercial Tax Department:		
A.	Sales Tax:	
(1)	Petrol	0.25 paise per litre
(2)	Diesel	0.10 paise per litre
(3)	On goods other than declared goods	5%
B.	Luxury Tax	5% on lodging charges of Rs.750/- and above
C.	Profession Tax	5% on Profession Tax
D.	Betting Tax	5% on Betting Tax
Motor Vehicles Department:		
A.	Motor Vehicle Tax	5% on Motor Vehicle Tax

Registration Department:		
A.	Stamp Duty	5% additional duty
Excise Department:		
A.	Licensing Fee	15% additional licensing fee on liquor manufacturing and liquor selling

The various components of BMRT Cess have together been able to raise more than Rs.50 crores per year in the past.

The case of BMRTS Cess provides the example of a dedicated fund to ensure the smooth channelisation of resources to an important sector like urban transport. In the context of the newly approved Delhi MRTS projects, certain dedicated taxes and levies have been suggested by experts for adoption to meet a part of the MRTS project cost. These include:

- Additional excise duty/sales tax on petrol/diesel, etc.;
- Surcharge on motor vehicles tax;
- Peak-hour entry fees on motor vehicles in defined metropolitan areas as in Singapore;
- Passenger terminal taxes, e.g., those leviable under Article 269 of the Constitution;
- Time-bound surcharge on property taxes in the city (co-terminus with the implementation period of the project);
- Levy at the rate of 1-2% of the annual wage bills of the large industrial and commercial establishments located in the metropolitan city or within a notified distance from the boundaries of such cities (payroll tax); and
- Surcharge on other Central/State/municipal taxes leviable and collected within the city.

As urban transport is a neglected sector, it is desirable that dedicated funds are created in large cities, at least for LRTS and MRTS projects to build a fund base for undertaking projects on a phase-by-phase basis.

Bond Issues: Bangalore and Ahmedabad Municipal Corporations

The Bangalore and Ahmedabad Municipal Corporations have created history in 1998 by issuing Municipal Bonds for the first time in the country. While Bangalore was the first one to issue Municipal Bonds, Ahmedabad stands distinguished as the first Municipal Corporation in the country to have mobilised resources on public placement basis. The features of the bond issues by the two Corporations are as follows:

	Bangalore City Corporation	Ahmedabad Municipal
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		Corporation
Date of Issue	27.11.97	16.1.1998
Date of Closure	On receipt of targeted amount	27.1.1998
Purpose of Issue	Strengthening and improving some important arterial roads along with footpaths, side drainage and road lighting.	Part finance water and Sewerage projects
Issue Size	Rs.75 crores + Greenshoe option of Rs.25 crores	Rs.100 crores
Face Value	Rs.100,000 each	Rs.1,000 each
Issue Price	Rs.100,000	Rs.1,000
Tenor	7 years	7 years
Credit Rating	CRISIL A(SO) Rating indicating Adequate safety with regard to timely payment of interest and interest and principal	CRISIL AA(SO) Rating indicating high degree of certainty
Placement	Private	Private and Public
Coupon Rate	13% per annum	14% per annum
Interest Payment	Half-yearly	Half-yearly
Under-written Amount	-	Rs.25 crores
Minimum Application	5 Bonds; in multiples size of 1 Bond thereafter	Denomination of 1 Bond or single certificate for aggregate amount if requested
Upfront Discount	0.25% for applications of Rs.3 crore or above but less than Rs.5 crore; 0.5% for applications of Rs.5 crores or above	-
Interest on Application Money	13% p.a. from the date of realisation of cheque(s)/demand draft(s) till date of allotment	6% to allottees paying in cash, cheque or draft between the date of encashment and the deemed date of allotment
Lead Manager to Bond Issue	SBI Capital Markets	Infrastructure Leasing & Financial Services Ltd. (IL&FS)
Listing	National Stock Exchange	Ahmedabad Stock Exchange; National Stock Exchange
Trustees	Karnataka State Financial Corporation	Indian Bank
Security	Government guarantee and Escrow account backed by Tripartite Agreement	Mortgage/charge on identified properties of the Corporation.

Guarantor	Government of Karnataka — unconditional and irrevocable guarantee	Not guaranteed
Structured Payment Mechanism	Escrow Account backed by a Tripartite Agreement between the Govt. of Karnataka, the City Corporation and Trustees to the Bondholders	Escrow Account to be created in Indian Bank with specific earmarking of Octroi revenues collectible from 10 pre-identified check posts
Deemed Date of Allotment	31.12.97	1.2.1998
Redemption	At par in 4 instalments of 20%, 25%, 25% and 30% of the face value at the end of 4th, 5th, 6th and 7th years respectively from the deemed date of allotment.	In three tranches of Rs. 333, Rs. 333 and Rs. 334 at the end of 5th, 6th and 7th years from the date of allotment.

The experiences of Bangalore and Ahmedabad Municipal Corporations indicate that by suitable designing of structured obligations and back-up fiscal concessions, Municipal/Urban Development Bonds could be developed as a major source of funding urban infrastructure projects in the future. Urban Development Authorities, Municipal Corporations, Water Supply and Sewerage Boards, Housing Boards and other agencies would be in a position to issue bonds provided required income tax concessions as in USA are available. In the absence of such concessions, the number of issuing authorities and investors are bound to be small. As the issue of pure General Obligation Bonds and pure Revenue Bonds will require considerable municipal reforms, in the initial stages the authorities may attempt issue of hybrid bonds. The alternatives for these hybrid bonds may include: General Obligation Bonds with project-specific utilisation and Revenue Bonds with general obligation characteristics/covenants. The general revenues of the borrowing authority and the revenue-generating potential of the projects could supplement each other to improve the marketability of Municipal Bond instruments.

The structuring of Municipal Bonds at the present juncture would need certain credit enhancement and risk-mitigating mechanisms so as to satisfy the investors regarding the application of their funds. It is desirable that all the bond proceeds are earmarked for specific projects which lead to visible improvements in local conditions and generate a steady stream of revenues. This would facilitate the structuring of bonds on a revenue-specific basis over a period of time, if not immediately. The development of a Municipal Bonds Market in India would require a number of key initiatives by the Central and State Governments including the following.

1. Bonds issued by the Municipalities and other agencies for infrastructure projects may be exempt from income tax;
2. Municipal Bonds may be regarded as eligible securities for the purpose of investment by public trusts, banks (SLR status) and public sector units and for money and treasury markets;
3. The amendments to the Income Tax Act with effect from the assessment year

1997-98 under Section 88 to provide tax rebate on amounts invested in debentures/bonds in a public company engaged in infrastructure may also be extended to Municipal Bonds;

4. The Government may undertake bond assurance and credit enhancement programmes that serve to extend tenor, generate liquidity, and provide a mechanism to equate risks across Municipal Bond issues;
5. Municipalities and Urban Development Authorities may be allowed to issue Municipal Bonds on the basis of credit rating by independent agencies;
6. Municipalities should be allowed to establish escrow accounts in order to provide transparent appropriation mechanisms to investors.

Tamil Nadu Urban Development Fund

As a component of the World Bank-supported Tamil Nadu Urban Development Project (TNUDP), an infrastructure fund was established in 1988 under a World Bank credit of Rs.167 crores to assist cities and towns in Tamil Nadu in the development of civic infrastructure. This fund, called the Municipal Urban Development Fund (MUDF), had extended loans to the tune of about Rs.200 crores to 74 cities and towns by September 30, 1996. The projects funded ranged from commercial ventures such as markets and shopping complexes to core municipal amenities like roads, water supply, drainage, sewerage and solid waste management. The MUDF was managed by a Project Management Group (PMG) which assisted ULBs in the preparation of viable urban development projects backed by appropriate financial operating plans. Financial discipline, strict project accounting, focus on project development, and cost recovery and effective management enabled MUDF to achieve an impressive 96% recovery on loans and to end up with a net worth of Rs.140 crores by the end of September, 1996. The successful track record of MUDF prompted the Government of Tamil Nadu (GoTN) to restructure the fund and broaden its scope so as to attract private capital and facilitate better-performing ULBs to access the capital market.

In 1996, the Government of Tamil Nadu (GoTN), with the assistance of the World Bank, invited three financial institutions: Industrial Credit and Investment Corporation of India (ICICI), Housing Development Finance Corporation (HDFC) and Infrastructure Leasing and Financial Services (IL&FS) to participate in the restructuring of MUDF into a Trust Fund. Accordingly, the Tamil Nadu Urban Development Fund (TNUDF) was established under the Indian Trusts Act, 1882 in September 1996 with GoTN, ICICI, HDFC, and IL&FS as partners and with a line of credit from the World Bank. By October 1997, the net worth of TNUDF stood at about Rs.1.91 billion, with GoTN's contribution at Rs.1.40 billion and the balance Rs.0.51 billion being the contribution of the FIs.

Based on a decision by GoTN to entrust the deployment of resources of the Trust to a private fund manager on consideration of efficiency, an Asset Management Company called the Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL) was established. GoTN's equity in TNUIFSL was deliberately restricted to 49% based on the motivation to facilitate private sector management of investment decisions. The shareholding patterns in respect of the private sector partners in TNUIFSL are: ICICI - 21%, HDFC - 15%, and IL&FS - 15%. ICICI, the lead institution, has taken up the management responsibility and has put in place appraisal systems and key personnel.

The main objectives of the Tamil Nadu Urban Development Fund (TNUDF) include the following:

1. Fund conventional-type civic infrastructure projects which improve the living standards of the urban population;
2. Facilitate participation by the private sector in urban infrastructure through joint venture and public-private partnerships;
3. Operate a complementary window, the Grant Fund, to assist in addressing the problems of the urban poor.

As a specialised financial intermediary with a focus on lending to high priority urban infrastructure, TNUDF has made tangible progress towards achieving its mandated objectives. With its unique structure, involving support of the Government of Tamil Nadu and the World Bank and expertise of reputed national FIs, TNUDF has pursued an approach to enable the ULBs to become financially vibrant and credit-worthy and eventually be in a position to access the capital markets. Simultaneously, it has facilitated the emergence of a robust system of municipal finance. As the only direct lender to municipalities, lending with recourse to no State guarantee and making them subject to project and financial discipline, TNUDF has introduced some of the larger and medium-sized ULBs to debt finance. It has made considerable effort to develop project financing structures that minimise business risks and facilitate partnerships between the public and private sectors.

As against the lending by MUDF to the tune of about Rs.200 crores over a period of 8 years between 1988 and 1996, TNUDF has appraised civic infrastructure projects costing Rs.208 crores and approved loans amounting to Rs.166 crores to 19 Municipalities and 5 Municipal Corporations between September 30, 1996 and June 5, 1998. These loans are to be disbursed in stages, depending on the progress of projects. Considering that the Business Plan of TNUDF targeted a lending of Rs.30 crores in 1996-97, Rs.60 crores in 1997-98 and Rs.90 crores in 1998-99, the performance of TNUDF is impressive.

Annexure 1

Rates of Development Charges to be levied under Section 28 of A.P. Urban Areas (Development) Act, 1975 and under Rule-15(6) of Urban Development Authority Rules, 1975

For Institution of Use or Change of Use	Within Municipal Corporation/ Municipalities Area					Outside Municipal Corporation/ Municipality Area	
	Proposed Rates (Rs./Sq.mts)					Proposed Rates (Rs./Sq.mts)	
	Land				Built-up space	Land	Built-up space
	Hyd.	Vsp. Vij.	Gun. Wgl.	Other Mclties			
I. Institution of Land Use							
a) Vacant to residential	10	10	10	10	20	05	10
b) Vacant to commercial	15	15	15	15	30	10	25
c) Vacant to industrial	15	15	15	15	30	10	25
d) Vacant to Misc.	10	10	10	10	20	05	10
II. Change of Land Use							
a) Recreational to Residential	90	50	40	30	20	05	10
b) Recreational to Commercial	100	60	60	40	30	10	25
c) Recreational to Industrial	90	50	40	30	30	10	25
d) Recreational to Miscellaneous	90	50	50	30	30	05	25
e) Agricultural/ Construction or Green Belt to Residential	60	40	30	20	20	05	10
f) Agricultural/ Construction or Green Belt to Commercial	75	50	40	30	30	10	25
g) Agricultural/ Construction or Green Belt to Industrial	60	40	30	20	30	10	25
h) Residential to Commercial	75	50	40	30	30	10	25

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i) Industrial to Commercial	60	40	30	20	30	10	25
j) Miscellaneous to Commercial	60	40	30	20	30	10	25
k) Agricultural/ Construction or Green Belt to Miscellaneous	10	10	10	10	20	05	10
l) Residential to Industrial	15	15	15	15	30	10	25
m) Residential to Miscellaneous	15	15	15	15	30	10	25
n) Commercial to Residential	10	10	10	10	18	05	10
o) Commercial to Industrial	15	15	15	15	30	05	10
p) Commercial to Miscellaneous	06	06	06	06	10	05	10
q) Industrial to Residential	06	06	06	06	10	05	10
r) Industrial to Miscellaneous	06	06	06	06	10	05	10
s) Miscellaneous to Residential	06	06	06	06	10	05	10
t) Miscellaneous to Industrial	15	15	15	15	30	10	25

Note: In case of developments involving change of land use and institution of use, both the charges shall be payable separately.

Hyd.=Hyderabad, Vsp.=Visakhapatnam, Vij.=Vijayawada, Gun.=Guntur,
Wgl.=Warangal.

Annexure 2

Sample pro forma of Development Right Certificate

Municipal Corporation of Greater Mumbai

Development Right Certificate

I,....., Municipal Commissioner for Greater Mumbai certify that the person(s) within named in this certificate is/are the registered holder(s) of the Development Right Certificate issued subject to the provisions of the regulation No.33(10) & 34 read with Appendix VII (B) of the Development Control Regulations for Greater Mumbai, 1991 as amended upto date.

- | | | |
|-------|---|-------|
| 1.(a) | Location & details of the land on which S.R.P. (Slum Rehabilitation Project) is sanctioned. | ..... |
| (b) | Area of the land on which S.R.P. is sanctioned. . | ..... |
| (c) | Zone of the land in 1(a) above | ..... |
| (d) | Number & date of approval of S.R.P. sanctioned by S.R.A. (Slum Redevelopment Authority) | ..... |
| 2.(a) | B.U.A. sanctioned in the form of T.D.R. in the S.R.P. | ..... |
| (b) | Number & date of the order issued by C.E.O., S.R.A. for 2(a) above. | ..... |
| 3.(a) | Built up area of the developed reservation handed over to M.C.G.M. | ..... |
| (b) | Possession Receipt No. & date | ..... |
| (c) | Reservation of built up amenity | ..... |
| 4. | The area where D.R.C. can be utilised | ..... |

Building File No.	Certificate No.
Names of DRC holders: .....	.....
FSI Credit of Built-up Area in Sq. M. ....	.....

Signature of
Chief Engineer,
Development Plan

Signature of
Municipal Commissioner
for Greater Mumbai

The Development Right Certificate also contains the details of utilisation of DRC and transfers: Sl. No., Date, Details of property where DRC is proposed to be used i.e., receiving plot, Name and Address of utiliser, Building File No., Area proposed to be used in sq. metres, Reduced Area of DRC in words and figures, Sanction No. and Date, Signature of Chief Engineer, Development Plan and Signature of Municipal Commissioner.

Annexure 3

**Internal and External Development Charges
as Levied in a Project in Gurgaon
(Rs. Lakhs per Acre)**

Sl. No.	Description	External	Internal	Total
1.	Water supply	2.13	1.02	3.15
2.	Sewerage	1.00	0.65	1.65
3.	Storm water drainage	0.60	0.65	1.25
4.	Roads including earth filling & bridges	0.86	1.15	2.01
5.	a) Electrification (including I/S)	0.25	0.95	1.20
	(Independent Feeder)			
6.	Street lighting	0.10	0.25	0.35
7.	Community buildings	0.75	0.75	1.50
8.	Diversion of high tension (HT) lines	---	0.20	0.20
9.	Horticulture including first five years maintenance	0.12	0.23	0.35
10.	Conservancy charges	0.05	0.10	0.15
11.	Nominal maintenance of roads for first five years	0.10	0.10	0.20
12.	Nominal maintenance of roads for second five years	0.10	0.10	0.20
13.	Resurfacing of roads for five years	0.25	0.40	0.65
14.	Resurfacing of roads after 10 years	0.40	0.40	0.80
15.	(a) Maintenance of Public Health Services for five years	0.20	0.25	0.45
	(b) Maintenance of Public Health Services for five years to 10 years	0.20	0.25	0.45
16.	(a) Maintenance of street lights for five years	0.05	0.10	0.15
	(b) Maintenance of street lights for five years to 10 years	0.05	0.15	0.20
17.	(a) Horticulture beyond 5 to 10 years	0.05	0.10	0.15
	(b) Beautification of entry points, junction improvements and levelling of area	0.15	---	0.15

18.	Development of recreational and communication zones	---	0.50	0.50
19.	Development of village abadi	---	0.25	0.25
20.	Provision of Ghaggar Bridge	2.00	---	2.00
21.	Protection works along Ghaggar	1.00	---	1.00
<hr/>				
Total		10.62	8.94	19.56
<hr/>				

Say Rs.19.56 lakhs per gross acre

The above development charges are subject to the following conditions:

1. The administrative charges, over-head charges, other elements, land cost etc., will be added extra as per price fixation formula.
2. The above figures do not include the price escalation.
3. The above figures are tentative and based on the present day prevailing rates. These may vary by 10% depending upon the site condition.
4. These figures are per gross acre up to density of 100 P.P.A.
5. The above figures are valid up to 31.12.1997.

Annexure 4

CIDCO: Land Pricing and Disposal Policy 1995

Type of Land Use	Approved Land Pricing Policy (March 1995)	Approved Method of Disposal (March 1995)
Residential		
a) EWS/LIG Tenements	At 25% - 50% of Reserve Price	By Public Advertisement & at Fixed Rate
b) MIG/HIG Tenements	At 125%-250% of RP	-do-
c) Society plots & others	At 250% of RP (in Developing Nodes) At 400% of RP (in Developed Nodes)	-do-
d) GES/12.5% plots	2 times of LA cost + Rs.5/M2 for devp. Cost	PAPs only. Fixed Price
e) Large size plots for Companies, Corporate bodies	300 to 600% for 50% employees and remaining at Market price	By advertisement at fixed rate
Commercial:		
a) Daily Bazar, Otlas, Stalls, Janta Bazar etc. & Middle Order Shops	At 25%-200% of RP	Rental/By Advertisement/At Fixed Price
b) Higher Order Shops & Commercial	At 400% of RP	By tender or Fixed Price
c) Other Commercial Plots including Offices & C+R	At 600% of RP (with F.S.I. 1.5)	By Tender
d) Govt. & Semi Govt. Department, Local body (Office + Staff Quarters)	At 125%-175% of RP	On request at Fixed Rate
e) Weigh Bridge	200% of RP	By tender
f) LPG	At 200% of RP in Developed Nodes At 150% of RP in Developing Nodes	At Fixed Rate
g) Service Industries, Warehousing, Cold Storage	200% of RP in Developed Nodes 125% of RP in Developing Nodes	By competitive bidding
h) Statutory Market Shifting	At 200% of RP	Public advertisement/ on request
i) Non-Statutory Market Shifting	At 500% of RP	-do-
j) Petrol Pump	At 400% of RP in Developed Nodes At 200% of RP in Developing Nodes	Fixed Price

Health Facilities:		
a) Public/Gen./ Govt. Hospitals	At 25% of RP	Public Advertisement/ on request
b) Other Hospitals/Accident hospital, Public Charitable Trust operated Clinics	At 50% of RP	-do-
c) Polyclinic/ Specialised Hospitals etc.	At 300% of RP in developed nodes At 200% of RP in developing nodes	-do- As well as by Tender
Social Facilities:		
a) Schools	At 10% of RP	Public advertisement/on request
b) Higher Education/ Professional Institutions	At 50%-400% of RP (1 Ha.-4 Ha. & above)	-do-
c) Professional Organisations	From RP to Mkt. Price (1000.00 – 400 Sq. m.)	On request at Fixed Price
d) Religious Organisations	From 50%-150% of RP (500 -1000 Sq. m. & above) From 50%-100% of RP	-do-
e) Regional Organisations	(1000 – 2000 Sq. m.)	-do-
f) Other Social Purposes	At 50% of RP (upto 10000 Sq. m.)	-do-
Public Utilities	At 50%-100% of RP	On request at Fixed Price
Political Parties	At Market Price (upto 250 Sq. m.)	-do-
Consumer Coop. Soc. Coop. Credit Soc.	At 200% of RP (with FSI -1)	-do-

Source: City and Industrial Development Corporation