

Jawaharlal Nehru National Urban Renewal Mission

Formulation of a City
Development Plan

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JrNURM

Ministry of Urban Employment and
Poverty Alleviation



Government of India

Ministry of Urban Development

JAWAHARLAL NEHRU NATIONAL URBAN RENEWAL MISSION

Formulation of a City Development Plan

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The Toolkit

This toolkit is designed to assist city governments and other participating organisations such as the state-level and city-level water supply and sewerage boards and development authorities in the formulation of City Development Plans (CDPs). The toolkit outlines the scope of City Development Plans (CDPs), as it emerges out of the Jawaharlal Nehru National Urban Renewal Mission (NURM). It indicates the requirements of data, and suggests a methodology for analysis, together with steps for their use to realistically assess the problems and resources and comparative advantage of cities and to determine a medium to long term vision for their future development. The toolkit provides an approach to identifying the key issues that need to be addressed and the options that are available with city governments to bridge the gap between where the city is now and where it wishes to go.

I. City Development Plan

A City Development Plan (CDP) is both a perspective and a vision for the future development of a city. It presents the current stage of the city's development – *where are we now?* It sets out the directions of change – *where do we want to go?* It identifies the thrust areas — *what do we need to address on a priority basis?* It also suggests alternative routes, strategies, and interventions for bringing about the change – *what interventions do we make in order to attain the vision?* It provides a framework and vision within which projects need to be identified and implemented. It establishes a logical and consistent framework for evaluation of investment decisions.

A CDP is anchored on the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) goal of creating economically productive, efficient, equitable and responsive cities. As a step to achieving this goal, the CDP focuses on the development of economic and social infrastructure, strategies that deal specifically with issues affecting the urban poor, strengthening of municipal governments and their financial accounting and budgeting systems and procedures, creation of structures for bringing in accountability and transparency, and elimination of legal and other bottlenecks that have stifled the land and housing markets. It provides a basis for cities to undertake urban sector reforms that help direct investment into city-based infrastructure.

It is essential for a city to systematically think of the future, and determine how it wishes to shape that future.

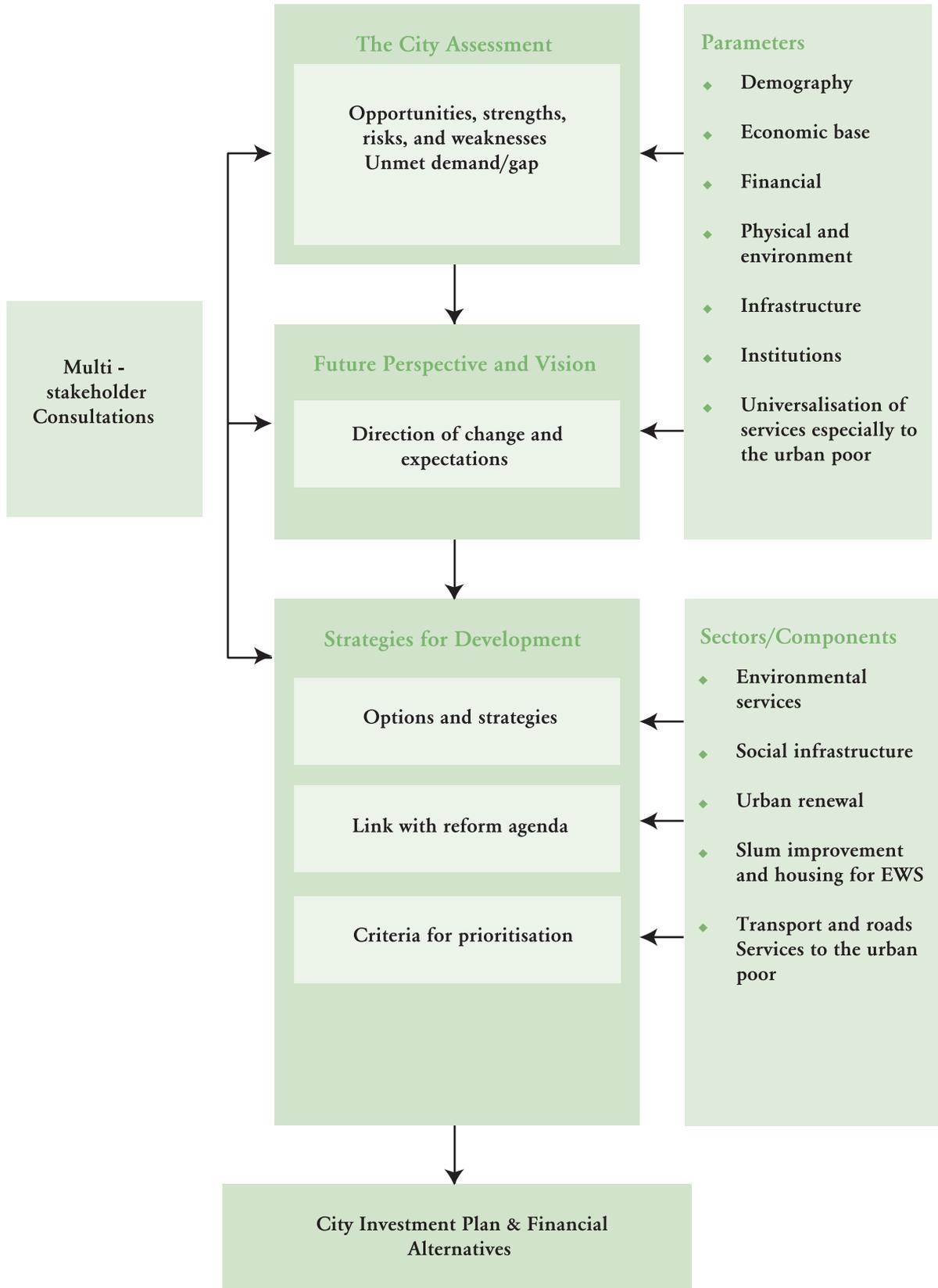
II. Preparing a City Development Plan

Preparation of a CDP is a multi-stage exercise, involving:

- (i) *In-depth analysis of the existing situation, covering the demographic, economic, financial, infrastructure, physical, environmental and institutional aspects:* The purpose of this stage is to review and analyse the current status of the city with regard to the state of its development, systems and procedures, as equally its institutional and financial context. This stage is meant to identify the strengths and weaknesses in the city's development and to provide an understanding of what impedes service delivery and management within the existing set-up and what contributes to better service provision. This stage offers an opportunity to bring out the unique features of the city that may distinguish it from other cities.
- (ii) *Development of a perspective and a vision of the city:* Using the results of the first stage of analysis combined with consultations with key stakeholders and civil society, this stage is meant to develop a vision for the future development – a shared vision of where the city wants to be in a medium-term perspective. It is a collective vision of the future direction expressed in terms of expectations and often even goals, such as “water for all”.
- (iii) *Formulating a strategy for bridging the gap between where the city is and where it wishes to go:* It is in this stage that strategies and interventions are identified for attaining the vision and future development perspectives. This stage is used to first identify the options and strategies and second, to evaluate the strategies from the perspective of their contribution to the goals and objectives of the JNNURM. The chosen strategies are translated into programmes and projects in this stage. This is the phase where the city needs to decide which programmes would contribute most to the vision and medium-term perspectives. It is at this stage where criteria are selected, with appropriate consultative processes, for prioritising the strategies, programmes and projects.
- (iv) *Preparing a City Investment Plan (CIP) and a financing strategy:* An investment plan and a financing strategy are an integral part of the CDP. It is an aggregate investment plan indicating, for instance, the cost involved in providing 24/7 water supply from the present level of 10/7; it is not a financial estimate of a project for increasing the capacity of a water plant from 1,00,000 mld to 1,50,000 mld. Crucial to this stage is a plan that considers the alternative sources of financing the vision and the accompanying strategy and programmes.

The process of formulating a CDP is illustrated in the chart (see diagram).

Multistage Exercise



III. City Assessment: Analysis of the Existing Situation

An analysis of the existing situation is the first stage in the formulation of a CDP. The purpose of the analysis is to make a realistic assessment of where the city is, the direction in which it has been moving, and its strengths and weaknesses. This stage is meant to make an in-depth analysis of the demographic, economic, financial, infrastructural, physical and environmental, and institutional aspects of the city. It should also examine the implications thereof for service delivery, management and governance.

Demography

The demographic characteristics of a city are a major component in the formulation of a CDP, and are analysed in terms of the pattern of population growth and its spatial spread within the city. The analysis should reflect on questions such as: Is the population growth excessive (by what measure), average or below average? What factors underlie the growth – natural increase, in-migration, or jurisdictional change? What, in broad terms, are the characteristics of the in-migrants? What implications does population growth have for shelter, services and infrastructure? What is the social composition of the city’s population in terms of income and access to shelter and services? What are the poverty levels within the city? Are the poverty levels in the city growing or declining? Is the problem of slums a matter of major concern for the city? Is it a growing problem or one that is showing signs of stabilisation?

The analysis can be extended to examine the age and sex composition of population so as to obtain a better understanding of the size of school-going population and labour force.

TABLE 1 : POPULATION GROWTH

Year	Population (lakh)	Average annual growth rate (%)
1981		
1991		
2001		
2005 (Estimated)		
2011 (Projected)*		
<i>*Straight-line projection</i>		

TABLE 2 : COMPOSITION OF GROWTH

Composition	Population increase during			
	1981-91	% of total	1991-2001	% of total
Natural increase				
In-migration				
Jurisdictional change				
Total increase				

TABLE 3 : SOCIAL COMPOSITION OF POPULATION

Year	Number of the poor*
1993/94	
1999/00	
2004/05 (Estimated)	
*Below poverty line	

TABLE 4 : ACCESS OF THE SLUM DWELLERS TO BASIC SERVICES

Year	Number of slum dwellers	Percentage of slum dwellers having access to		
		Water supply	Drainage system	Waste service collection
1991				
2001				
2005 (Estimated)				

Economic Base

The economic base refers to the key sectors that drive the city's economy. The sectors may relate to mining and manufacturing, infrastructure such as power and utilities, financial and banking services, public services, tourism, or places of religious importance. The key to the analysis lies in identifying the lead sectors of the city's economy, and examining if the growth within the lead sectors is likely to be maintained in a medium-term framework? It should ascertain the recent shifts in the economic base and the factors that would explain such shifts and their long-term impact on the city's economy. It is important to take stock of the role and contribution of the informal sector in the city's economy.

TABLE 5 : ECONOMIC BASE, REGISTERED MANUFACTURING AND SERVICES

Economic base	Years	
	2001	2005 (Estimated)
Manufacturing		
Employment		
Production (Rs. crore)		
Value added (Rs. crore)		
Services (IT etc.)		
Employment		
Production or quantum of business (Rs. crore)		
Value added (Rs. crore)		

TABLE 6 : ECONOMIC BASE, OCCUPATIONAL DISTRIBUTION, 2001

Occupation category	Number of workers (lakh)	% of total
Primary sector		
Household industry		
Manufacturing		
Electricity, gas and water supply		
Construction		
Transport, storage and communication		
Banking and insurance		
Trade and business		
Services		
Total		

Financial Profile

The financial profile of the city indicates the state of the city's finances and the capacity of the city to be able to manage its finances and mobilise resources for maintaining infrastructural services at prescribed norms and standards. The analysis should focus on assessing: (i) the financial status of the city government (as also of other parastatal organisations responsible for service provision); (ii) the status of current assets and liabilities including outstanding debt; and (iii) analysing the role of inter-governmental transfers in the finances of municipal governments. It should especially address such questions as: What sources of revenues do the municipal governments have? Is the municipal government able to meet its current level of recurrent expenditure out of its own resources? Is it able to optimally use its "own resources"? How effective are the local tax assessment and collection procedures criteria? To what extent does the city government depend on the state government transfers for meeting its recurrent expenditures? Is the gap between what is needed by city governments and what they are able to raise due to inter-governmental assignment of revenue-raising powers, or their inefficient use and application by city governments? It will be useful to examine if the levels of expenditure on municipal services are skewed in favour of certain areas compared with others e.g., the poor areas. What budgetary and accounting practices are used? Do the finance accounts of city governments reflect the "receivables" and "payables"?

In most municipalities, the primary source of revenue for the local government is property taxes. An analysis of the property tax system should focus on tax assessment and collection practices, ratio of collection costs to revenues, and estimation of leakages, loss on account of exemptions etc. What criteria are generally applied in fixing user charges? What is the level of efficiency and equity in local taxation, expenditure, and user fee policies? How much do the urban poor contribute to local revenues? How much do they benefit from local expenditures?

TABLE 7 : MUNICIPAL REVENUE INCOME

Year	Revenue Account Receipts (Rs. lakh)			
	Tax	Non-Tax	Transfers including grants	Total
2001/02				
2002/03				
2003/04				
2004/05				

TABLE 8 : MUNICIPAL REVENUE EXPENDITURE

Year	Revenue Account Expenditure (Rs. lakh)				
	Establishment (wages and salaries)	Operation and maintenance	Interest payment	Others	Total
2001/02					
2002/03					
2003/04					
2004/05					

TABLE 9 : MUNICIPAL CAPITAL RECEIPTS

Year	Capital Receipts (Rs.lakh)				
	State government (Rs.lakh)		Financing institutions	Market	Total
	Loans	Grants			
2001/02					
2002/03					
2003/04					
2004/05					

TABLE 10 : FINANCES OF CITY-LEVEL WATER SUPPLY AND SEWERAGE BOARD

Year	Expenditure (Rs. lakh)	Income (Rs.lakh)
2001/02		
2002/03		
2003/04		
2004/05		

Infrastructure

The infrastructure profile refers to the current state of infrastructure and utility systems in the city. It indicates the adequacy or inadequacy of infrastructural services in terms of coverage, quantity, and quality, and attempts to identify the factors responsible for inadequate development of infrastructure services. It measures the gap between demand and supply of different infrastructural services, and examines the factors that explain the gap. For example, is the inadequacy of the availability of water or power due to: (i) the lack of investment, leakages and thefts commonly observed in water and power sectors; (ii) low tariffs that serve as a disincentive to investment; (iii) or institutional fragmentation. It reviews the cost of delivering services and compares them with recoveries made therefrom. What are the distributional characteristics of service delivery within the city? What differences are there in the level of services received by different socio-economic groups?

The most important aspect of the analysis lies in recognition of the fact that inadequate access to infrastructure is a key constraint to development; apart from determining the characteristics and quality of public service delivery, it is important to ascertain the factors that are constraining infrastructure development. Are these factors financial, institutional, or others?

TABLE 11 : STATE OF THE INFRASTRUCTURE

Water availability	Installed capacity (mgd)
	Released/daily (mgd)
Source of water supply	<i>Within city limits</i>
	10-50 sq. km.
	50-100 sq. km.
Water coverage	Population covered by public water supply %
	Per capita supply (lpcd)
	Supply duration (hrs.)
Wastewater Disposal	Wastewater generated daily (mld)
	Disposal (underground sewerage) capacity (mld)
	Present operating capacity (mld)
	Households connected to underground sewerage %
Solid Waste	Waste generation daily (tonnes/day)
	Collection daily (tonnes/day)
Stormwater Drainage	Annual rainfall (cm.)
	Length of stormwater drains (km.)
Roads and Road Transport	Municipal roads (km.)
	State-level roads (km.)
	Public transport
	Buses (number)
	Bus capacity/passengers
	Private registered vehicles
Street Lighting	Number
	Area coverage %

TABLE 12: COST RECOVERY IN URBAN INFRASTRUCTURE

Infrastructure	Cost incurred in service provision (Rs. lakh)			Direct recoveries (Rs. lakh)		
	2002/03	2003/04	2004/05	2002/03	2003/04	2004/05
Water supply						
Sewerage and sanitation						
Solid waste collection						
Public bus services						

TABLE 13: LEVEL OF AGGREGATE INVESTMENT IN URBAN INFRASTRUCTURE, 2001/02 TO 2004/05

Infrastructure	Public investment (Rs. crore)	Private investment (Rs. crore)
Water supply		
Sewerage and drainage		
Solid waste		
Roads (municipal)		
Street lighting		
Storm water drainage		
Total		

Physical and Environment Aspects

The physical aspects of a city relate to topography (the extent to which it acts as a constraint on development), natural drainage system, and availability of lands. Given the service delivery concerns, this element of assessment should specifically deal with the availability of land, and land use organisation. It should indicate the total land availability, allocation of land for different uses and purposes, whether it has been done on the basis of certain identified principles, and their consistency with the broader economic and infrastructural base of the city. The analysis contains an assessment of the adequacy of land availability and focuses on the role of legal and statutory provisions e.g. Urban Land (Ceiling and Regulation) Act, 1976 in making land available to the market. It contains a survey and delineation of areas and infrastructure that are in need of renewal, by establishing criteria for identification of renewal areas.

Given that urban planning is an important factor in development, it is necessary to focus on such questions as: What percentage of urban land is occupied by different uses? What land use changes have occurred in recent years? What are the characteristics of the urban land market? What kinds of land use controls are practised?

An analysis of environment is primarily concerned with the impact of population growth, changes in income, expansion of economic activities, motorisation and the like on environment and

environment-related services such as air and water quality, waste water, and composition of solid wastes including toxic and hazardous waste. A key point is to assess the health impacts of environmental conditions within the city. It is equally essential to include in the analysis, the city's susceptibility to floods, earthquakes, or other national disasters.

TABLE 14 : ENVIRONMENT SERVICES

Environmental services	Quality
Air	
Water	
Waste water	
Solid water	

TABLE 15 : LAND SUPPLY (HECTARES)

Year	Developed land (hectares)	Undeveloped and under developed land under use (hectares)
2001/02		
2002/03		
2003/04		
2004/05		

TABLE 16 : LAND USE BREAK-UP

Category	% Area (specify year)
Residential	
Commercial	
Industrial	
Public semi-public	
Recreational	
Transportation	
Agricultural and water bodies	
Special area*	
Total area	

**Specify detail of which areas have been defined as special areas viz. urban villages, slums etc*

TABLE 17 : ESTIMATING RENEWAL OF HOUSING AND INFRASTRUCTURE STOCK, 2005

City Stock	Area (hectare)
Housing	
Infrastructure	
<ul style="list-style-type: none"> ◆ Roads and streets ◆ Water distribution network* ◆ Sewerage and drainage* 	
Industry	
<ul style="list-style-type: none"> ◆ Obsolete, technological and physical ◆ Incompatibility with other uses 	
Business districts	
<ul style="list-style-type: none"> ◆ Obsolete ◆ Incompatibility with other uses 	
* use appropriate unit of measurement such as km. for distribution network.	

Institutions

The city is managed and governed by a number of institutions and organisations. In this respect, a city is a complex entity. The purpose of the analysis is to present the organisational structure as it relates to the delivery and management of infrastructure services, i.e., who does what, and evaluate the efficiency and effectiveness of the existing institutional structures. Often, responsibilities overlap, and also often, there may exist fragmentation of responsibilities without any platform for coordination. The analysis needs to be organised such that it sheds light on the key problems in the existing allocation of functional and financial responsibilities, and the extent to which it bears on the efficient and equitable delivery of services. It involves: (i) identification of institutions and organisations that have direct and indirect responsibilities for infrastructure provision; (ii) identification of the areas of fragmentation or overlap; (iii) assessment of the impact that it has on infrastructure delivery and management; and (iv) a review of the role of the private sector in service delivery and the potential of public-private partnership in the development and management of infrastructural services.

The analysis is designed to focus on such questions as: What is the *de jure* and *de facto* distribution of authority between the three tiers of government and how does it relate to Constitutional and legal requirements? What impact does it have on urban administration and delivery of public services? Is there an overlap in the responsibilities and activities of public service agencies? Are their objectives and activities complementary or conflicting? What mechanisms exist for **interagency** coordination?

TABLE 18 : INSTITUTIONAL RESPONSIBILITY

Urban infrastructure	Planning and design	Construction	Operation and maintenance
Water supply			
Sewerage			
Drainage			
Storm water drainage			
Solid waste disposal			
Municipal roads (including flyovers)			
Street lighting			

TABLE 19 : ROLE OF THE PRIVATE SECTOR IN URBAN INFRASTRUCTURE PROVISION

Urban infrastructure	Role of the private sector (specify)
Water supply	
Sewerage	
Drainage	
Storm water drainage	
Solid waste disposal	
Municipal roads (including flyovers)	
Street lighting	

IV. Developing a Vision for the City

Developing a vision for the city is central to the preparation of a CDP. A vision is a statement of where the city wishes to go, within a given timeframe, and is often expressed in terms of clear expectations. It defines the potential of the city and reflects its unique attributes in terms of comparative and competitive advantages, values and preferences of the city's residents, relationship of the city to the state, national and global economies, and of course, the history and physical characteristics of the city. A vision aligns stakeholders' energies to work cohesively for the development of the city. Cities need to systematically consider the future, and design strategies to accordingly shape the future. All objectives, strategies, programmes and projects must be aligned with the vision of the city.

Developing a common vision requires a significant effort of consensus building in order to balance the competing demands arising from different economic infrastructure sectors, as also from different interest groups within the city. In order to achieve an understanding on a common vision, it is useful to choose "milestones" and targets such as provision of a minimum level of services to all; public disclosure and transparency in the formulation of budget proposals; introduction of a single window in matters of service delivery and management and the like. In developing the vision, cities must choose a set of criteria that are directly relevant to the JNNURM components. It is important that when cities define outcomes and milestones on the vision, they ensure that these are measurable and have a time frame.

TABLE 20 : VISION AND GOALS

Vision and goals	Year		
	2010	2015	2020
Sectoral agenda			
Water supply			
Sewerage			
Sanitation			
Solid waste management			
Drainage/storm water drains			
Urban transport			
Heritage			
Reform agenda			
Decentralisation			
Land and housing markets			
Transparency and accountability			
Community participation			
Financing management system			
Municipal finances			
Budgeting for the urban poor			

THE JNNURM OUTCOMES

- ☞ *Universal access to a minimum level of services*
- ☞ *Establishment of city-wide framework for planning and governance*
- ☞ *Modern and transparent budgeting, accounting, and financial management system at municipal levels*
- ☞ *Financial sustainability for municipalities and other service delivery institutions*
- ☞ *Introduction of e-governance in the core functions of municipal governments*
- ☞ *Transparency and accountability in urban service delivery and management*

V. Working on Strategies

The gap between where the city is and where it wishes to go can be bridged by pursuing different strategies and programmes. It is important that alternative strategies for meeting the gap are identified and subjected to careful evaluation. In the context of the JNNURM, the selection of a strategy or a set of strategies should be guided by their contribution to its goals, objectives, and the reform agenda.

The selection of a strategy is an extremely important constituent of a CDP, and needs to be done with wide-ranging consultations among key stakeholders. A strategy that links the urban poor with service provision may be preferred compared to the one that aims at expansion of service without any reference to its potential beneficiaries or target groups. An urban renewal strategy which incorporates the interests of the poor in the transition phase may rank high in comparison with another, which does not distinguish between different affected groups. It is thus evident that evaluation of alternative strategies aims at maximising the impact – be it the water supply project or a constituent of the reform agenda like the repealment of the Urban Land (Ceiling and Regulation) Act, 1976.

In working on strategy formulation and selection, it is useful to ask: Will this strategy help in achieving the vision or will it help bring the city closer to the vision? Will this strategy help in achieving the JNNURM outcomes? The selection of a strategy involves making a choice; no two strategies are of equal importance in their impact. Selection needs to be guided by the probability of producing results and should be evaluated in terms of “outcomes” instead of “inputs”. Selection is often determined by institutional capacities and financial means for implementation although strategies could be selected in a way that they enhance institutional and financial capacities to achieve the vision.

TABLE 21 : CRITERIA FOR STRATEGY SELECTION

Criteria	Alternative strategies and programme

A strategy plan is one that can help a city leapfrog into the future in order to achieve the vision or the perspective.

VII. City Investment Plan and Financing Strategies

A City Investment Plan (CIP) provides an estimate of the level of investment that will be needed to implement the CDP. It is an estimate and approximation, and provides an order of investment, arrived at by using financial norms or standards for service provision and upgradation or directly estimating the cost of implementing a reform agenda. An investment plan may be formulated by seeking answers to questions such as: What level of investment would be needed to provide 150 litres of water to the city's population? What would be the order of investment if area under citywide roads were to be raised from the present level to about 20 per cent of the city's total area? What would the city need to invest if the open drainage system were to be converted into an underground sewerage facility?

A linked, but an extremely important, aspect is to consider options and strategies for financing the vision as contained in the CDP. Will it be financed by the local government by mobilising resources or in partnership with other tiers of government and financing institutions? Will the city resort to capital market? What will the city need to do in order to access the capital market? Will it encourage the private sector to finance this vision? What steps will be required to be taken to facilitate private sector investment? To the extent a city is able to systematically examine the financing options will add value to the CDP.

TABLE 22 : FORMAT FOR FINANCING OPTIONS

Financing options	Estimate of additional resources (Rs.crore)
Municipal government's own resources	
State government grants and loans	
Financing institution	
Capital market	
Off-shore financing	
Central government grants	
Private sector	

Summary

It is useful to summarise the key features of the CDP focusing on the following:

- ◆ What does the analysis of city's profile show? Where are the opportunities and where are the key constraints?
- ◆ Given the opportunities and constraints, where does the city wish to move in a medium-term perspective? While the vision is forward-looking, it is also a realistic vision, achievable with a given time frame.
- ◆ What strategic options are available to achieve the vision? What are the costs and benefits of alternative strategic options? Which of the strategies will help the city achieve the vision at least cost or maximum impact?
- ◆ What would be the aggregate investment needed to implement the vision? What are the options for mobilising resources for implementing the CDP?
- ◆ What reforms other than those embodied in the JNNURM are necessary for effectively implementing the CDP?

The Toolkit lays down the steps in the preparation of a (CDP). It must be recognised that the preparation of a CDP is not a straight-jacketed exercise that must follow the steps outlined in this Toolkit. It is flexible, requiring an approach that suits the city's environment and institutional set-up. Further, this Toolkit is, at best, illustrative and a reference document and so are the format of Tables

Annex

Activities Admissible under JNNURM

- i. Urban Renewal i.e., redevelopment of inner (old) city areas (this would include items like widening of narrow streets, shifting of industrial/commercial establishments from non-conforming (inner-city) areas to 'conforming' (outer-city) areas to reduce congestion, replacement of old and worn-out water pipes by new/higher capacity ones, renewal of sewerage/drainage/solid waste disposal systems, etc). Land acquisition cost will not be financed under this component of the programme.
- ii. Water Supply including setting up de-salination plants, where necessary;
- iii. Sewerage and solid waste management
- iv. Construction and improvement of drains/storm water drains
- v. Urban transport
- vi. Laying/improvement /widening of arterial/sub-arterial roads and bridges to remove transport bottlenecks.
- vii. Laying of ring roads and by-passes around metro and mega cities, provided certain cost recovery measures like toll charges are built in.
- viii. Construction and development of bus and truck terminals
- ix. Environmental improvement and city beautification schemes.
- x. Construction of working women hostels, marriage halls, old age and destitute Children's homes, night shelters with community toilets.