



INTERFACE BETWEEN CITY DEVELOPMENT PLANS AND MASTER PLANS

D.S. MESHRAM

Former Chief Planner, TCPO, Ministry of Urban Development and Poverty Alleviation, Government of India

ABSTRACT

A requirement of preparation of CDPs under the Jawaharlal Nehru National Urban Renewal Mission for selected 63 cities has caused a great deal of confusion in planning practice because it is not entirely clear where the CDPs could be located in the existing hierarchy of land development plans in these cities. In this paper it is shown that an interface between CDPs and Master Plans is necessary and possible. Both plans could be linked together to better plan implementation and realization of economic and social objectives.

1. INTRODUCTION

In India, the nomenclature master plan and development plan is being used without much distinction. It is however, the Third Five Year Plan that defined the term 'Master Plan' as a statutory instrument for controlling, directing and promoting sound and rational development and redevelopment of an urban area with a view to achieving maximum economic, social and aesthetic benefits. In fact, the master plan is a vision document giving perspective of 20 to 25 years keeping in view the future growth of population, economic development potential and ecological improvements likely to come up during the plan period. Master plan is required to take note of regional and national context, which have bearing on the development of different areas. While City Development Plan (CDP) is anchored in the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) with a focus on creating economically productive, efficient equitable and responsive cities. As per tool kit of the JNNURM, a City Development Plan is both perspective and vision document for the future development of a city.

Accordingly, this paper attempts to study the master plan concept with reference to CDP as defined in the JNNURM and seeks to examine the possibility of achieving interface between CDP and master plan. A requirement of preparation of CDPs under the Jawaharlal Nehru National Urban Renewal Mission for selected 63 cities has caused a great deal of confusion in planning practice because it is not entirely clear where the CDPs could be located in the existing hierarchy of land development plans in these cities. In this paper it

is shown that an interface between CDPs and master plans is necessary and possible. Both plans could be linked together to better plan implementation and realization of economic and social objectives.

2. JAWAHARLAL NEHRU NATIONAL URBAN RENEWAL MISSION

The Prime minister of India launched the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) consisting of two sub-missions, one on urban infrastructure and governance to be administered by the Ministry of Urban Development, and the other on basic services to the urban poor, to be administered by the Ministry of Urban Employment and Poverty Alleviation. The main objectives of the missions are:

- Focused attention on integrated development of infrastructure and services, in the cities covered under the mission;
- Secure effective linkages between asset creation and asset management so that the infrastructural services created in the cities are not only maintained efficiently but also become self sustaining over time;
- Ensure adequate investment of funds to fulfill deficiencies in urban infrastructural services;
- Planned development of identified cities including peri-urban areas, out growths, urban corridors, so that urbanization takes place in a dispersed manner;
- Scale up the delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor;

- To take up urban renewal programme i.e. redevelopment of inner (old) city area to reduce congestion; and
- Provision of basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply, sanitation and ensuring delivery of other already existing universal services of the government for education, health and social security.

2.1 Components of the JNNRUM

To be implemented over the next seven years, the JNNRUM will entail investment partnerships among the central government, state governments and urban local bodies. The components which could be considered for funding under the mission are:

- 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;
- Water Supply and sanitation, including setting up desalination plants, wherever necessary;

- Sewerage and Solid Waste Management;
- Construction and improvement of drains / storm water drains;
- Laying / improvement / widening of arterial / sub-arterial roads and bridges to remove transport bottlenecks;
- Construction and development of bus and truck terminals;
- Environmental improvement and city beautification schemes;
- Construction of working women's hostels, marriage halls, old age and destitute Children's homes, night shelters with community toilets;
- Street lighting;
- Slaughter houses;
- Civic amenities like playgrounds / stadium, community halls;
- Hospital Waste Management; and
- Urban Transport

2.2 Funding Pattern

The funding Pattern under JNNURM is the partnership among the Central Government, State Government and Urban Local Bodies as given in Table 1. Rs. 50,000 crore have been reserved for a period of seven years to be given as grant-in-aid for leveraging additional resources in these cities.

Table 1. The Funding Pattern Under JNNRUM

Category of Towns / Cities	Grant		Loan from financial instructions
	Centre	State	
Cities with 4 million plus population as per 2001 census	35%	15%	50%
Cities with million plus but less than 4 million population as per 2001 census	50%	20%	30%
Other Cities	60%	10%	10%
For setting up de-salination plants within 20 km. from sea-shore and other than areas predominantly facing water scarcity due to brackish water and non-availability of surface source.	80%	10%	10%

Note: Land cost will not be financed except for acquisition of private land for schemes and projects in the north eastern states and hilly states, namely Himachal Pradesh, Uttarakhand and Jammu and Kashmir.

2.3 Coverage under JNNURM

The mission is a 'city based' initiative to implement urban reforms in 63 cities (Refer Table 2) comprising of 7 mega cities, having population more than 4 million, 28 metropolitan cities with population 1 to 4 million and 28 other cities having population less than 1 million; out of these 63 cities, 23 cities are mainly of religious and tourist

importance. It would also be interesting to note that out of 63 cities identified under JNNURM except Varanasi town all appeared in the list of National Commission on Urbanization setup by the Government of India in 1985. Out of these 63 towns, 50 towns are National Priority Cities (NPCs), and 12 towns are State Priority Cities (SPCs). Thus, it is quite clear that these towns / cities has potentials for development.

Table 2. List of Identified Cities under JNNURM

Sl.No.	City	State	Population in lakhs	NCU Recommendation
Mega Cities				
1.	Delhi	NCTD	128.77	NPC
2.	Greater Mumbai	Maharashtra	164.34	NPC
3.	Ahmedabad	Gujarat	45.25	NPC
4.	Bangalore	Karnataka	57.01	NPC
5.	Chennai	Tamil Nadu	65.60	NPC
6.	Kolkata	West Bengal	132.06	NPC
7.	Hyderabad	Andhra Pradesh	57.42	NPC
Million Plus Cities				
8.	Patna	Bihar	16.98	NPC
9.	Faridabad	Haryana	10.56	SPC
10.	Bhopal	Madhya Pradesh	14.58	NPC
11.	Ludhiana	Punjab	13.98	NPC
12.	Jaipur	Rajasthan	23.27	NPC
13.	Lucknow	Uttar Pradesh	22.46	NPC
14.	Madurai	Tamil Nadu	12.03	NPC
15.	Nashik	Maharashtra	11.52	SPC
16.	Pune	Maharashtra	37.60	NPC
17.	Cochin	Kerala	13.55	NPC
18.	Varanasi	Uttar Pradesh	12.04	--
19.	Agra	Uttar Pradesh	13.31	NPC
20.	Amritsar	Punjab	10.03	NPC
21.	Visakhapatnam	Andhra Pradesh	13.45	NPC
22.	Vadodara	Gujarat	14.91	NPC
23.	Surat	Gujarat	28.11	NPC
24.	Kanpur	Uttar Pradesh	27.15	NPC
25.	Nagpur	Maharashtra	21.29	NPC
26.	Coimbatore	Tamil Nadu	14.61	NPC
27.	Meerut	Uttar Pradesh	11.61	NPC

Sl.No.	City	State	Population in lakhs	NCU Recommendation
28.	Jabalpur	Madhya Pradesh	10.98	NPC
29.	Jamshedput	Jharkhand	11.04	NPC
30.	Asansol	West Bengal	10.67	SPC
31.	Allahabad	Uttar Pradesh	10.42	NPC
32.	Vijayawada	Andhra Pradesh	10.39	NPC
33.	Rajkot	Gujarat	10.03	SPC
34.	Dhanbad	Jharkhand	10.65	NPC
35.	Indore	Madhya Pradesh	16.40	NPC
Cities with less than one million population				
36.	Guwahati	Assam	8.19	NPC
37.	Itanagar	Arunachal Pradesh	0.35	NPC
38.	Jammu	Jammu & Kashmit	6.12	NPC
39.	Raipur	Chhattisgarh	7.00	SPC
40.	Panaji	Goa	0.99	NPC
41.	Shimla	Himachal Pradesh	1.45	NPC
42.	Ranchi	Jharkhand	8.63	NPC
43.	Thiruvananthapuram	Kerala	8.90	NPC
44.	Impahl	Manipur	2.50	NPC
45.	Shillong	Meghalaya	2.68	NPC
46.	Aizawal	Mizoram	2.28	NPC
47.	Kohima	Nagaland	0.77	NPC
48.	Bhubaneswar	Orissa	6.58	NPC
49.	Gangtok	Sikkim	0.29	NPC
50.	Agartala	Tripura	1.90	NPC
51.	Dehradun	Uttaranchal	5.30	SPC
52.	Bodh Gaya	Bihar	3.94	NPC
53.	Ujjain	Madhya Pradesh	4.31	SPC
54.	Puri	Orissa	1.57	NPC
55.	Ajmer-Pushkar	Rajasthan	5.04	SPC
56.	Nainital	Uttaranchal	2.20	SPC
57.	Mysore	Karnataka	7.99	NPC
58.	Pondicherry	Pondicherry	5.05	NPC
59.	Chandigarh	Punjab & Haryana	8.08	NPC
60.	Srinagar	Jammu & Kashmir	9.88	NPC
61.	Mathura	Uttar Pradesh	3.23	SPC
62.	Hardwar	Uttaranchal	2.21	SPC
63.	Nanded	Maharashtra	4.31	SPC

Source : Report of the National Commission on Urbanization, Vol. II (August 1988), Government of India

Note : NPC - National Priority Cities, SPC - State Priority Cities

2.4 Urban Reforms

As the cities are attracting new activities, these are preferred locations for investment of private sector and even for foreign investors, these opportunities need to be encashed to improve and to make cities more livable, healthy and safe not only to those who could afford to live but also to those who have little or no access to basic facilities i.e. urban poor. To meet these challenges, reforms are needed in urban sector specifically in the areas of planning, fiscal, legal and administrative aspects and urban governance.

Accordingly, massive central assistance to states and urban local bodies under JNNURM has been linked to the implementation of reforms at the micro level that will provide necessary boost to infrastructure development. Reforms comprise of two sets (i) mandatory reforms i.e. core reforms at urban local body level which aims at process of re-engineering through deployment of technology to enable more efficient, reliable and timely services in a transparent manner, and (ii) optional reforms include framework of state administration. Main objectives of these reforms are to improve the financial conditions of local bodies, their credit worthiness, and ability to access market capital for taking up new projects, secure public participation and commercial sustainability in the provision of services. The reforms identified under JNNURM are given below:

2.4.1 Mandatory Reforms at ULBs and Parastatal Agencies Level

- Adoption of modern accrual-based double entry system of accounting;
- Introduction of a system of e-governance using IT applications, such as GIS and MIS for various services provided by them ;
- Reform of property tax with GIS. It becomes a major source of revenue for ULBs and arrangements for its effective implementation so that collection efficiency reaches at least 85 per cent within next seven years;
- Levy of reasonable user charges with the objective that the full cost of operation and maintenance or recurring cost to be collected within the next seven years. However, cities

and towns in the north east and other special category states may recover only 50 percent of operation and maintenance charges initially. These cities and towns should graduate to full operation and maintenance cost recovery in a phased manner;

- Internal earmarking, within local bodies, budgets for basic services to the urban poor; and
- Provision of basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply and sanitation. Ensured delivery of other existing universal services of the government for education, health and social security.

2.4.2 Mandatory Reforms at State level

- Implementation of decentralization measures as envisaged in 74th Constitution Amendment Act. The State should ensure meaningful association and engagement of ULBs in planning, the function of parastatal agencies as well as the delivery of services to the citizens;
- Repeal of Urban Land Ceiling and Regulation Act (ULCRA);
- Reform of Rent Control Laws balancing the interests of landlords and tenants;
- Rationalization of Stamp Duty to bring it down to no more than 5 per cent within next seven years;
- Enactment of the Public Disclosure Law to ensure preparation of medium-term fiscal plan of ULBs and parastatal agencies and release of quarterly performance information to all stakeholders;
- Enactment of the Community Participation Law to institutionalize citizen's participation and introduce the concept of the Area Sabha in urban areas; and
- Assigning or associating elected ULBs with "city planning function". Over a period of seven years, transferring all special agencies that deliver civic services in urban areas to ULBs and creating accountability platforms for all urban civic service providers in transition.

2.4.3 Optional Reforms at States, ULBs and Parastatal Agencies Level

- Revision of byelaws to streamline the approval process for construction of buildings, development of site, etc.;
- Simplification of legal and procedural frameworks for conversion of land from agricultural to non-agricultural purposes;
- Introduction of Property Title Certification System in ULBs;
- Earmarking at least 20-25 per cent of developed land in all housing projects (both public and private agencies) for EWS and LIG category with a system of cross subsidization;
- Introduction of computerized process of registration of land and property;
- Revision of byelaws to make rainwater harvesting mandatory in all buildings and adoption of water conservation measures;
- Byelaws for reuse of recycled water;
- Administrative reforms i.e. reduction in establishment costs by adopting the Voluntary Retirement Scheme (VRS), not filling posts falling vacant due to retirement, etc., and achieving specified milestones in this regard;
- Structural reforms; and
- Encouraging PPP.

2.5 City Development Plan (CDP)

CDP has been anchored on the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), which aims at creating economically productive, efficient, equitable and responsive cities. A city Development Plan is both, a perspective as well as a vision document for the future development of a city. Developing a vision for the city is central to the preparation of a CDP which in fact is a statement of where the city wishes to go, within a given time frame, 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. The selection of a strategy under CDP is an extremely important constituent, 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, as compared to the one that aims at expansion of service without any reference to its potential beneficiaries or target.

A City Investment Plan under CDP 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. Yet another important aspect is to consider options and strategies for financing the vision as contained in the CDP i.e. whether it will be financed by the local government by mobilizing resources or in partnership with other tiers of government and financing institutions or whether it will resort to capital market or will it encourage the private sector to finance this vision. All these options need to be systematically examined while preparing the CDP.

In depth analysis and review of the existing situation, covering the demographic, economic, financial, infrastructure, physical, environmental and institutional aspects is important so as 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. The analysis of demographic characteristics of a city needs to be done in terms of the pattern of population growth and its spatial spread within the city. Besides, the economic base, it encompasses the key sectors that drive the city's economy like mining and manufacturing, infrastructure such as power and utilities, financial and banking services, public services, tourism, or places of religious importance. All these sectors need to be examined so as to derive the lead sectors of the city's economy in order to maintain growth within the lead sectors in a medium-term framework.

The financial profile of the city would indicate the state of the city's finances and the capacity of the city to be able to manage its finances and

mobilize resources for maintaining infrastructural services at prescribed norms and standards. The analysis needs to focus on assessing: (i) the financial status of the city government (as also of other parastatal organizations responsible for service provision); (ii) the status of current assets and liabilities including outstanding debts; and (iii) analyzing the role of inter-governmental transfers in the finances of municipal governments. It will be useful to examine if the levels of expenditure on municipal services are skewed in favor of certain areas compared with others e.g. the poor areas.

Infrastructure profile under a CDP 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 is due to lack of power: (i) the lack of investment, leakages and thefts commonly observed in water and power sector or ; (ii) low tariffs that serve as a disincentive to investment; or (iii) institutional fragmentation. It reviews the costs of delivering services and compare them with recoveries made there from.

The physical component of a CDP relate to topography that is the extent to which it acts as a constraint on development, natural drainage system, and availability of land. Given the service delivery concerns, this element of assessment should specifically deal with the availability of land, and land use organization. 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 should contain an assessment of the adequacy of land availability and focus on the role of legal and statutory provisions e.g. Urban Land (Ceiling and Regulation) Act, 1976 in making land available in 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.

Thus, it can be seen that the focus of CDP is on the development of economic and social infrastructure, strategies affecting urban poor, strengthening municipal governance and their financial accounting and budgeting system in bringing accountability and transparency and elimination of legal and other bottlenecks that have stifled the land and housing market.

3. THE MASTER PLAN

The purpose of a Master Plan is to promote growth and guide and regulate present and future development of towns and cities. It is an instrument to work out land and infrastructure requirements for various urban and rural uses, and allocate land for various uses to result in harmonious and sustainable distribution of activities so that towns / cities are provided with a form and structure within which they can perform all their economic and social functions efficiently and effectively. However, as indicated in various relevant acts, the scope of a master plan confines to the broad proposals and allocation of land for various uses such as residential, industrial, commercial, recreational, public and semi-public, etc. It proposes a network of roads and pattern of streets and traffic circulation systems for the present and the future. A master plan identifies areas required to be preserved and conserved and development of areas of natural scenery and landscape together with preservation of features, structures or places of historical, architectural and scientific interest and environmental value. Master plan includes zoning regulations for regulating development within each zone. It also indicates stages through which the plan is proposed to be implemented. Thus, a master plan is an important instrument for guiding and regulating development of towns and cities over a period of time, and contributes to planned development both conceptually and operationally.

Master plans are generally prepared for periods of 20 to 25 years. Population projection for such plans is in fact a difficult task even though various scientific methods are adopted by planners. It is a

well known fact that actual population always surpasses the projected population. Therefore, land requirements proposed for projected population also falls short and so is the case with proposed infrastructure as well.

It is not denying the fact that collection and compilation of information required on various parameters is a time consuming process because, firstly, upto date and reliable information is not available and secondly, collection of information calls for fresh field surveys every time a master plan is prepared. Compulsory acquisition of land for public purposes is opposed tooth and nail by owners of land, which leads to corrupt practices of changing land use proposals and ultimately causing delays. Besides, a master plan approval process is yet another cause of delay.

Ensuring effective involvement of citizens in plan preparation and implementation is seldom resorted to because in the present practice of master planning, public suggestions and objections are invited by giving only a public notice that too only after the draft development plan is prepared. Active participation is largely confined to land owners whose properties are adversely affected.

Planning is a continuous process involving not only plan preparation but also plan implementation. Due to ineffective implementation of plans, planning proposals become irrelevant and meaningless and plan document becomes ineffective. In India, the root cause of urban maladies is disconnection of plan preparation and plan implementation. Thus, over the years, dichotomy has emerged between what has been proposed in a master plan and what has happened on the ground. In large number of cases investment opportunities have been made use of in contradiction to master plan proposals, which have led to the emergence of development trends in the directions contrary to that of master plans. If investment strategy goes contrary to master plan, economic chaos are sure to prevail. Orderly growth of urban centers therefore calls for making available adequate resources and adoption of investment strategies in accordance with the direction indicated in the master plan for effective implementation.

Strategies for raising funds required for plan implementation are generally not an integral part of a master plan. For example Master Plan for Delhi, 1962, 2001 and 2021 are silent on investments required and sources of funding. While the Report on the Development Plan for Greater Bombay, 1964 ends with the hope of raising financial resources for plan implementation by noting, 'with little sacrifice on the part of all citizens and sympathetic attitude of state and central governments towards Corporation's problem, this plan can be translated into reality'. Lack of financial resources on one hand and absence of dovetailing of physical planning with fiscal planning has been largely responsible for lopsided and unplanned growth of our urban areas. Land use planning without any link with infrastructure investment leads to a situation whereby investment is driven by the demand of already developed areas leaving new areas with inadequate investments. Implementation of master plans in Maharashtra even though differs from one municipal body to another, depending upon their financial strength, yet it can be safely assumed that implementation has not been more than 30 percent.

Major reason for poor implementation of master plans is not far to seek. Urban local bodies without exception suffer from very weak resource base. Their incomes are much less compared to the ideal level of expenditure. Demands on these institutions are very heavy, while the resources available with them are very few. Because of the archaic urban land policies and rent control acts, income of local bodies has remained static. These urban local bodies are also plagued with high levels of corruption, poor managerial capacity, lack of technical expertise and constant interference of elected representatives. These bodies are spending nearly 50 percent on establishment, about 30 percent on maintenance of utilities and 10 to 15 percent on development works. It is therefore not surprising that execution of development plan suffers (Patharkar, 1995). In spite of these limitations as mentioned above, the concept of statutory master plan has been in vogue over the last four decades and it has no doubt made discernable impact in regulating and guiding the development of cities and towns.

Without master plans the situation would have been much worst in our towns and cities

4. INTERFACE BETWEEN CDPS AND MASTER PLANS

Under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), it is mandatory to prepare City Development Plans (CDPs) for 63 selected cities. A CDP will provide vision and perspective for the future development of the city. But as mentioned earlier, the focus of CDP is more on the development of economic and social infrastructure, strengthening of municipal governance, financial accounting and other bottlenecks. It could also be noted that the main objectives of reforms under the JNNURM are to improve the financial conditions of local bodies and their credit worthiness and ability to access market capital. Besides the main objectives of the JNNURM, it is to secure focused attention on integrated development of infrastructure and services, secure effective linkages between asset creation and assets management, ensure adequate investments of funds to fulfill deficiencies in urban infrastructure services, scale up the delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor and planned development of cities identified under the mission. On the other hand master plan aims to promote growth and regulate present and future development of towns and cities. It is an instrument to work out space and infrastructure required and to allocate land to various uses for harmonious and sustainable distribution of land so that towns and cities are provided with a form and structure within which it can perform all its economic and social functions effectively and efficiently. It also gives zoning regulations for harmonizing the development in each zone.

As noted earlier, a master plan is a statutory instrument for guiding and regulating development of towns and cities over a period of

time and contributes to planned development both conceptually and operationally. Master plan also takes the cognizance of the regional linkages unlike CDP where emphasis is city based. The emphasis of CDP is also more on identification of set of projects under JNNURM guidelines as given in section 2.1 above, which may compel urban local bodies to devise ways and means to lift more funds from central and state kitty. However, it is not denying the fact that CDP highlights certain important aspects like preparation of financial profile of a city, investment plan and strategy plan and infrastructure profile in preparation of CDP, which will go a long way in realizing harmonious and sustainable development of towns and cities. These aspects which even though are emphasized in the master plan but always are down played. Thus, it would be advisable to integrate the CDP and master plan, as the objective of both the documents is the same i.e. 'future development of city'. For all the 63 cities identified under JNNURM, master plans are in operation. For mega and metro cities second and third generation master plans are in force which are statutory documents prepared under relevant acts, if the cognizance of this fact is not taken both documents may work in cross purposes and chaos are sure to prevail.

5. CONCLUSIONS

In order to avoid contradictions between these two documents, it is advisable to achieve interface between both the documents. The best way is to identify the projects under the JNNURM in CDP in conformity with master plan proposals, which will also give an edge to the CDP.

REFERENCES

- Town and Country Planning Organization (1995) Master Plan Approach: Efficacy and Alternatives, Town and Country Planning Organization, New Delhi.
- Patharkar, A.R. (1995) Master Plan Approach and its Alternatives
- <http://urbanindia.nic.in/mud-final-site/programs/urbandevelopment/nurm.htm>