A framework for urban planning for modern India -Thoughts of an amateur

The 2005 P. N. Haksar Memorial Lecture

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It is an honor to deliver the 2005 P. N. Haksar Memorial Lecture. I thank the organizers for inviting me.

Parameshwar Narain Haksar was one of the key policy planners of post-independence India, and a brilliant strategist. He was the architect of India's foreign policy in the 1960s and 1970s, playing a central role in the signing of the 1971 Indo-Soviet Treaty, the Shimla accord with Pakistan, and the liberation of Bangladesh.

Haksar was known for his deep understanding of India's poor masses. In 1971, he planned Indira Gandhi's political campaign using the powerful slogan of "Garibi Hatao", a direct call to war against poverty on behalf of 300 million poor Indians. He was deeply concerned with the social and economic challenges facing independent India, noting that the "need for social, economic and political transformation is the major issue before our country."

I realize that the only way we can truly implement "Garibi Hatao" is by improving our urban areas since cities have to bear the main brunt of any economic growth. Hence, I have chosen this topic even though I have no claim to any expertise in urban planning.

The vision outlined by the Indian government in 1956 of a poverty-free India, with full employment in 25 years by 1981, still eludes us. Today, over 260 million people in India remain below the poverty line. More than 390 million people in the country are illiterate – the largest pool of illiterates in the world. Unemployment in India is estimated to be over 10%. Experts opine that India has to create jobs at the rate of ten million a year for the next five years to merely sustain the present unemployment rate. Yet, we have been creating less than one million jobs a year. Our economic growth has not been dynamic enough to ensure sustained job creation, and to facilitate broad-based, equitable development. I believe the key to unlocking India's vast economic potential, and creating rapid, sustainable economic growth lies in our cities. That is why urbanization and urban planning for modern India become important.

Today, we are witnessing rapid urbanization in both developing and developed economies around the world. Globally, each year, around 70 million people are migrating to cities. The rate of urbanization is especially significant in fast-growing, developing economies like India and China. It is interesting to note that, in 1950, the United States had 50% more urban dwellers than either China or India. By 2000, China had twice as many urban residents as the US, while India had 25% more.

Since the reforms of 1991, the Indian economy has grown at an annual rate of 6%, and the country is undergoing a rapid transition from a rural to a semi-urban

economy. Over 30% of India's current population is urban. By 2001, over 300 million Indians lived in nearly 3,700 towns and cities across the country. The number of Indian cities with populations over one million increased from 23 to 35 between 1991 and 2003. Indian towns and cities have registered an annual population growth rate averaging 4-5%, driven by a combination of rural-urban migration and internal growth. Thus, the urban population in India doubles every 14 to 18 years.

The economists Brunn and Williams explained urbanization as "a natural consequence of economic growth". A country's cities are at the frontline of its economic development. Urban centers provide increasing returns to land, labor and capital through agglomeration and economies of scale. Cities become poles of attraction for capital and labor, as businesses and individuals locate in urban areas to take advantage of higher TFP (total factor productivity). Thus, savings, investment and wealth are concentrated in cities. Clearly, cities are the "theatres of accumulation" for the country's economic activities. The UN estimates that the per capita output of cities in an economy is, on average, 10% higher than overall per capita GNP. In countries like India, it is even higher.

The contribution of India's urban economy to overall economic growth is significant. The urban contribution to GDP has increased from 30% in 1960 to 70% in 2003. As the economist David McKee points out, urban areas clearly house the strengths of national economies, and consequently, the efficiency of national economies is impeded by anything that impairs the efficiency of the city. An effective urban planning framework is essential to ensure sustained economic growth, and to manage the pace of urbanization through the effective supply of land, shelter and employment opportunities.

Unfortunately, urban planning in India has not been given sufficient priority. The expansion of India's cities and towns has been unplanned and haphazard. Consequently, urban India faces critical inadequacies in coping with the rising demand for resources and services. The demand exceeds the supply of clean water in cities by an average of 30%. Water degradation has led to health costs amounting to US \$ 5.7 million every year. This is, in my opinion, an underestimate. Urban waste management systems are overstressed, with significant implications for public health. Over 40% of the solid waste generated daily in urban areas goes uncollected. Housing shortage in India's towns and cities is estimated to be around 22 million. About 22% of India's urban population lives in slums. Around 25% of the urban population is below the poverty line. Traffic congestion in Indian cities has assumed critical dimensions. While India's vehicle population increased 100-fold from 0.3 million in 1960 to 30 million in 2004, the road network increased by just eight times in the same period – from 0.4 million km to 3.3 million km.

The problem has become worse since attempts by governments to divert industry, job creation and investment into rural regions have failed in the absence of even minimal infrastructure in rural areas. For instance, 40% of rural areas even lack all-weather access by roads. About 28% of India's villages lack a primary school. A whopping 54% of villages are over five km away from the nearest health centre. Consequently, while India's urban economy grew at an average of 7.3% over the last decade, rural economy grew at an average of just 1.9%. Hence, the contribution of rural workers to GDP is less than 20% that of workers in the urban economy. Average urban income is twice that of rural income in India.

Clearly, we require radical, immediate reform in the planning and management of our cities. Effective urban planning, as defined by the World Bank, "creates a

competitive, well governed urban environment. It makes cities livable, by ensuring a decent quality of life and equitable opportunity for all residents."

To plan cities and towns which are livable and provide equitable opportunities, urban planners have to recognize the complexity of their brief. The need of the hour is a two-pronged approach to urban planning in India. Firstly, planning should address existing, chronic shortages in urban infrastructure. It should provide accessible, low-cost infrastructure for urban residents like housing, schooling, hospitals, commercial activities, transport and support infrastructure. In addition, it should incorporate an effective framework for capacity building, and coordinate the expansion of infrastructure and services with urban growth.

Efficient land use and space planning is essential in building a livable urban environment. However, India's archaic land regulations and property tax systems have resulted in highly sub-optimal land use. For example, India's urban land ceiling act and floor space index (FSI) restrictions have created extremely low densities in land development. Additionally, rent-control and complex ownership regulations have prevented effective land-recycling and redevelopment. Consequently, today, FSIs average below 1.6 in urban India, compared to averages ranging from 5 to 15 in other Asian cities. Such low FSIs also result in greater energy use for transportation and cause higher pollution levels. Such inefficient land use has created an artificial land shortage, and has led to significantly high costs for office space and housing in Indian cities. According to McKinsey, the average property cost relative to average urban income in India is the highest in Asia.

Unaffordable housing costs have contributed to the rapid growth of urban slums. India's urban slum population has been growing at 9-10% a year. At the present rate of migration and housing development, 35% of India's urban population will be forced to live in slums by 2030. Clearly, as the economist Michael Leaf writes, our urban policies have created "islands of homogeneity and wealth, set in a sea of diversity and poverty".

We must encourage high-rise and high-density cities for equitable, sustainable urban development. Urban FSI restrictions must be relaxed. FSI should be raised significantly in CBDs (Central Business Districts) to create affordable office space, and make these areas accessible to small and mid-size businesses. We must replace the 'policing' approach to land markets with an 'enabling' one. Land and housing markets must be deregulated. Property tax systems must be based on land value rather than rent to improve tax collections. A supra-judicial agency must be created to quickly resolve existing property disputes.

Planning must adequately address the shortage of low-cost housing in Indian cities. It is estimated that India requires the construction of 3.6 million housing units annually to merely address the annual incremental demand for urban housing. An example of a successful low-cost housing program is Sweden's "Million Program", implemented by the Swedish government in partnership with private developers between 1964 and 1974. Within a ten-year period, the program built a million low-cost dwellings for the poor. The houses were well-connected to the city through inexpensive tram systems, and provided with infrastructure like schools, hospitals and recreational facilities.

Private developers in cities may be given incentives like tax rebates to include low-income housing in their development plans. Systems for reusing public land and abandoned lots for social housing can also be incorporated. For example, in New

York and in Caracas, abandoned buildings are upgraded and provided as housing to low-income families.

A key drawback of India's urban policy is its land zoning regulations. These regulations mandate the division of cities into "business" and "residential" zones. However, these zoning laws were adopted from pre-1950 British urban planning models intended to separate polluting industries from residential areas. Today, such regulations limit the opportunity for non-polluting commercial land use which can increase economic opportunity and enhance the quality of urban life. Modern planning models such as the smart growth urban planning model suggest a "mixed land use" system. Such a system allows the planned construction of both commercial and residential buildings around employment opportunities. Such a construction is coordinated with the development of support infrastructure and the growth of schools and hospitals. Thus, housing, commercial activity, transport and support infrastructure are developed in an integrated, "holistic" manner.

Today, the congestion of road transport in urban areas has become a critical issue. It is estimated that road congestion has cut road transport efficiency by 50% in urban areas. There has been little progress in the development of mass urban transit systems in the country. Suburban rail transit systems exist in just four of the 35 Indian cities with populations in excess of one million. Dedicated city bus services operate in just 17 cities.

Effective transport infrastructure forms the backbone of economic development in urban areas. As Prof. Paul Krugman points out, weak urban transport systems constrain economic growth, as they "limit urban agglomeration, and reduce labor mobility and economies of scale." Unfortunately, there has been little focus on building efficient urban transport systems in India. Urban transit systems must satisfactorily address six key criteria: connectivity and accessibility; efficiency; safety; urban aesthetics; financial viability; and affordability. Cities must implement an urban transportation system using multiple options. Road capacity must be enhanced. There has to be accelerated development of mass transit systems using metro, light-rail, mono-rail, and bus services.

Existing shortages in road infrastructure should be addressed through the introduction of parallel service roads, and the construction of priority bus and taxi lanes. In addition, public transit systems must incorporate easy transfers between bus/air/rail terminals through a single-ticket system, valid across the transport network. Such an integrated approach – similar to the Hong Kong and Tokyo transit systems – increases connectivity within transit networks, eases commuting and improves efficiencies for businesses.

Enforceable, well-defined standards in infrastructure planning and development are critical to enhancing the quality of life in our cities. Unfortunately, we do not see such enforceable design and execution standards in the construction of buildings, in footpaths and roads, in support infrastructure, and in our water and sanitation systems.

Building standards should be realistic with broad enforceable guidelines and incentives for compliance beyond required norms. For instance, FSI entitlements in cities can be combined with "bonus FSI" for buildings that implement design and construction quality standards above the required norms. This has been put in practice in New York which allows greater FSI for buildings that "enhance the public realm".

Building standards should also mandate parking space requirements for commercial and residential units. The absence of such requirements results in overcrowding, road encroachments, and parking on pavements. Standards for the construction and maintenance of roads should include standards for user-friendly and accessible foot paths to effectively connect open spaces, parks and playgrounds.

Road planning standards should include standards for related infrastructure like street lighting and signal systems for the road network. Conduits must be laid for cables, power lines and sewage systems. Such conduits eliminate repeated digging of roads and footpaths.

To improve the functioning of urban infrastructure and services, these services can be contracted out to private operators. Creating a competitive environment in providing infrastructure and services to citizens will improve service delivery and efficiency, enable improved response to urban growth, and help lower costs. The management of public services such as sanitation systems by private operators has been successfully implemented in Thailand and Malaysia. The participation of the government in these systems has been limited to a regulatory and monitoring role.

To address urban decay in cities, we must incorporate urban renewal activities within the planning framework. Urban renewal activities can help promote new commercial and housing development in 'depressed' areas, and the creation of 'green areas' and open spaces in overcrowded districts. Cities can permit "infrastructure endowments" in business districts where the government sells "extra FSI" to developers above the existing, permitted value. The funds from such endowments can be demarcated for urban renewal activities.

Local governments should actively involve multiple stakeholders – industry, civil society organizations and citizen groups – in articulating a shared vision for urban planning. For example, Brazil's system of participatory budgeting in municipalities provides interaction between citizen councils and elected officials to decide priorities and expenditures in municipal budgets. A coordinated public-private approach to urban infrastructure can also improve the enforcement of design, execution and operational standards.

No urban planning exercise will be effective in the absence of effective governance systems. While urban governance is critical, it is often the resource in shortest supply. Urban governance in India has been weakened by complex administrative systems and highly fragmented responsibilities. Decision-making, financing and execution roles are split across state and city administrations.

In the present urban governance system, local bodies such as municipalities are responsible for providing services. However, they lack the mandate to generate financial resources to meet expenditures and take decisions on funding. Municipal areas in India generate 50% of the total revenues for state and central governments. Yet, municipalities receive less than 2% of these funds directly. Funds are collected and allocated by the state. The state governments take decisions on important issues like user charges for municipal services and property taxes. Such systems severely reduce the ability of municipal corporations to deliver effective services.

The mayor of an Indian city is elected by city councilors, typically, for a one year term. The mayor lacks executive authority. The role of the mayor is a ceremonial one, and lacks real accountability on governance issues. The municipal councils do

not effectively represent urban citizens. The citizen-representative ratio in India's urban areas averages over 4000:1, compared to a ratio of 300:1 for rural governance bodies! To ensure effective governance, cities must have a mayor who is elected directly by the citizens for a period of five years. The mayor should be supported by an urban legislative body composed of councilors who have been directly elected from the city wards. Electoral wards should be properly demarcated and defined to reduce citizen-representative ratio averages to less than 1000:1. This is essential to ensure that local governance concerns are adequately represented at the legislative level.

The legislative body, headed by the mayor, should have broad, effective authority and responsibility in all functions - financing, planning, execution and maintenance – for the city. The proposal of the Urban Renewal Mission to empower municipal bodies in tax collection and receiving funds is excellent, and should be immediately implemented.

We must link infrastructure investment and services provided to wards with the payments made by the ward citizens through tariffs and taxes. This "social compact" is the key to restoring accountability in urban governance. Wards must be financially empowered through de-centralized tax collection, and the authority to levy and collect user charges for services. The management of all services like electricity, water, sewage, and roads should be handled in an integrated manner at the ward level.

The urban governance system should also handle urban planning and management for the wider metropolis. This can be achieved through a council of elected mayors of the cities who are responsible for addressing metropolitan concerns such as periurban sprawl, and for the planning and expansion of inter-city infrastructure. Additionally, an advisory city committee consisting of eminent citizens and urban planners should monitor the progress of urban projects and the overall spending of funds. They must be consulted before any large project is taken up. There must be periodic surveys to assess the satisfaction level among citizens.

It is critical that the city governments ensure the financial viability of urban services. In urban India, public services realize, on average, less than 12-15% of expenditure through the recovery of costs. This is unsustainable. The pricing of services such as water, electricity and public transport must cover all effective costs incurred in providing these services. An efficient subsidy system like the voucher system, suggested by the economist Milton Friedman, can be used to provide directed subsidy for the low-income urban households.

It is estimated that the transaction cost of issuing a building permit or a business license in India is at least 40% of the total cost of the permit/license. Such inefficiencies in administration impose significant, unnecessary costs on urban development. This has to be improved.

There must be strong incentive systems to bring in efficiency and accountability in urban administration. Accountability in urban administration can be enhanced through the financing of urban projects by accessing capital markets, credit rating of municipalities and urban infrastructure entities, and competitive score-carding of city officers. In addition, IT tools such as MIS (management information systems) can be employed to improve efficiency and help better monitoring of public service delivery.

The urban transition of our economies must be viewed within a broad development framework. Urban strategies must be developed with an understanding of the contribution that cities and towns can make to the country's economic goals. The expansion of infrastructure and basic services into outlying areas is a necessary factor in synergizing economic growth outside existing urban centers. This can be seen in the present development of the Zhengdong district in China. The Zhengdong district is located in China's rural hinterland. To encourage urbanization, the district is being developed with state-of-the-art infrastructure for business, residential, high-tech, university and industrial buildings, and for support systems.

State governments must develop systematic regional plans to extend economic energy outside the existing urban centers. The growth of satellite townships must be encouraged through the establishment of effective arterial infrastructure networks, fast-paced transport corridors and efficient regional supply-chains.

Urban development must be part of a broader macroeconomic dialogue for economic growth. Weak national economic policies raise costs for businesses and households. They distort and limit private investment, the main source of urban wealth creation.

Today, we are in an age of rapid urbanization. The face of India's cities represents the future face of our country. Clearly, how we manage the development of our towns and cities today will shape the success of our country for decades to come. It is best to remember the words of geographer David Harvey that "Cities are endowed with great character and with fascinating, ever-changing personalities". It is the need of the hour to embrace intelligent, practical and effective policies for urban development and governance to transform our dynamic fast-changing, urban centers into truly sustainable engines of growth.

Thank you.