

# Making Indian Cities Liveable: the Challenges of India's Urban Transformation

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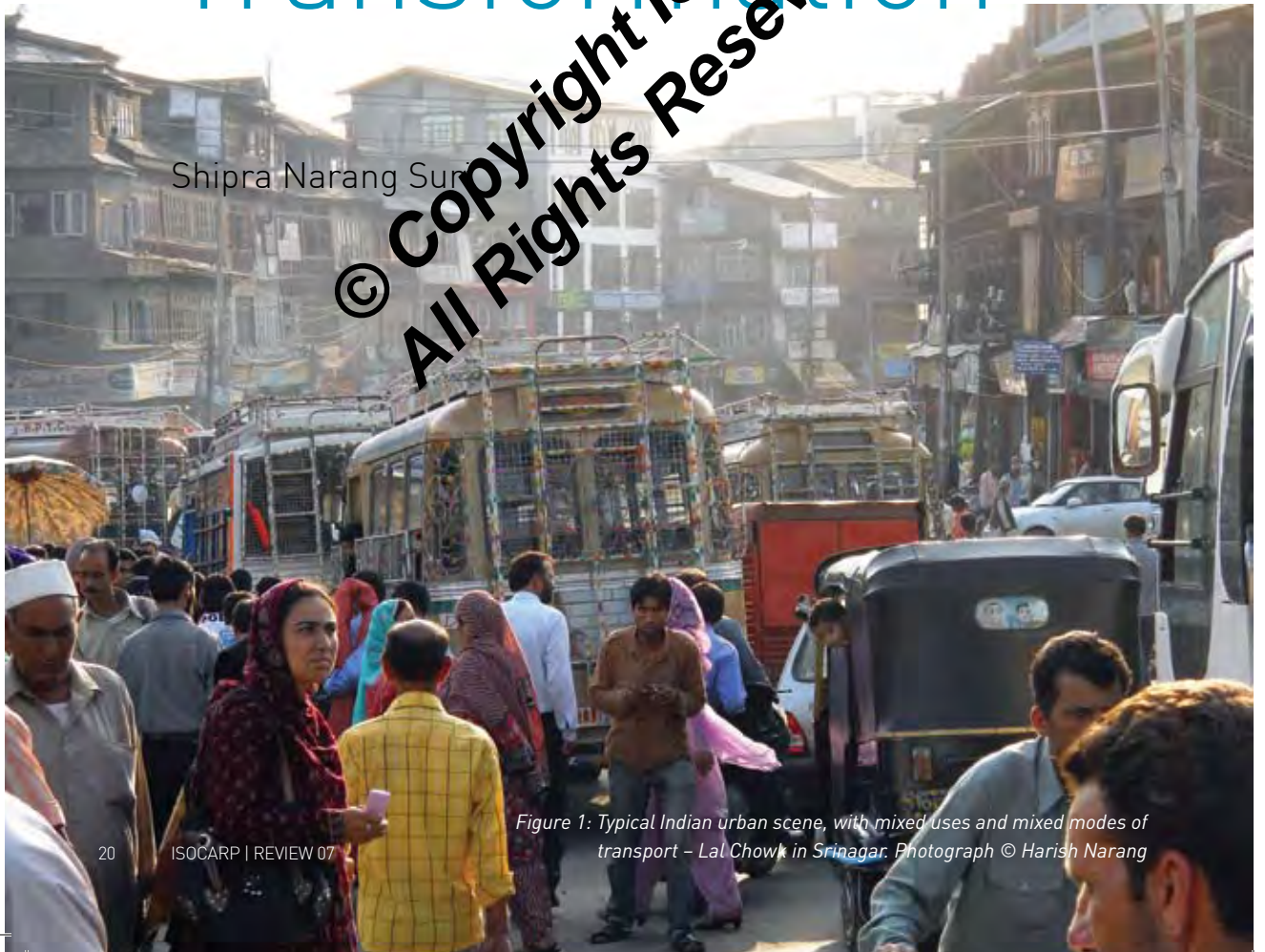


Figure 1: Typical Indian urban scene, with mixed uses and mixed modes of transport – Lal Chowk in Srinagar. Photograph © Harish Narang

## Setting the Context: India's Urban Transformation

India's urbanisation is a paradox of sorts. The country's urban population is undoubtedly vast at 377 million (2011 Census). In international terms, however, India's urban growth can hardly be described as rapid. Despite the fact that the fastest urbanization rates are being witnessed in the developing world, India's urban population increased from 17.3 per cent in 1971 to just 23.3 per cent in 1981, and 27.78 per cent in 2001. The 2011 Census figures reveal that just over 31 per cent of the country's population is presently living in urban areas, lower than, for example, China, Indonesia, Mexico or Brazil (HPEC 2011). But there are over 80 million people living below the poverty line in India's urban centres; a quarter of the total urban population lives in slums. Informal settlements, informal livelihoods, homelessness, insecurity, various types of pollution and declining green areas are the bane of most Indian cities. Combined with emerging concerns about climate change and the regular occurrence of natural disasters, Indian towns and cities seem to be sitting on a ticking time bomb.

The other characteristic of India's urbanisation is that it is 'top-heavy', which means that the larger cities (metropolises, which have over a million residents, and Class I cities, which have 100,000+ residents) have witnessed much more rapid growth than smaller towns. In 2001, nearly 70 per cent of the country's urban population resided in the 393 Class I cities. The unequal spatial distribution of urban populations across the country has been a cause for concern for the policymakers at the highest level in successive five-year plans (Kundu 2011). At the same time, urbanisation strategies currently being implemented or proposed seem to advance the same trend.

For example, the proposals put forth by a recently constituted High-Powered Expert Committee for Estimating the Investment Requirements for Urban Infrastructure Services (HPEC) are likely to create 87 cities with population of 1 million and above by 2030 (HPEC 2011).

These outcomes of India's urban transformation pose enormous challenges for the country's planners and policymakers. The formal planning system has seen little change since independence, and most towns and cities rely on inflexible master plans which are more often than not outdated by the time they are completed. Rigid development control norms which are touted at every step, and a weak governance system which can neither guide nor enforce, completes the sorry picture. Recent policy innovations such as the National Urban Renewal Mission launched in 2005 have triggered some changes, but have sidestepped the existing planning processes, which seem too complicated to change. Other recent events, including increasingly frequent violent protests on issues such as rural land acquisition for urbanisation and industrialisation, and the widespread political posturing on the issue, seem once again to pitch urban centres versus rural areas, or "India" versus "Bharat", as the country is commonly known in Hindi. Many thinkers and policymakers understand that this is a false dichotomy, but the latter in particular are unable to take any stand which apparently 'favours' urban areas, urban residents, or even the urban poor, over their rural counterparts.

Given this scenario, many of India's cities have taken it upon themselves to introduce innovative measures in urban planning, management and governance, demonstrating vision, creativity, and a departure from business as usual. Improvements in public transport are becoming increasingly common and characterised by innovative planning and the use of modern technology – Delhi, for instance, has

pioneered the use of Compressed Natural Gas, a low-polluting fuel, for all modes of public transport, while Ahmedabad has launched an extremely successful Bus Rapid Transit system. Disaster risk management plans are being developed, institutionalised and implemented, as has been done by Mumbai, to protect cities and their residents from natural and man-made disasters. Renewal and revitalisation of older areas within cities is also being promoted, by cities such as Ahmedabad, Jaipur, Pondicherry and Varanasi. Urban infrastructure, water and sanitation systems are being revamped – in fact this is the overarching focus of recent policy reforms; safety and security in public spaces is being enhanced through improved infrastructure and more responsive policing; and communities are being empowered through skill development, participation and partnerships in a number of cities across the country.

This article attempts to build a broad picture of India's urban transformation and the major challenges of liveability faced in India. Cities, based on a conception of liveability that includes notions of **inclusion** (involving not only social integration and cohesion, but also enabling the widest range of stakeholders to make the best of the opportunities that offers, as well as participate actively in decision-making), **resilience** (referring to adaptability, flexibility and balance; the ability of a city to "invent" or "re-invent" itself in response to shocks and stresses, to harmoniously accommodate old and new values, and to adapt the functions and requirements of the city), and **authenticity** (which involves maintaining the local character of the city, the local heritage, culture and environment, while evolving and accommodating social, economic and technological changes).<sup>1</sup> As Indian towns and cities have expanded, they have become less inclusive for the poor, for women, and for other socially disadvantaged groups. In addition, the imperatives of development and 'modernisation' are taking a toll on the historic character

of many cities. They are also struggling to become more resilient in coping with natural and man-made disasters, crime and insecurity, and conflict among various societal groups.

Using a wide range of illustrations and examples, this paper argues that to build liveable cities in India, a fundamental shift in the approach to urban planning and development is required, and concludes with some ideas that might contribute towards such a change.

## The Changing (?) Mechanics of Planning

### Urban planning and local governance in Indian cities

Urban planning in India has traditionally taken the form of master plans, usually developed and implemented by specially constituted development authorities which are outside the purview of the local administration and hence not directly accountable to the local population (unlike local governments which have an elected council that is accountable to the citizens). The lack of coordination between urban planning and local governance was sought to be corrected through the adoption of the 74th Constitutional Amendment Act (CAA) in 1992, which proposed that Urban Local Bodies (ULBs) be established and strengthened in order to improve the quality of the urban environment, provide services in a more responsive and effective manner, and enhance participation of local stakeholders in decision-making processes. The amendment has been described as

*"...the first serious attempt to ensure stabilization of democratic municipal government through constitutional provisions." (Savage and Dasgupta 2006: 43)*

While the Act directly addressed the issue of planning (the first of the functions assigned to ULBs under the Twelfth Schedule which is part of the Amendment Act), this aspect has remained marginal to the development of India's towns, cities, districts and regions. According to a report prepared by the National Institute of Urban Affairs (NIUA) in 2005 assessing the implementation of the 74th CAA in 27 states and one Union Territory, District Planning Committees (DPCs) and Metropolitan Planning Committees (MPCs), which according to the Act should be established by each Municipal Authority, are yet to be established in most states.<sup>2</sup>

The ineffectiveness of planning has become endemic across Indian cities. Ansari (2004) points out some key drawbacks of the Master Plan, including the limited attention paid to social and economic development aspects, financial resource mobilisation for the implementation of the plan, as well as the long time needed for plan preparation and the limited stakeholder involvement. Economic planning or local economic development strategies are rarely incorporated into the spatial planning exercise, with the result that the plans are unrealistic and impossible to implement (Sridharan 2008).

*"What emerges [...] is largely a bundle of half-baked ideas incorporated into a proposed land use plan that planners insist should be implemented in its entirety, at all costs." (Ansari 2004: 15)*

Furthermore, the implementation of urban plans in Indian cities is hampered by the fact that water and sewerage systems, power and telecommunication services, roads and public transport, housing and slums, are controlled by other parastatal bodies or line departments of central and state governments. Local governments are responsible only for solid waste management, maintenance of public spaces, and some basic repair and maintenance of

other services such as roads, street lighting and drainage systems.

The launch of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) towards the end of 2005 has significantly influenced both the local governance and urban planning systems in India's large cities. Covering 63 cities across the country, the JNNURM's overarching goal is to encourage reforms and fast track planned development of the identified cities, with a focus on improving efficiency in the delivery of urban infrastructure and services. Community participation and building accountability of local authorities towards citizens are the other objectives of the Mission (Government of India 2005b).<sup>3</sup>

One of the prerequisites for any city to access funds under the JNNURM is the preparation of a City Development Plan (CDP). To support cities in this process, the JNNURM secretariat has produced a Toolkit containing guidelines for CDP preparation. The Toolkit suggests that a multi-stage process be adopted for the preparation of a CDP, including an assessment of the current situation, development of a vision for the future in consultation with stakeholders, strategy formulation and the development of a City Investment Plan (Government of India 2005a).

While this is indeed a welcome step forward, and has encouraged the cities included to formulate CDPs, one is unable to decipher how different these plans are, or will be, from old-fashioned master plans (other than including an Investment Plan). It is also unclear whether CDPs will replace master plans as the key statutory document for planning, or are to be developed in addition to master plans. It is too soon, of course, to comment on the extent to which each CDP has been implemented, and its long-term impact on the city concerned. The JNNURM demands that over the duration of the Mission urban planning become a designated function of elected local bod-

ies. However, without significant institutional reforms to streamline and reorganise the responsibilities of local bodies and various parastatal (unelected/ technical) organisations, the development and implementation of the CDPs prepared for cities in the next phase of JNNURM (see below) could well remain as fragmented as it has been in the past.

A revised version of the JNNURM is now in the pipeline. Titled unimaginatively as the “New Improved JNNURM” (NIJNNURM), the new scheme will target all cities and towns, small or big, and will focus on capacity creation within the local governments. Funding will be linked to a city-specific reform agenda, rather than imposing one-size-fits-all solutions on large, medium and smaller urban centres. Regarding the governance of planning, it is proposed to strengthen Metropolitan and District Planning Committees, with Urban Development Authorities and Unified Metropolitan Transport Authorities as their technical arms. City planning would be made a function of elected local governments rather than Urban Development Authorities (HPE 2014). It remains to be seen if this version of the Urban Renewal Mission would be any more effective as compared to the previous one, especially vis-à-vis planning.

### Addressing the complex and contentious issue of urban land

Of course, urban planning reforms cannot be complete without addressing the issue of land. Urban land has always been, and continues to be, a contentious subject in most Indian cities. Like urban development and local governance, land is also a state subject under the Indian federal system. The central government provides policy advice and guidance in this area, but it is up to the state governments to adopt any central policies or directives (Banerjee 2002). One of the major legal instruments which has significantly impacted (in fact, hin-

dered) the development of urban land in the country has been the Urban Land Ceiling and Regulation Act (ULCRA) of 1976, which was applied in cities with populations of 200,000 or more in the year 1971. The key objectives of this Act were to

*“...curb the activities of private land developers, to check undesirable speculation, to operate a land bank to keep land prices within reasonable limits and to ensure plan development with special reference to the needs of the poorer segment of the population.” (Sivam 2002: 529)*

Although these goals were undoubtedly noble, the Act led to the freezing of large tracts of land in the big cities, ostensibly for planned development. The slow pace of such development, in turn, led to a scarcity of developed land and sky rocketing prices. Land acquisition also became more and more expensive for development authorities, as well as being a cumbersome process fraught with litigation, which in turn fed the cycle of low supply and high demand (Gnaneshwar 1995; Sivam 2002). Thus, in effect, the Act shut out the urban poor from the housing market in most large cities, Delhi being a prime example. In 1998, the central Act was finally repealed. Most states have also repealed the corresponding state acts. Some states have also made other attempts to reduce barriers to private supply of land, such as reforming Rent Control Acts.

In recent years, two other initiatives have been tried to overcome the existing constraints. These are: (i) township development and (ii) land pooling and readjustment. The Integrated Township Policy, adopted by certain states, is an attempt to mobilize the private sector for the supply of land for urban housing, infrastructure, and other public purposes. Under this mechanism, a developer assembles land by paying private landowners the prevailing market price, without the deployment of Land Acquisition Act (LAA) provisions to acquire

land. This is unusual in India, where land is historically seen as a public good, and its acquisition a state function. The role of the public sector in this process is restricted to that of a facilitator and a regulator of town planning, environmental, and social welfare norms (Joshi 2009).

Another effective approach being deployed for the delivery of serviced land for urban expansion in the periphery of cities, mainly in the western Indian state of Gujarat, is known as the 'Development Plan–Town Planning Scheme' mechanism. Under the Gujarat Town Planning and Urban Development Act (GT-PUDA) of 1976, a two-stage process is outlined for urban development. The first step is the preparation of a statutory Development Plan (DP) for the town or city as a whole, which also demarcates the area of the rural hinterland where the city is expected to expand. In the second stage, the expansion area is divided into a number of smaller areas, usually

between 1 and 2 sq km each, and for each of these, a Town Planning Scheme (TPS) is prepared. This is a combined land reconstitution, infrastructure development, and financing proposal (see Figure 2). Although this is a tedious process, it has been, and continues to be an effective instrument for development planning, infrastructure development, financing and implementation (Ballaney and Patel 2009).

While these measures are innovative and are being usefully deployed in a number of cities, in the long term, the supply of urban land can only be freed by removing constraints such as rent control, high stamp duty and development charges, restriction on sale or conversion of agricultural land, and the weak land title/record and protection system (IDFC 2009).

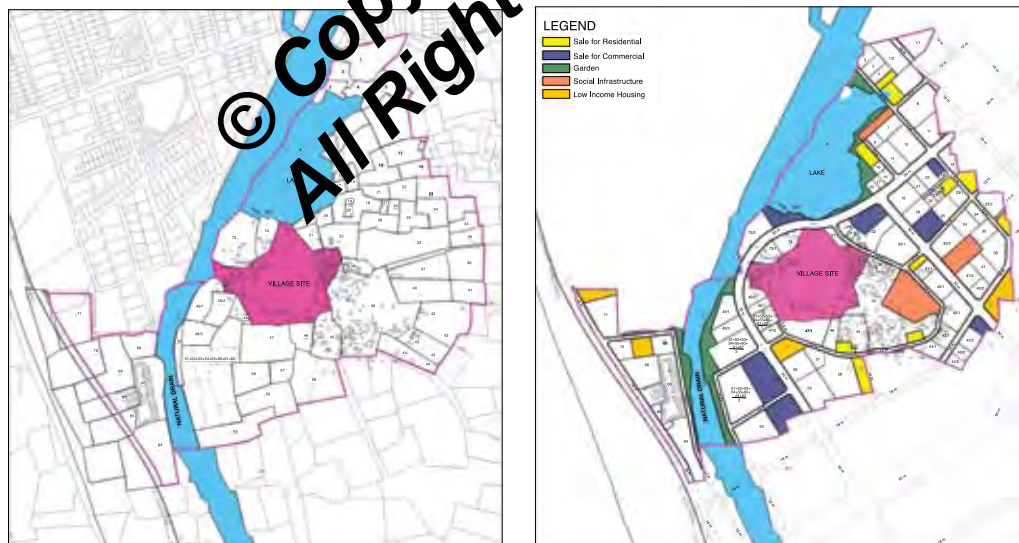


Figure 2: Before and after maps of Vinzol-2 Town Planning Scheme in the south of Ahmedabad, western India. Courtesy EPC Development Planning and Management (EPCDPM), Ahmedabad

## Responding to the Challenges of Liveability

This paper does not attempt to provide a comprehensive overview of every single challenge or concern faced by Indian cities today. Rather, it aims to focus on some critical areas which have a close connection with the concepts of inclusion, resilience and authenticity, including some which have consistently been of concern to policymakers and citizens alike (e.g. urban housing, services and transport), as well as issues which have recently emerged

(or, re-emerged) and captured the imagination of urban stakeholders (e.g. revitalisation of historic districts within cities, security and social inclusion). For each of these, the major challenges are enunciated first, followed by a few examples of innovative interventions which aim to address these.

### Urban housing, infrastructure and service delivery

The challenges of urban housing, especially for low-income populations, infrastructure provision, and the delivery of a variety of urban services including (among others) water, sanitation, education and health, are long-stand-



Figure 3: Pavement-dwellers in the city of Delhi. Photograph © Maud Hainry, courtesy UNESCO New Delhi

ing concerns for Indian policymakers. According to the latest National Sample Survey reports, there are over 80 million poor people living in the cities and towns of India. While this figure is contentious and debated, at the same time it is widely accepted that 'shelter poverty' is much larger than income poverty in urban areas. This is mainly a result of heavily distorted land markets and an exclusionary regulatory system that fails to accommodate the needs of the poor, or adequately address the challenges of slums, informal settlements and pavement dwellings. An adequate, affordable formal housing supply for the urban poor doesn't seem to be a priority area for policy-makers, even though land values are escalating sharply and the 'market' is clearly

excluding the poor. A resettlement policy is urgently required which lays down guidelines to minimize displacements and ensure the rehabilitation of people affected by projects, based on human rights to adequate shelter. As slums are a state subject according to the Indian constitution, state slum laws also need to be reviewed across the country (Risbud 2009).

In terms of services, too, Indian cities lag behind on almost all counts. It is estimated that water supply is available for an average of 2.9 hours per day, across all Indian cities and towns; less than 20 per cent of waste water is treated; and solid waste management is grossly inadequate. National benchmarks have recently been developed for the four key



Figure 4: Typical scene in the older part of an Indian city, with overcrowding, dilapidated buildings and crumbling infrastructure. Photograph © Marina Faetanini, courtesy UNESCO New Delhi



service sectors, viz., water supply, sewerage, storm water drainage and solid waste management (Vaidya 2009).

Urban transport, however, is one area which is witnessing quite some innovation. Mobility is a serious challenge in most Indian cities and towns, mainly due to inadequate transport infrastructure, an unbalanced modal split heavily favouring private transport, and little integration between land use and transport planning. However, public transport is increasingly coming into focus, with a range of options being tried, from improved and environment-friendly bus services, introduction of bus rapid transit, and the development of metro rail systems. Integration of transport and land use planning is a key suggestion of the National Urban Transport Policy adopted in 2006, and Transit-Oriented Development is slowly becoming a strategic focus in several key cities, such as Delhi. The capital has seen the development of the most extensive metro rail network in the country over the past decade, which now ferries upto 1.7 million commuters every day on seven lines. In addi-

tion, all public service vehicles in the National Capital Territory run on Compressed Natural Gas (CNG), a much cleaner fuel than diesel. This policy, when introduced in 2001-02 under directives of the Supreme Court of India, was extremely unpopular, and riddled with several glitches, the most important one being limited availability of CNG and the long queues that snaked for several kilometers outside the handful of stations which supplied the fuel. These, however, have now been addressed effectively, and the capital is relatively free of diesel smoke. Between 2000 and 2008 carbon emissions had plummeted by 72% while SO<sub>2</sub> emissions decreased by 57%, thanks to 3,500 CNG buses, 12,000 taxis, 65,000 auto rickshaws and 15,000 mini buses running on CNG (Hohne, Buck et al. 2009).

The experience of the Bus Rapid Transit (BRT) corridor on the other hand, was not as positive in Delhi, and the corridor was never extended beyond roads covered in the first phase. Delhi, and other Indian cities, would do well to learn from Ahmedabad in this respect (see Box 1, Figure 6).



Figure 5: Buses and auto-rickshaws plying on CNG in Delhi. Photograph © Harish Narang



Figure 6: Aerial view of the Janmarg BRTS corridor, Ahmedabad. Photograph © CEPT University, Ahmedabad

### Box 1: The Ahmedabad Bus Rapid Transit System – demonstrating innovation in policy, technology, and implementation

The Janmarg BRTS, as the BRTS system in Ahmedabad is known, is a much-lauded initiative for many reasons. Developed under the broader vision of “Accessible Ahmedabad”, which aimed to redesign the city structure and transport systems towards greater accessibility, efficient mobility and a lower carbon future, the Janmarg BRTS was inaugurated in 2009. The project itself aimed to provide high quality, reliable public transport services comparable to a much more expensive metro system, which would attract users from all classes of society. Extensive technological applications such as Automatic Vehicle Tracking and passenger information systems, the use of smart cards, surveillance and security systems, and Area Traffic Control Systems at junctions ensured superior service and helped build a brand identity for the Janmarg system. Dedicated right-of-way for the buses and median bus stations with barrier-free access and at-level boarding enhance accessibility and save time. Innovative public-private partnership arrangements have been used to provide footbridges, landscaping and maintenance of the corridor, as well as operation and maintenance of a pay and park system. The Janmarg BRTS today carries an average of 125,000 passengers per day using 70 buses. Financed initially through a combination of JNNURM (central government) funds (35%), Gujarat state contribution (15%) and local government contribution (50%), Ahmedabad Janmarg Limited, the company incorporated to manage the system, today generates a daily revenue of about Rs. 0.75 million and meets all its operating costs, including bus cost.

Source: [www.ahmedabadbrts.com](http://www.ahmedabadbrts.com), CEPT University documentation

## Urban renewal and revitalisation of historic areas

Urbanisation, along with the pressure it creates on urban land and services, also has a significant bearing on the older/historic areas within cities, often leading to deterioration and decay, as well as the loss of harmony and a sense of place. Unfortunately, this dimension of liveability is frequently neglected by policy-makers. This is, of course, not unusual as traditionally, across the developing world, rehabilitation and conservation of historic and inner-city districts receives little attention in urban development policy, with the focus mainly on monuments, or remains of monuments, or at the most, sites or complexes containing a number of monuments or other

historic structures (Steinberg 1996). The emphasis on modernisation – including modern housing, transport and infrastructure – means that older city areas (which present a range of complex problems and cannot be ‘modernised’ easily) are ignored, therefore continue to decline, and are eventually torn down. In India, too, the urbanization of poverty and poor planning on the one hand, and the desire to ‘modernise’ and ‘develop’, on the other, have combined to play a rather destructive role vis-à-vis urban heritage (Menon 2005).

According to a recent UNESCO publication, historic areas in India are faced with multiple challenges, including those relating to poverty, migration and exclusion; inadequate housing, poor infrastructure and a deteriorat-

Figure 7: Inner-city housing above the spice market in Shahjahanabad, Delhi  
 Photograph © Marina Faetanini, courtesy UNESCO New Delhi





Figure 8: Evening prayer ("Aarti") on the banks of the Ganges river in the holy city of Varanasi. A popular religio-cultural ritual witnessed by thousands of residents and visitors. Photograph © Harish Narang

ing living environment; land tenure, ownership and tenancy; weak governance and conflicting interests; and finally, lack of political will to address these complex issues (UNEP, 2010). As historic areas provide economic and residential opportunities to a large number and wide range of residents and migrants, they also become melting pots for very diverse groups of people. At the same time, they can become ghettos for the urban poor and those working in the informal sector. With deteriorating urban services, overcrowded housing conditions and lack of interest on the part of many owners in maintaining their properties, historic districts in Indian cities increasingly resemble urban slums. Conflicting interests of the poor and the middle-classes, who prefer a sanitised, restrictive approach to urban conservation, and the lack of political will to resolve these, mean that historic districts continue to suffer from neglect and decay. The

fragmented governance framework vis-à-vis cities has also played a part in the neglect of urban heritage. While the Archaeological Survey of India focused its attention predominantly on individual or groups of monuments, the Town Planning Acts and the work of development authorities only emphasised new development (and to a lesser degree, some urban renewal). Historic districts or areas within cities, thus, fell between the institutional cracks. According to Ravindran (2005)

*"[There are] no regulations to guide their [old cities'] development, no base maps to propose improvements, and no intellectual space devoted to planning them."*  
(Ravindran 2005: 11)

Clearly, the development and renewal of historic districts in cities, with their complex and layered built form, wide-ranging eco-

conomic activities and multiple uses, need to be addressed as a whole, rather than as a sum of many parts. An important step was taken in 2004 in the form of the INTACH Charter, which proposed a concept of “Heritage Zones”, described as ‘sensitive development areas, which are a part of larger urban agglomeration possessing significant evidence of heritage’ (Menon 2005). The Heritage Zone concept emphasises that the conservation of architectural heritage and sites must be undertaken in a holistic manner, and should go hand in hand with the imperatives of routine development process. An example of the application of the heritage zone concept can be found in the newly prepared City Development Plan for the city of Ujjain, which divides the city into 18 ‘*kshetras*’ (areas or zones), each of which is unique and

treated differently in the overall plan. Detailed master plans are being developed for each of these *kshetras* (UNESCO 2010).

Some of these issues of liveability faced by historic areas in Indian cities are being addressed within the broader City Development Plans (CDPs) prepared under the aegis of JNNURM. Guidelines issued by the Mission emphasise that heritage conservation must be integrated with the overall plan for the city - an important step forward from the older approach of focusing on the conservation of monuments and structures, often virtually in isolation from their surrounding environment (Government of India 2006). However, while these guidelines are undoubtedly progressive, they still don’t go far enough in terms of being

Figure 9: A view of the restored French Quarter in Pondicherry, southern India. Photograph © INTACH Pondicherry Chapter



‘people-centric’. The emphasis is far more on what heritage can do for the city in terms of revenue raising and increasing tourism inflows, rather than what it does to promote social cohesion and inclusion, sustain livelihoods, and serve as an important integrative symbol of the city (among others). There is little space devoted to the concept of ‘urban revitalisation’, and even less to principles of sustainable development or social inclusion,

which must form the basis of any revitalization effort.

At the same time, innovative urban renewal and revitalization initiatives are by no means entirely at the mercy of national legislation or policy. Ahmedabad, in the western Indian state of Gujarat, and Pondicherry, a centrally governed territory in the south, are cases in point (See Box 2).

### Box 2: Revitalisation of the historic urban core in Ahmedabad

The municipal corporation of Ahmedabad in western India has recently been awarded the top prize for being the best-managed urban local body among the 63 local governments participating in the JNNURM programme. In the news lately for its well-designed and popular Bus Rapid Transit system described earlier, the city has also been leading the way in the conservation of the walled city area and the traditional neighbourhoods therein (pols) since 1996. Undertaken in a participatory and holistic manner, the exercise has focused on creating awareness among different sections of society, and adopting a fresh approach, towards urban conservation and revitalisation. The interventions are not just about the physical conservation of heritage monuments, but also aimed to protect intangible heritage as well as improve living conditions in the pols. Further, it aims to revive local governance in the walled city through extensive and continuous public participation, particularly recognizing the panch, key community leaders, involved in information dissemination, as formal representatives of the community. Cultural revival is also a key focus area. One of the most successful elements of the project, which has also been replicated in other cities subsequently, is the Heritage Walk. The Heritage Walk passes through a number of well-preserved old neighbourhoods and raises awareness about their architectural, cultural and socio-economic significance. It not only targets tourists but also inhabitants of the city, aiming to build a sense of urban identity and belonging.

The urban revitalisation efforts are currently led by the Ahmedabad Heritage Centre, established in 2001 by the Ahmedabad Municipal Corporation (AMC) in collaboration with the French Government. The Centre was preceded by a Heritage Conservation Cell set up within the AMC in July 1996, to oversee and coordinate all heritage conservation efforts, in partnership with a number of civil society organisations. The Cell introduced a bye-law in the General Development Control Regulations which prohibited any heritage property from being pulled down without its prior permission. Other measures adopted include the reduction in property tax on traditional buildings, and the reduction of the Floor Space Index (FSI) from 3 to 1.8. In addition, the municipal budget sanctions approximately Rs 5 million (US\$ 100,000) every year to sustain conservation activities in the area. Since waste management is integral to the process of revitalisation of the walled city, the Heritage Centre has also initiated a garbage collection and disposal programme for the same.

*Source: AHC 2008; Nayak and Iyer 2008*

## Urban security and inclusion

Despite all its positive impact, urbanisation often brings in its wake many kinds of security challenges. In India, like many other countries, the most obvious one is the increasing vulnerability of urban areas to natural and man-made disasters – both climate- and non-climate related. Flash floods (e.g. seen in Mumbai in the year 2005), earthquakes (most recently in Kashmir (2005), Andaman Islands (2004) and Gujarat (2001)), countless urban fires and other such disasters regularly affect poorly planned settlements and buildings which usually disregard the most basic building bye-laws and safety standards. The result is loss of life as well as livelihoods, mainly for the poor who live on precarious sites (e.g. along railway tracks, close to land-fill sites, or on low-lying land), in overcrowded conditions, and without many basic services such as water, sanitation and health care. Large parts of the city of Delhi lie in the floodplain of the River Yamuna, and are especially vulnerable. Mumbai is susceptible to rising sea levels, as large sections of the city are built on land reclaimed from the sea, and to heavy monsoon rains, which can cause serious havoc as the natural storm water drainage system of the city have been haphazardly built over. Kolkata has witnessed frequent and increasingly severe cyclonic storms over the past few years, and is also facing a fresh water crisis, while Chennai is increasingly at risk of being struck by tidal waves (Banerjee 2011).

National policymakers have attempted to respond to these issues by creating a National Disaster Management Authority (NDMA), which was established under the aegis of the Disaster Management Act of 2005 and is headed by the Prime Minister. Since its inception, the NDMA has adopted numerous guidelines on preventing and responding to natural and man-made disasters. At the city level, too, many innovative initiatives are seen. Mumbai's disaster management approach, adopted by

the city authorities after the flash floods of 2005, is a key example (See Box 3).

Yet another form of urban insecurity is rising crime. Urbanisation also leads to an increasing gap between the rich and the poor, between the formal and the informal. One of the results of these imbalances is exclusionary development, which is manifested in the separation of poorer settlements from the enclaves of the middle-classes and the rich, the abandonment of certain neighbourhoods, the development of an "architecture of fear", and the stigmatisation of districts or communities (UN-HABITAT 2000). At the same time, crime also limits the access of vulnerable populations such as women, youth and the elderly to urban spaces, which has serious implications for livability in cities.

Rising crime affects not only the rich, but also the poor. Contrary to the widely-held belief that poverty, and the poor, are the most important cause of crime, the latter are in fact the most vulnerable as they don't have the means to defend themselves. Urban violence erodes their social capital and prevents social mobility and progress, especially that of the youth, who in turn get increasingly disenchanted (UN-HABITAT 2000). Furthermore, poorer women and girls are the most affected by crime and violence, both in their unprotected dwellings and on the streets, as they have no protection, and often no recourse. In India, past efforts have focused mainly on domestic violence and sexual harassment at the workplace, sexual assault and rape, but some recent initiatives have also attempted to reduce violence against women in public spaces, and increase safety and inclusion.

The National Capital Territory of Delhi, for example, while being in the vanguard with respect to many urban innovations, has not been able to successfully tackle the problem of gender-based violence, especially in its streets, squares, parks and public transport

### Box 3: Upgrading Mumbai's disaster management capabilities

The city of Mumbai as it exists today is formed by the merger of 7 islands in the city area with 4 islands and hilly areas in the suburbs. Much of the area is reclaimed from the sea. The city has a gravity-based drainage system. During high tide, flood-gates have to be closed to stop the ingress of sea water, as a result of which there is no drainage of storm water. Water logging and floods occur when heavy rains combine with high tide conditions. The drainage network is over 150 years old and not designed for current rainfall levels. The population of greater Mumbai is over 20 million today, and it is the financial and entertainment capital of the country. The greatest challenge, however, lies in the density of its population. As compared to the national density of 382 people per square kilometre (sq. km.), the density of population in suburban Mumbai is 20,925 per sq. km., while that in the island city is 20,038 per sq. km. In these circumstances, when disaster strikes, it has the potential to affect a very large section of the population. The flash floods of July 2005 were one such event. Starting at 0830 hours on the 26th July, 2005, 994 mm of rainfall was recorded over a period of 24 hours, which resulted in water logging in several suburbs, overflow of the Mithi River, and flooding of the Western Express Highway. Nearly 500 people lost their lives in the flash floods and landslides, and about 200 died due to various deluge-related illnesses. 2,000 dwellings were completely destroyed while over 50,000 were partially damaged. 40,000 commercial establishments were also affected. Railway tracks were submerged and services on all railway lines were suspended as a consequence. The airport was also flooded and temporarily closed. Power supplies were disconnected in most parts of Mumbai's western suburbs on the night of the 26th July, due to the danger of electrocution. Following the devastating floods, the Municipal Corporation of Greater Mumbai (MCGM) has significantly upgraded its disaster management system and capacities. The Disaster Management Unit (DMU) of the Corporation now serves as a strong and effective command and control centre, coordinating preparedness as well as response activities between the administration, field units and various stakeholders. The DMU is equipped with an array of communications systems, land lines, hot lines, cellular phones, wireless, Very High Frequency (VHF) etc., and is linked with 14 key agencies on hotlines. Each agency provides regular updates about the situation in the city. To issue warnings and enable evacuation, MCGM has installed 35 rain gauges at 28 locations across the city. The data from these stations is transmitted to the DMU at 15-minute intervals. The gauges are calibrated to raise an alarm if rainfall intensity exceeds 10 mm in 15 minutes. Real-time information is provided to citizens on the website [www.mumbaimonsoon.in](http://www.mumbaimonsoon.in). This portal also contains information on traffic and public transport diversions during floods. The DMU also engages with the population by organizing frequent training programmes on disaster preparedness for communities, school and college students and corporate houses. The Unit is currently preparing a multi-hazard disaster plan for the city.

Source: [http://siteresources.worldbank.org/PHILIPPINEEXTN/Resources/05\\_Mumbai\\_Presentation\\_20080513.pdf](http://siteresources.worldbank.org/PHILIPPINEEXTN/Resources/05_Mumbai_Presentation_20080513.pdf), [www.mumbaimonsoon.in](http://www.mumbaimonsoon.in)



systems. This lack of safety for women, both experienced and perceived, significantly undermines their right to the city – the right to move around freely; to use and access public spaces and services; to make choices about their place of residence, work, or leisure; and more broadly, to make the most of the opportunities the city has to offer (Narang Suri 2010).

To address these challenges, the Department of Women and Child Development, Government of Delhi, in collaboration with UNIFEM, UN-HABITAT and Jagori (a women-focused NGO), has developed a Strategic Framework on Women's Safety. This Framework is the first attempt in the country to address the issues of women's safety systematically and comprehensively (see Box 4).

#### Box 4: Towards a Strategic Framework for women's safety in Delhi

The Draft Strategic Framework for Women's Safety in Delhi is a groundbreaking document which has been developed through an extensive process of stakeholder consultations. The Framework draws on the findings of a large-scale safety survey of over 5,000 respondents conducted across the city, as well as several Safety Audits and focus group discussions organised over the past few years by Jagori, a leading non-governmental organisation working on women's issues in Delhi and other Indian cities. The survey and other instruments revealed that sexual harassment is seen as a major threat to women's safety in public spaces in Delhi, with the roadside seen as the most unsafe place, followed closely by public transport, as well as waiting areas for public transport. Trust in the police is extremely low, and bystanders too refuse to get involved in incidents of harassment. Some groups such as poor women who live and work on the streets, the physically challenged, as well as students and other migrants from the north-eastern parts of the country, are particularly vulnerable.

The Framework identifies seven major areas of intervention in order to address the issue of women's safety in public spaces, which would clearly also have a positive impact on the safety and security of the general population. These are: urban planning and design of public spaces; provision and management of public infrastructure and services; public transport; policing; legislation, justice and support to victims; education; and, civic awareness and participation.

For each of these seven themes, the Framework proposes a mix of physical, institutional and policy interventions, which can be carried out in the short-, medium- and longer-term. These would require the involvement of various arms of the government as well as civil society, and in some cases, the private sector. Many of these have already been acted upon, for example, the installation of GPS in auto-rickshaw and taxi services; training of public transport staff; and introduction of women-only coaches in the Delhi Metro. The biggest challenge, however, lies in transforming attitudes towards women and women's safety in public spaces, including those of key policy makers, political leaders and high-level officials, as well as ordinary citizens.

*(Source: Narang Suri 2010)*

## Building Liveable Cities: The China Model, or is there Another Way?

Unlike China, where urbanisation is a heavily directed and planned effort, urban growth in India can be described as largely organic and chaotic, with the planning and provision of housing, infrastructure and basic services constantly playing catch-up (often unsuccessfully) with such growth. The result is seen in the way larger Indian towns and cities are being regularly retrofitted to keep up with the demands of the burgeoning population. However, the HPEC report cited earlier notes that:

*“To achieve both inclusion and economic growth will [...] require shifting the focus of policy from creating physical infrastructure to delivering services.” (HPEC 2011: XXV)*

Indeed, to make Indian cities liveable from the perspective of inclusion, resilience and authenticity, which are intricately interconnected, and cannot be achieved independently of one another, there needs to be a fundamental shift in the way planners and policy-makers approach urban development. Learning from the success stories as well as many failed initiatives, a few factors emerge as central to making Indian cities liveable.

- Planning legislation needs to be overhauled, in conjunction with the legal framework relating to urban land. Conventional master plans have proved to be unwieldy and impossible to implement, while new-age Comprehensive Development Plans have yet to be brought into the mainstream of the legislative framework. Land management needs to be made more efficient and transparent, with a role for both the state as well as private developers.
- Creation of extensive infrastructure, often at massive cost, not unlike China, is often seen



Figure 10: Graphic depiction of women’s safety concerns in an older area of Delhi. Illustration © JAGORI

by political and business leaders as the key to resolving the urban problems. More importantly, however, Indian cities need more equitable as well as efficient systems of planning, stakeholder engagement and provision and management of services. Addressing urban poverty, lack of decent shelter and urban services, and the challenges of slums and homelessness need to be accorded the highest priority.

- Safety and security in cities cannot be viewed as an optional extra, but is a central concern of liveability. Security against natural and man-made disasters, as well as crime, can be enhanced significantly through better planning practices, implementation and enforcement of appropriate zoning and building regulations, and the provision of basic amenities such as water, sanitation, and electricity/lighting. This will in turn contribute significantly to making cities resilient as well as inclusive.
- The approach towards historic city centres needs to shift from heritage conservation to sustainable urban revitalisation. This is critical in order to make it people-centric in general, and pro-poor, in particular. Historic districts not only provide a sense of place and authenticity to cities, but are also important economic and social hubs whose development needs to be integrated with the rest of the city.
- Finally, better and more reliable spatial as well as socio-economic data is needed in order to make policy decisions that are suitable to different stakeholders in Indian towns and cities. This requires not only technological solutions but also a change in mindset, and also needs to be built into planning education systems and curricula.

As India stands on the verge of being an economic superpower, urbanisation is a phenomenon that can no longer be ignored or relegated to the backburner. Many Indian cities, their citizens and administrators, researchers and thinkers are taking innovative steps to address the challenges of liveability, but bringing about change across 4,000+ urban centres which are home to nearly 380 million people needs more than one-off initiatives. Laws and policies need to be changed, institutions need to be transformed, capacities need to be upgraded, and most importantly, citizens need to be empowered, if India's cities are to fulfil their enormous potential and become liveable for generations to come.

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## Endnotes

1. These ideas are currently under development as part of the work of a think-tank on Liveable Cities set up by the Philips Centre for Health and Well-being, of which the author is a member.
2. Since local government is a state matter according to the Constitution of India, the 74<sup>th</sup> CAA had to be adopted individually by each state legislature before it could be applied to the local authorities under its jurisdiction.
3. A similar initiative focusing on small and medium towns is the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT). Planned and integrated development of urban areas is one of the stated objectives of this programme.

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## References

- AHC (2008). Walled City Revitalisation Project, Ahmedabad, Ahmedabad Heritage Centre.
- Ansari, J. H. (2004). "Time for a new approach in India." *Habitat Debate* 10 (4): 15.
- Ballaney, S. and B. Patel (2009). Using the 'Development Plan—Town Planning Scheme' Mechanism to Appropriate Land and Build Urban Infrastructure. *India Infrastructure Report 2009. Land - A Critical Resource for Infrastructure*. New Delhi, Oxford University Press for IDFC. 190-204.
- Banerjee, B. (2002). Security of Tenure in Indian Cities. *Holding Their Ground: Secure land tenure for the urban poor in developing countries*. A. Durand-Lasserve and L. Royston. London, Sterling (VA), Earthscan. 37-58.
- Banerjee, I. R. (2011). How safe are our cities? *The Times of India*. New Delhi. March 27, 2011.
- Gnaneshwar, V. (1995). "Urban Policies in India - Paradoxes and Predicaments." *Habitat International* 19(3): 293-316.
- Government of India (2005a). *Formulation of a City Development Plan*. New Delhi, Ministry of Urban Development, Ministry of Housing and Urban Poverty Alleviation.

Government of India (2005b). Jawaharlal Nehru National Urban Renewal Mission (JNNURM): Overview. New Delhi, Ministry of Urban Development, Ministry of Housing and Urban Poverty Alleviation.

Government of India (2006). A supplement to Toolkit on formulation of City Development Plan: Focus on Heritage. New Delhi, Ministry of Urban Development, Ministry of Housing and Poverty Alleviation.

Hohne, N., J. Burck, et al. (2009). Scorecards on best and worst policies for green new deal, WWF and E3G.

HPEC (2011). Report on Indian Urban Infrastructure and Services. New Delhi, National Institute of Urban Affairs.

IDFC (2009). India Infrastructure Report 2009. Land - A Critical Resource for Infrastructure. New Delhi, Oxford University Press for IDFC.

Joshi, R. (2009). Integrated Townships as a Policy Response to Changing Supply and Demand Dynamics of Urban Growth. India Infrastructure Report 2009. Land - A Critical Resource for Infrastructure. New Delhi, Oxford University Press for IDFC. 167-175.

Kundu, A. (2011). "Politics and Economics of Urban Growth." *Economic & Political Weekly XLVL (20)*: 10-12.

Menon, A. G. K. (2005). Heritage Conservation and Urban Development: Beyond the Monument. Heritage Conservation and Urban Development. Hyderabad, India, INTACH.

Narang Suri, S. (2010). Safe City Free of Violence Against Women and Girls Initiative: A Draft Strategic Framework for Women's Safety in Delhi. New Delhi, Idgri.

Nayak, D. and A. Iyer (2008). "The case of Ahmednagar: Heritage Regulations and Participatory Conservation." *Context V(1)*: 175-188.

Ravindran, K. T. (2005). Cities within Cities: Locality and Community Participation in Indian Cities. Heritage Conservation and Urban Development. Hyderabad, India, INTACH.

Risbud, N. (2009). The Pool and Morphology of Cities. India Urban Poverty Report 2009. New Delhi, Oxford University Press. 177-198.

Savage, D. and S. Dasgupta (2006). Governance Framework for Delivery of Urban Services. India Infrastructure Report 2006 - Urban Infrastructure. 3i-Network. New Delhi, Oxford University Press. 42-58.

Sivam, A. (2002). "Constraints affecting the efficiency of the urban residential land market in developing countries: a case study of India." *Habitat International 26(4)*: 523-537.

Sridharan, N. (2008). "Globalisation of Urban India." *Economic and Political Weekly (March 8, 2008)*: 26-31.

Steinberg, F. (1996). "Conservation and Rehabilitation of Urban Heritage in Developing Countries." *Habitat International 20(3)*: 463-475.

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UN-HABITAT (2000). Prevention of Urban Crime: Safer Cities Concept Note. Nairobi, Safer Cities Programme, UN-HABITAT.

UNESCO (2010). Historic Districts for All - India. A Social and Human Approach for Sustainable Revitalisation. New Delhi, UNESCO.

Vaidya, C. (2009). Urban Issues, Reforms and Way Forward in India. New Delhi, Department of Economic Affairs, Ministry of Finance, Government of India.

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