

7

A Better Way to Grow?: Town Planning Schemes as a Hybrid Land Readjustment Process in Ahmedabad, India

Bishwapriya Sanyal and Chandan Deuskar

What is the most effective way local governments can influence the spatial growth of cities? This is not a new question for Indian urban planners, who have been grappling with the challenges of urban growth since the 1940s. For example, the Bombay Town Planning Act was passed in 1954, when the nation was only 20 percent urbanized. The fact that rural people were migrating to cities, and that the resulting growth of cities was part of the nation's modernization process, was acknowledged by the leaders of newly independent India: the central government made a significant investment in the planning and construction of the city of Chandigarh; the plan for the growth of New Delhi also was prepared in the early 1950s; soon after, the plan for Calcutta (now called Kolkata) was initiated by the chief minister of West Bengal; and there were interesting debates about planning in Bombay (now called Mumbai). All such plans and planning conversations rested on a critical assumption: that orderly urban growth required strong government intervention from the local to the national level. At the local level, the goal was to demarcate the boundaries of growth and assign the different land uses necessary for a well-functioning city. The national and state governments were to provide the financial resources for large-scale urban infrastructure investments.

In India urban planning has never been against market forces, in contrast to the way, say, Soviet and Chinese cities were planned to allocate nationalized land so as to achieve maximum social efficiency. Neither has India ever attempted to

control rural-to-urban migration in the way China has. Urban planning practices in India were borrowed mainly from the United Kingdom. Planners have always respected private property rights and freedom of movement. Building guidelines have been based on an awareness that well-functioning cities and land markets require strong government interventions, in the form of land use rules, regulation, and provision of public goods and services. Regulation of various kinds, such as rent control and the Urban Land Ceiling Act,¹ as well as the demolition of unauthorized settlements, peaked in the 1970s, particularly during the infamous “emergency rule” imposed by Prime Minister Indira Gandhi between 1975 and 1977. During the same decade, a number of metropolitan development authorities were created by state governments to steer the pace and direction of urban growth with a range of public policies that acknowledged the critical role of private actors and firms in generating economic growth.

Yet there remains a mismatch between the aims of city planning and its actual achievements. This was formally acknowledged by the central government in the late 1980s, when the National Commission on Urbanisation was created to recommend a new set of urban policies. The commission’s report (National Commission on Urbanisation 1988) was strongly critical of the ad hoc nature of the prevailing interventions; the existing institutional frameworks, which hindered policy reforms; and the government’s ambivalent attitude toward urban investment. The report came at a time when policy makers were beginning to question the efficacy of past public policies regarding a host of issues, including macro-economic, industrial, and foreign policies (in the aftermath of the collapse of the Soviet Union), as well as interactions between various levels of government. Moreover, the forms of political representation, particularly at the local level, were being questioned and revised through constitutional amendments urging state governments to strengthen local bodies.

As India liberalized its old regime of economic controls and embraced market competition in order to attract foreign investment, foster technological change, and increase economic efficiency, there was a shift in urban planning practices as well. In contrast to the earlier reliance on regulations of various kinds and the arbitrary use of the power of eminent domain to acquire land at below-market prices, policy makers and citizens at large began to advocate for more market-friendly and socially equitable efforts. This led to a distinctly different planning discourse. Rural-urban migration, which in the past had been viewed as a problem, was now put forward as necessary for rapid industrialization. Cities, as opposed to India’s thousands of villages, were portrayed as the primary engine of economic growth (Mohan 2006). Regulations such as rent control and land ceil-

1. The Urban Land (Ceiling & Regulation) Act of 1976 imposed limits on the amount of land that could be held by private owners, allowing the government to acquire private land in excess of those limits. Widely considered a failure, it has been repealed by the national government and most state governments (JNNURM 2005b).

ings were dismantled to rectify the distortions in the land and housing markets (JNNURM 2005a, 2005b). Simultaneously, a new concern regarding the fiscal responsibilities of cities—and, in fact, the fiscal responsibilities of government in general—emerged, raising questions about old-style transfers of funds between local, state, and national levels of government and subsidies of various kinds. Cities were urged to be more entrepreneurial, competitive, market-friendly, and accepting of rapid urban growth (Rao and Bird 2010; Vaidya and Vaidya 2008).

The rise in popularity of town planning schemes (TPS), which is the focus of this chapter, coincided with this change of attitude about how to influence urban growth (Ballaney and Patel 2009). TPS is a hybrid form of land readjustment whereby agricultural landowners on the urban fringe are required to give up part of their land—up to 40 percent—to the government in exchange for compensation. The government builds roads and other civic amenities on a portion of this land and retains a portion of it to sell at auction in order to raise revenue for infrastructure provision. The remaining land is reconstituted into new, serviced plots, which are returned to the original landowners. Either the landowners can sell these plots, usually receiving a high price from real estate developers, or they can build on them. Either way, they pay only half of the increase in the value of their land to the government as a betterment charge, while the remaining increase is theirs to keep. According to TPS proponents, both landowners and the government benefit, making it a win-win proposition.

TPS has many similarities to land readjustment as it is practiced in countries such as Germany, Japan, and China. However, there are several key differences between TPS and land readjustment as it is commonly understood (Hong 2007). In TPS the state government initiates the process, while in other countries municipalities and landowners initiate and manage land readjustment projects. TPS does not require the consent of landowners, whose participation is compulsory. In contrast, land readjustment projects require majority consent; they use compulsory land acquisition only in the case of minority holdouts. Whereas land readjustment treats landowners as stakeholders who help shape the design, finances, and management of the scheme, in TPS landowners only react to plans devised by authorities. Lastly, TPS involves monetary exchange in the form of betterment charges for increases in land value and compensation for land taken, which is not the case in land readjustment, where only land is exchanged (Hong 2007). As the history of TPS demonstrates, its trajectory was not influenced by land readjustment practices elsewhere, but instead developed in parallel with them over the past century.

Despite these differences, both TPS and land readjustment are generally viewed as win-win propositions for both public and private actors. This perception fits well with current views in India about the appropriate role of government in influencing market outcomes. Efforts such as TPS are seen as examples of a new market-friendly approach. To draw attention to TPS, it is often portrayed as being very different from conventional city planning, which has been discredited not only in India, but worldwide (UN Human Settlements Programme 2009).

For example, conventional planning is portrayed as relying on static and inflexible master plans, while TPS is considered less ambitious, but more flexible, seeking to “use the land market and not thwart it” (Ballaney and Patel 2009, 204). Likewise, conventional planning has been criticized for relying on old colonial practices, where governments used their autocratic power to confiscate private land, without adequate compensation, in the name of public interest. In contrast, TPS is portrayed as a democratic approach, in which landowners and government must work together. TPS is also considered a smart—meaning market savvy—way of financing public infrastructure, which in the past was financed either by cash-poor city governments or occasionally by unpredictable allocations from state governments. Because TPS allows local governments to auction land and charge betterment fees and does not require large subsidies, it is regarded as necessary for prudent urban governance. TPS also has an aura of being a more transparent and accountable way of land management than conventional city planning, which relied on decisions made by a nexus of corrupt bureaucrats and local politicians. The idea of open land auctions, in contrast to bureaucratically managed land acquisition and allocation, contributes to this aura. The fact that TPS allows an increase in the amount of development that can occur on a formerly open piece of land reinforces its image as a market-friendly approach.

This shifting preference for a more market-friendly approach to planning, however, has not obliterated earlier concern that Indian cities must respond to the housing and infrastructure needs of the urban poor, who still constitute the majority population even in relatively prosperous cities such as Ahmedabad. That is why even TPS requires that up to 10 percent of the pooled and serviced land must be allocated for housing the urban poor. In the old-style planning mode, poverty and inequality received much attention, at least on paper. It is widely acknowledged now that such attention did not address the poor’s needs, which is why slums and shantytowns are common in expanding cities. Still, all past efforts to serve the poor were not hollow. Many urban programs, such as rent control, land ceilings, and slum upgrading, were crafted specifically to assist the poor. That such policies did not work well in practice supports the current perception of how government interventions should change. There is renewed hope that the benefits of well-functioning markets, to which TPS contributes, will ultimately trickle down to the poor—perhaps slowly, but not any more slowly than in the past, under old planning regimes.

This chapter focuses on the use of TPS in the city of Ahmedabad, located in the state of Gujarat, and draws on our experience in working closely with practitioners involved in the design of TPS. It is based on conversations with planners, policy makers, and academics familiar with TPS, plus site visits to a few completed schemes. As part of the research, we reviewed reports and published articles on TPS, the literature surrounding land readjustment, government documents and court reports, and unconventional sources such as satellite imagery and online advertisements for the sale of vacant land. Although more definitive data are necessary for a full-fledged analysis, we are able to make a few tentative

propositions based on the intriguing composite picture of TPS that has emerged from our study.

What are the lessons to be drawn from the implementation of TPS? This may appear to be a somewhat premature question, because TPS is considered by many to be a relatively new approach in India, and one that is practiced only in one state, Gujarat. But TPS is not a new idea, nor is its practice restricted to Gujarat. TPS has been in use in India since 1915 and has been tried in one form or another in a number of other Indian cities.² It is not an alternative to conventional city planning, but in fact relies on master plans, a conventional planning instrument used to control urban growth. The difference is that whereas a master plan broadly indicates overall orderly growth, TPS, which relies on market signals, indicates which areas are to grow first. As for plan implementation, this chapter addresses three issues: (1) the role of government in preparing and implementing TPS; (2) the rigor and transparency of the method used by government agents in valuing land; and (3) the extent to which TPS has served the housing needs of the urban poor.

The conclusions of this chapter are not definitive: they could be tested more rigorously as good data become available. Hence, at this stage, this chapter raises more questions than providing any definitive verdict on TPS's efficacy as a new planning tool.

The DP-TPS Mechanism

THE DEVELOPMENT PLAN

TPS is often portrayed as a new way to influence the pattern of urban expansion, but it is not a dramatic shift from established planning practices in India, because it relies on the same kind of development plans that most Indian cities have used for decades. TPS is the second step in the development plan–town planning scheme (DP-TPS) process. Every 10 years or so, the Ahmedabad Urban Development Authority (AUDA) prepares a development plan for the entire metropolitan region. This plan serves as a “comprehensive strategic document for the development of the city” (Ballaney and Patel 2009, 194). It addresses a variety of issues, ranging from infrastructure development, transportation, and land use zoning to heritage protection, economic development, and environmental regulations.

A development plan usually includes a land use master plan, which identifies the areas of the surrounding agricultural region into which the city is expected to expand, based on estimated population growth. These areas are then rezoned for nonagricultural uses (residential, commercial, industrial, institutional, etc.). These newly urbanizable areas are then divided into smaller segments of 250–500 acres (100–200 hectares), usually encompassing land owned by 100 to 250 landowners,

2. Other states that have used TPS or similar tools include Maharashtra, Kerala, Punjab, Tamil Nadu, and Andhra Pradesh.

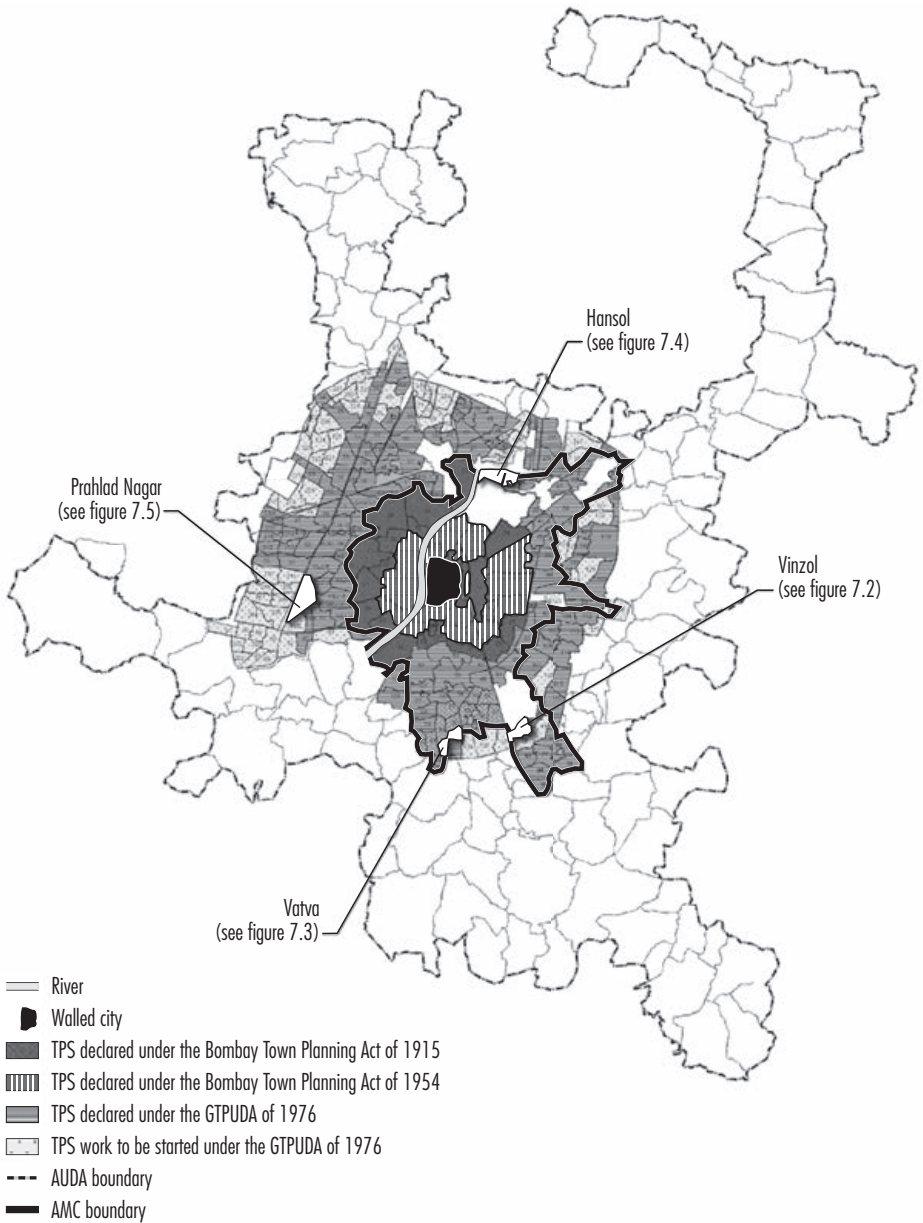
for which more detailed physical plans are prepared. These are the town planning schemes (TPS).

This kind of large-scale land use master planning has been the subject of much criticism in the planning literature. In fact, many consider it to be a relic of early-twentieth-century modernist planning, which has fallen out of favor in the West, where it originated, but persists in developing countries. Some have suggested that master planning continues to exist in developing nations because government officials there use control over urban land as a source of power (UN Human Settlements Programme 2009). In India criticisms of this master planning approach include the following (Tiwari 2002):

- Detailed land use plans are static and inflexible, projecting a utopian, long-term end state without paying attention to short- and medium-term action or midcourse corrections that may be required.
- The preparation and approval of master plans is very time-consuming and ignores time pressures that market agents must take into account.
- Obtaining land to implement these plans is usually a difficult and long, drawn-out process.
- Public participation in master planning is lacking or ineffective, resulting in a top-down approach.
- The preparation of master plans is hindered by a severe lack of data on socioeconomic variables, housing prices and markets, and environmental conditions, and there is no systematic data collection process in place.
- Physical standards for the built environment are impractically high, making developments unaffordable for the poor.
- Insufficient attention is paid to financial strategies needed to implement a master plan.
- The spatial order of the city is overemphasized, while social, economic, and institutional factors are neglected.
- Master plans are not sensitive to the role of the private sector in city building.
- Although many regulations are enacted, very few are enforced.
- Once prepared, plans are often not implemented. There is no system in place to monitor and evaluate the implementation of plans over time.

In Ahmedabad, TPS has made land acquisition easier for the government (see figure 7.1). However, the overall approach to Ahmedabad's development plans remains quite similar to the planning approach of other cities. Ahmedabad's plans have been criticized for their lack of analytical rigor and transparency in designating areas of future growth (Adhvaryu 2011). For example, an area's population growth rate is estimated by relying on past statistical projections, without any attention paid to the area's specific location within the city. The area's employment rate, other socioeconomic characteristics, transportation infrastructure, and housing supply also are not taken into account. This is why

Figure 7.1
Town Planning Schemes in Ahmedabad Declared Under Various Acts Between 1915 and 1976



Source: Adapted from Ballaney (2008). Used with permission.

estimates of population growth in previous development plans have proved grossly inaccurate, generally overestimating growth in secondary centers while underestimating growth in the central city. Regardless of the methods used to estimate population growth, how such estimates result in specific amounts of land being rezoned is usually not fully explained (Adhvaryu 2011).

There have been attempts to involve the public in the preparation of the city's development plans. During the preparation of the 2006–2012 plan, for example, a three-phase stakeholder consultation was conducted. It began with a city development strategy workshop in 1999, organized by the Ahmedabad Municipal Corporation (AMC), the Ahmedabad Urban Development Authority (AUDA), and others. According to AMC, the consultative process involved a “wide cross section of citizen[s],” including elected officials, professionals, corporate leaders, business/industry associations, educational institutions, nongovernmental organizations (NGOs), government officials, and senior citizens (AUDA and AMC 2006, 3; NIUA and AMC 2006). Shirley Ballaney, the principal planner at the Environmental Planning Collaborative (EPC), which helped coordinate the public participation process for the 2006–2012 plan, has suggested that reforms are needed to ensure widespread public participation in the process (Ballaney 2009). It has been argued, however, that at the development plan level, where six million people are aggregated in a single plan, meaningful local participation is not possible (Kleinenhammans 2009).

Despite the various shortcomings of master planning, it is clear that some form of a guiding framework is required for TPS to be implemented in a systematic way. Whether centralized master planning can be strategic in influencing growth patterns, while avoiding the inherent pitfalls in the process, is a question that needs further investigation. Such planning does, however, require a good understanding of how the city's economy is linked to the larger regional economy. This is necessary for predicting the direction of urban growth.

HOW TPS WORKS

TPS has been described as a planning, infrastructure development, implementation, and financing tool that can be used to fill in the details of a development plan.³ Following is a brief account of how TPS is supposed to work, as prescribed by the 1976 Gujarat Town Planning and Urban Development Act (GTPUDA) and its subsequent amendments (Gujarat Legislative and Parliamentary Affairs Department 1976).

The government body in charge of the area in question⁴ designs a draft plan

3. This section relies on the work of Ahmedabad-based planners Shirley Ballaney and Bimal Patel (Ballaney 2008, 2009; Ballaney and Patel 2009). Information was also gathered through interviews (Ballaney 2011; Joshi 2011; B. Patel 2011; V. Patel 2011).

4. In Ahmedabad, this is the Ahmedabad Municipal Corporation (AMC) for the central city and the Ahmedabad Urban Development Authority (AUDA) for the surrounding region.

Table 7.1**Land Appropriation in 103 Town Planning Schemes Prepared by AUDA, 2002–2010**

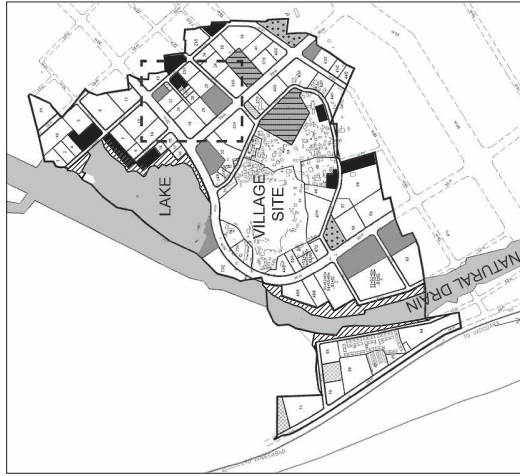
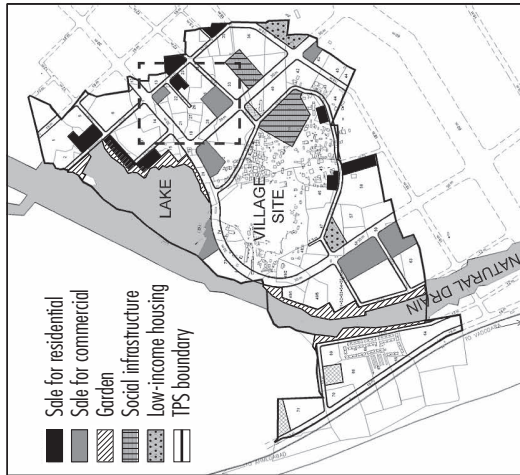
Use of Land	Area		
	Square Kilometers	Square Miles	Percentage of Total (%)
Roads	21.78	8.41	14.2
Land bank or land for sale	12.05	4.65	7.8
Public utilities	4.69	1.81	3.0
Affordable housing	4.52	1.75	2.9
Gardens, open spaces, playgrounds	4.45	1.72	2.9
Public purpose (education, health, etc.)	1.01	0.39	0.7
Total land appropriated	48.50	18.73	31.5
Returned to owners as final plots	105.28	40.65	68.5
Total	153.78	59.38	100.0

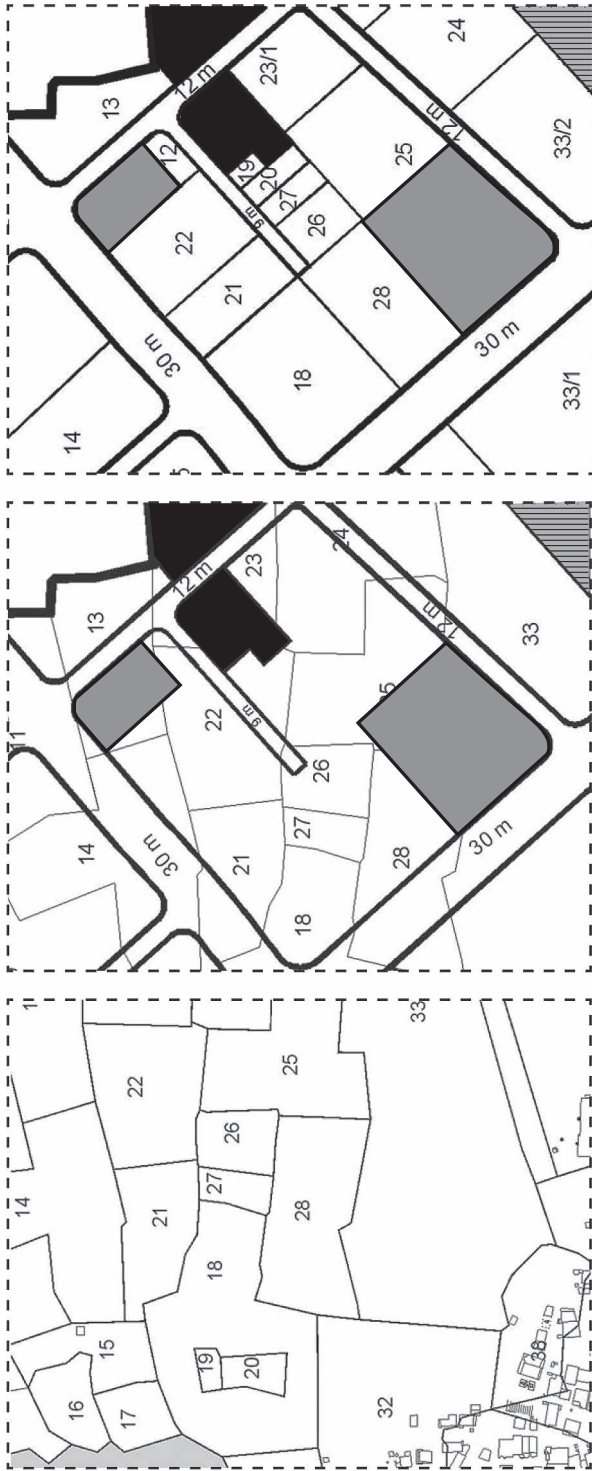
Source: Adapted from Ballaney (2010, 52).

for the scheme after conducting the necessary surveys and documenting the ownership of the affected agricultural land. The plan shows the location of proposed roads, which take up 15–20 percent of the total area under consideration, as well as the location of other amenities, such as parks, low-income housing, schools, neighborhood centers, and land to be auctioned by the government, all of which constitute another 15–20 percent of the area (see table 7.1). The remaining 60–70 percent of the land is returned to the original owners, with the same proportion of land having been deducted from each plot of land. For example, if 35 percent of all the land is used by the government for infrastructure and amenities, each landowner’s plot is reduced by 35 percent. This is achieved by a process known as plot reconstitution (see figure 7.2). The reconstituted plots, besides being smaller by 35 percent, are reshaped to fit the new scheme. For example, irregularly shaped plots may be reshaped into rectangles, as regularly shaped plots are considered more “buildable.” Reconstitution of plots is not imposed on officially recognized village settlements, only on the open agricultural land surrounding them. If a village falls within a TPS, a road is built around it, or one or two roads within it are connected to the new surrounding road network.⁵

5. This appears to be a convention rather than a regulation of the GTPUDA, which states only that “a town planning scheme may be made . . . in respect of any land which is (i) in the

Figure 7.2
 Vinzol II TPS Showing Plot Reconstitution





Source: Adapted from Bolleney and Patel (2009). Used with permission.

All TPS go through three stages: draft, preliminary, and final schemes. Each stage needs to be approved by the state government. Even though consultations with affected landowners are held at all stages, the government can take possession of land needed for the construction of roads after the draft scheme has been approved. The authority to use the remaining land for other public purposes is transferred to the government after the preliminary scheme is sanctioned, at which point the construction of other amenities may begin. Changes made to the preliminary scheme, resulting in the preparation of the final scheme, relate only to financial matters. The entire process should be completed in just over four years, according to the GTPUDA.

The GTPUDA lays down the following procedure for dealing with financial aspects of TPS. Assessment of the financial value of each original plot is made prior to the draft scheme, based on recent land sales. The government owes each landowner some amount of money for the portion of land it appropriated (the 30–40 percent mentioned earlier), based on the original plot value. At the same time (before the construction of any infrastructure), the government also estimates the future value of each plot. The difference between the original value and the estimated future value—that is, the increase in land value, or “increment,” due to the government’s actions—is considered to have been attained by the landowner through no effort of his own. Therefore, the landowner owes the government a betterment charge for this improvement, amounting to 50 percent of the increment. The intention is to share the financial benefits equally between the government and the landowner. In this way, the government owes the landowner compensation for land taken, while the landowner owes the government a betterment charge. The government calculates the difference between the two amounts, and the balance is paid by the party that owes more. For example, if the betterment charge exceeds the compensation, which is usually the case, the landowner must pay the excess amount to the government in installments over 10 years.

TPS is frequently described as a win-win proposition (*Hindu* 2010; Kleinenhammans 2009). It is commonly believed that poor landowners on the urban fringe can keep the bulk of their land as infrastructure improvements are made and then sell the improved land at a higher price, if they so choose. This is seen as more favorable to farmers than having the government simply appropriate all of their land for a compensation that is often considered unfair (Lahiri 2010). While the landowner’s assets appreciate as a result of the TPS, the government is able to recover infrastructure costs through betterment charges, as well as through auctioning off some land. The government also benefits by not having to pay either

course of development; (ii) likely to be used for residential or commercial or industrial or for building purposes; or, (iii) already built upon” (Gujarat Legislative and Parliamentary Affairs Department 1976).

the financial or the political costs of direct land acquisition (CITYNET 1995). In addition, TPS is visually more orderly than other forms of urban growth in India, which are widely regarded as haphazard and aesthetically unappealing. More broadly, TPS is considered an appropriate supply-side solution to formal housing shortages in Indian cities (Annez et al. 2010). Although there is some truth to all these beliefs, how TPS works in practice is different from how it appears to work in theory, as is explained later.

TPS: An Old Idea in a New Context? _____

Although TPS has received widespread attention only since the 1990s, it is in fact an old idea that was revived in a time of economic growth.

TPS UNDER COLONIAL RULE

TPS was introduced to India in 1915 under the Bombay Town Planning Act. At the time, the British colonial government was trying to combat plague epidemics that were killing thousands of city dwellers each month. Previously, starting in Bombay in 1898, the colonial government had created “improvement trusts” to bring light and air into the “insanitary labyrinths” of congested city centers. The trusts were granted sweeping powers of land acquisition and demolition in order to “ventilate” the cities. This was unpopular with local landowners, who received little or no compensation for land appropriated from them (Home 1997, 90; Home 2002).

By the 1910s, however, the British colonial government’s attitude toward its Indian subjects was starting to change. For example, the Government of India Act of 1909 (also called the Minto-Morley reforms) allowed Indians to be elected to legislative positions for the first time. Although such reforms were limited, they marked the moment when the British acknowledged that Indians must have at least a token participatory role in the governance of their country. Subsequent reforms were motivated, at least in part, by the fact that tens of thousands of Indian soldiers fought and died alongside their British counterparts on the battlefields of World War I. As newspapers and the new medium of radio spread accounts of Indian participation in the war around the world, they generated respect for Indians and helped alter the relationship between Britain and its colony (Brown 1994; Robb 2002).

It was at this historical moment that the Bombay Town Planning Act of 1915 became the first town planning legislation in India (Mirams 1919). Unlike the earlier improvement trusts, the new act explicitly acknowledged the local landowners as legitimate stakeholders and publicized the benefits they would receive under the act. Devised by Arthur Edward Mirams, consulting surveyor to the Bombay Presidency, the act was “a sincere attempt to embody in one measure all that was best from every other Town Planning Act extant” (Mirams 1919, 44). The town planning process, as outlined in the act, combined elements of the British

Housing and Town Planning Act of 1909, which dealt with land use zoning and land reservation, and the German *Lex Adickes* of 1902, which advocated land readjustment (Archer 1992; Mirams 1919).

First proposed by Franz Adickes, the mayor of Frankfurt, the *Lex Adickes* allowed the city government to acquire, pool, reconstitute, and then return to owners private plots of land, retaining up to 40 percent of the area for streets and parks (Mullin 1976). Although some consider the *Lex Adickes* the founding land readjustment legislation, a very similar policy had been used by George Washington in 1791 to acquire land in order to carry out Pierre L'Enfant's plan for Washington, DC (Caemmerer 1939; Home 2007; Schnidman 1988). The notion of land readjustment thus predates not just contemporary city planning in India, but also the emergence of modern town planning efforts in the West.

Mirams described the essence of India's new town planning act as follows:

The Bombay Town Planning Act aims at distributing the cost of development schemes over the lands improved thereby, and yet at the same time allows a fair margin of profit to the owners of the land, who as a rule have done absolutely nothing to improve the value of their property. At the same time, the Act brings into the market large areas of land which without cooperative action would for untold years remain agricultural land. In this way the community at large is able to obtain land at a reasonable price. (Mirams 1919, 54)

With this goal in mind, Mirams acted as an arbitrator for some 60 town planning schemes, explaining the process to landowners and addressing their concerns. He described the Bombay act as "a magnificent thing," which "intensely pleased" the landowners, as their attitude transformed "from possible open hostility to undisguised gratitude for benefits conferred" (Mirams 1919, 50; Mirams 1923–1924, 196).

The first TPS was prepared for seven acres (three hectares) of land in Bandra, Bombay. The practice was soon extended to the rest of the Bombay Presidency, which included parts of today's Maharashtra and Gujarat. The first TPS in Ahmedabad was prepared in 1917 (Adusumilli 2009).

It is noteworthy that the mechanism has not changed significantly over the past century. The major differences between then and now are (1) under British rule, TPS were not prepared as part of the cities' larger development plans, as they are today; and (2) initially there was no provision to use acquired land for low-income housing. Even the concept of financing of the schemes through the acquisition of land by the government for resale at a higher price, often thought of today as an innovation of the 1990s, was described by Mirams in 1919 in relation to a scheme for Ahmedabad.

THE EVOLUTION OF TPS SINCE INDEPENDENCE

The Bombay Presidency continued to prepare town planning schemes over the next several decades. After India achieved independence from Britain in 1947,

the presidency was reorganized into Bombay State, which passed a new Bombay Town Planning Act in 1954. The 1954 act prescribed TPS as a tool to fill in, in steps, the larger development plan that each city was now required to prepare. Like the act of 1915, the 1954 act was based on British legislation, the Town and Country Planning Act, passed in 1947. As a result, it has attracted criticism for borrowing unquestioningly from the colonizers instead of cultivating indigenous planning efforts from the ground up (Ballaney 2009; Menon 1997).

Bombay State was split into Maharashtra and Gujarat in 1960, and each state eventually passed its own town planning act—the Maharashtra Regional and Town Planning Act in 1966, and the Gujarat Town Planning and Urban Development Act (GTPUDA) in 1976. As urban growth had begun to spill over municipal boundaries, both acts recommended a regional approach to planning and created development authorities—such as the AUDA—to manage the growth of the metropolitan areas. Although Maharashtra continued using TPS for a few years, by the 1980s the schemes had gained a reputation as being overly complex, time-consuming, and contentious. Consequently, despite several proposed amendments to the act, TPS fell out of use in Maharashtra (Adusumilli 2009; MMRDA 1999). That TPS had slowed down as a process since 1947 was not an accident, however. With the advent of democracy, due process became increasingly important to ensure accountability and also to protect rural areas from uncontrolled urban sprawl. As with other regulations, however, such as urban land ceilings and rent control, due process created unintended consequences by slowing down the planning process with red tape and thereby reducing its effectiveness.

Gujarat's town planning act differed from Maharashtra's in one important way. In Gujarat, TPS were prepared in three stages—draft, preliminary, and final schemes—each of which required approval by the state government. To address the long delays that regularly occurred as financial issues between landowners and the government were resolved, the GTPUDA separated physical and financial considerations. This allowed project implementation to begin once the physical layout of the area was determined, without having to wait for all the financial details to be sorted out. Still, delays were the norm, with some schemes taking as long as 20 years for completion (Ballaney 2009). In addition, few schemes were self-financed: the World Bank estimated in 1986 that 50–90 percent of total project costs for TPS were subsidized by the government (Baker 1992). Consequently, TPS started to fall into disuse in Gujarat, too. Authorities began to reserve land for public purposes in their development plans, bypassing the TPS process altogether.

This remained the case until 1999, when TPS was revived by AUDA, which prepared 47 new schemes as a means of assembling land to create a new ring road around Ahmedabad. This was a pet project of AUDA's chairman, Surendra Patel. The original intention was to take the land from farmers in exchange for compensation as per the Land Acquisition Act of 1894, but this had provoked widespread opposition among landowners, making TPS a potentially more

acceptable alternative. Thereafter, AUDA officials engaged with the affected landowners, building their trust and convincing them to give up their land earlier in the process than usual, so that AUDA could begin building the road (Ballaney 2009; Ballaney and Patel 2009; Vaidya 2011). More than 80 percent of the land for the 47-mile (76-km) ring road was acquired through TPS, with landowners giving up portions of their land “by consent,” receiving no compensation in return (AUDA 2007, 4). Whether the process was really consensual can be questioned, particularly in light of the violent opposition to the schemes reported in local newspapers at the time (Chakravarti 1999; *Indian Express* 1999a, 1999b). Whether or not landowners wholeheartedly endorsed the way in which land for the ring road was assembled, AUDA’s ability to take possession of the land earlier in the process was formalized through amendments to the GTPUDA in 1999. These amendments allowed faster implementation of subsequent TPS and are one of the reforms credited with breathing new life into TPS in Ahmedabad (V. Patel 2011).

The other key change made at this time allowed authorities to appropriate land for sale. As mentioned earlier, this had been prescribed as far back as 1919 to recover costs. It had also been practiced for many years in land readjustment schemes in other countries, such as Japan, South Korea, and Taiwan (Doebele 1982), and was proposed by the World Bank and others to be used in Gujarat in the 1980s (Vaidya 1986; World Bank 1985). This change was also incorporated into the GTPUDA in 1999, enabling TPS to become financially viable for local governments in Gujarat (B. Patel 2011).

Another use of the mechanism was demonstrated when the historic core of Bhuj, a town west of Ahmedabad, was destroyed by an earthquake in 2001. The area was replanned and rebuilt using eight new TPS prepared by the Environmental Planning Collaborative (EPC), an Ahmedabad-based planning organization. That TPS could be deployed quickly in an emergency enhanced its popularity as a reliable planning tool (Ballaney 2009).

The use of TPS has increased since the turn of the twenty-first century. Between 2000 and 2009, for example, AMC and AUDA developed more than 77 square miles (200 square kilometers) of land using TPS. Only half that area had been developed in the preceding 25 years (Annez et al. 2010). As of late 2009, around 100 schemes developed by AMC and another 100 by AUDA were under way, with an additional 200 recommended in the 2002 development plan (Ballaney 2009). According to one estimate, the area developed by TPS each year in Ahmedabad was around 3 percent of AMC’s built-up area (Nair and Ahluwalia 2010).

How Does TPS Work in Practice? _____

The way TPS is implemented differs significantly from its idealized version, as is often the case with development projects.

WHO ARE THE LANDOWNERS IN TPS?

The landowners on the urban fringe are not necessarily poor rural farmers. According to many officials, planners, and developers in Ahmedabad, a significant proportion of urban fringe land is owned by speculative land assemblers, developers, businesspeople, and even politicians and bureaucrats (Ballaney 2011; Chakravarti 1999; Joshi 2011). Under the Bombay Tenancy and Agricultural Lands Act of 1948, land designated agricultural in Gujarat and Maharashtra may be sold only to an “agriculturist,” yet it appears that people who are not really agriculturalists gain control of such land by taking advantage of the loose definition of the term or by securing power of attorney over actual farmers. Land assemblers are even known routinely to forge documents, falsify power of attorney, and duplicate sales records in order to acquire the rights to land without the knowledge of the rightful owners. Hundreds of such cases of fraud have been filed recently (*Times of India* 2011). As a result, one cannot assume that poor farmers benefit from TPS.

THE LAND VALUATION PROCESS

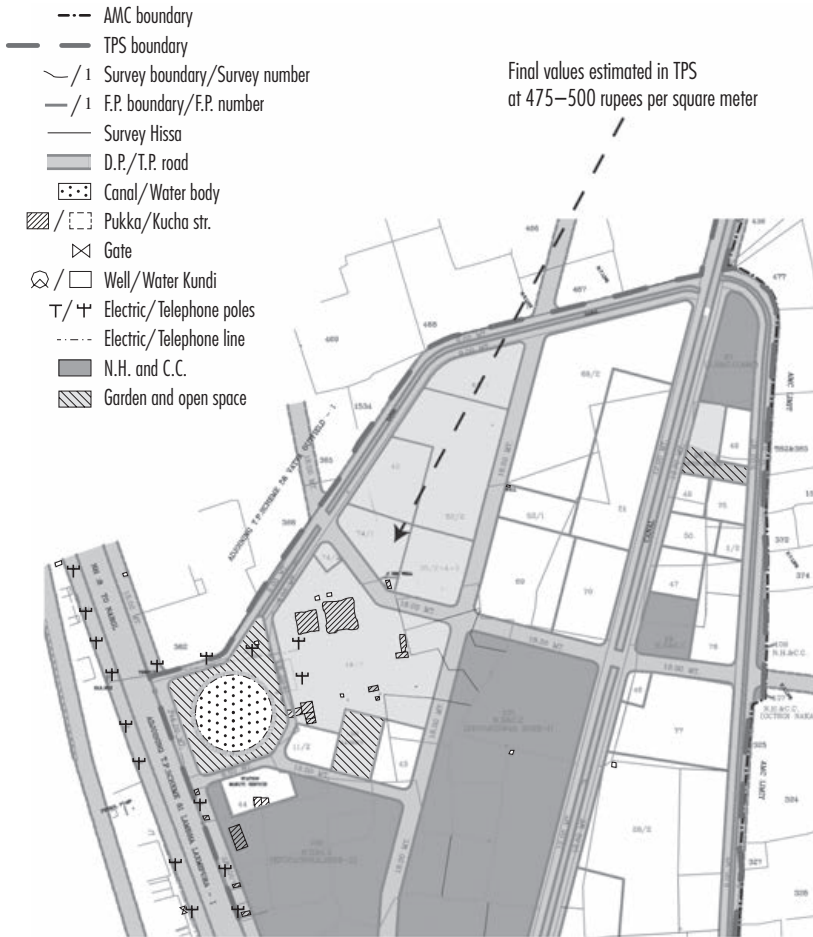
Another striking difference between the rules and realities of TPS is in the valuation of land, which can be problematic because neither the original assessment of plot values nor the projected final plot values are based on rigorous analysis. In fact, given the murky nature of how land transactions are usually recorded in India, it is virtually impossible for the government to value land accurately by relying only on the officially recorded data on recent sales.⁶ That is why original plot values, instead of being based on recent sales in the area, are based on a standard land “reckoner.” The calculation of future values is made even more difficult by TPS, a problem that has been noted around the world wherever betterment levies have been charged (Peterson 2009).

In TPS postdevelopment land values are determined in a roundabout way. First, the government estimates the costs it will incur to provide infrastructure, including roads, water, drainage, and streetlights, as well as all the accompanying administrative costs. These are calculated according to a schedule of estimates, which assumes minimal standards of construction and hence does not capture the full costs that are usually incurred. The government does not expect to recover even these underestimated costs from landowners. It first decides the portion of the costs it can bear itself and then calculates how much to recover from landowners through betterment charges. Only then does it estimate the final plot values, which are set so that it can recover the predetermined betterment charges. In other words, the land valuation process is really conducted in reverse: valuation

6. Ballaney (2011) estimates that for every land sale, 40 percent of the price is declared and the remaining 60 percent is paid in cash under the table, in order to pay lower stamp duties, which are charged whenever property changes hands.

Figure 7.3

Vatva VII Draft TPS Comparing Final Plot Values Estimated in TPS with Observed Market Prices



The draft scheme as sanctioned in 2006 (above) shows low estimated final plot values. As of September 2009 (opposite), no infrastructure had been constructed. Despite the lack of implementation, land in the area is being sold for much higher prices.

Source: Adapted from image at www.egovamc.com.

is based on betterment charges instead of the other way around. As a result, the betterment charges, which are meant to equal half the increase in land value, amount to much less than that. This is a form of subsidy very rarely talked about by advocates of government efficiency, who are always concerned with how to make subsidies more transparent in order to allocate resources more efficiently.

Figure 7.3 (continued)

Source: © Google Earth © 2012 GeoEye, Coordinates: 22°56'11.39"N, 72°35'51.35" E. Elev. 132 ft. Eye alt 7272 ft. Imagery date: 09/09/2009.

These kinds of hidden subsidies, which go to relatively prosperous households, often escape their notice.

On the outskirts of Ahmedabad, which is growing rapidly, the market price of land (after infrastructure provision) tends to be much higher than official estimates. Figure 7.3 provides an example of the discrepancy between “official” land values and what the market offers. The Vatva VII draft TPS was sanctioned by the Gujarat state government in March 2006. At that time, the government estimated that after the construction of roads, parks, and other amenities, the final value of the plots would be between 475 and 500 rupees per square meter. As

the satellite image in figure 7.3 (page 167) suggests, no infrastructure had been constructed by September 2009, and not even the preliminary scheme had yet been sanctioned by the state government. In 2011, however, a plot of land adjacent to this TPS was being advertised on a real estate website for 9,558 rupees per square meter (99acres.com 2011). If the market price of land increases to 20 times the estimated plot value even before a final TPS is approved and any infrastructure is laid out, one can imagine how high the differential in price could be once the TPS is actually completed. In Ballaney's (2011) estimate, if the "official price" of a plot is 500 rupees per square meter, the same plot may be sold for between 20,000 and 60,000 rupees per square meter after the TPS is completed.

It is clear that betterment charges usually recover far less than half the increase in land value. However, we acknowledge that such charges still perform an important function. Variations in plot values within a TPS are based on locational advantages and disadvantages, and as a result landowners benefiting differentially are burdened differentially with betterment charges. This conveys to the landowners a sense of fairness in the process. If, for example, one landowner's reconstituted plot fronts a major street or is next to a park, her estimated final plot value will be higher than average, even if her plot is the same size as the average plot. Conversely, if someone's reconstituted plot is next to a low-income housing block or a crematorium, his final plot value will be lower than the average. The two landowners' betterment charges will reflect these differences. The sense of fairness resulting from such assessment practices, even if the values are not precise, is important for the perception of legitimacy of TPS (B. Patel 2011).

Moreover, TPS generates a significant level of revenue for the government—not through the collection of betterment charges, as is commonly assumed, but mainly through the sale of appropriated land. This is why the legislative amendment that allowed land banking has been so important to the financial viability of TPS. The revenue from the sale of land obtained through TPS has become an important source of income for implementing agencies. For example, between 2003–2004 and 2008–2009, 29 percent of AUDA's revenue came from the sale of land. In April 2006, AUDA auctioned 20 plots for 172 crore⁷ (US\$38 million) to large real estate firms. In that year, as much as 65 percent of AUDA's revenue came from land sales. AUDA has used this money to finance large infrastructure projects, mostly roads, water, sanitation, drainage, and so on (Mahadevia 2009; Sridhar and Reddy 2009). A recent development plan states that as a result of 24 TPS, AUDA has created a land bank worth 500 crore, or more than US\$100 million (AUDA and AMC 2006).

The foregoing evidence confirms what TPS proponents claim—that it does benefit original landowners while also generating revenue for local governments—even if not in the way it was envisaged in the enabling legislation. In

7. 1 crore = 10 million rupees.

fact, both parties—landowners and government—benefit more than originally expected when serviced land is sold on the market. It is important to understand, however, how this win-win outcome is achieved. TPS requires land rezoning for urban development. In a rapidly growing city such as Ahmedabad, simply legalizing construction on peripheral land is bound to increase its value. It is unclear at this stage how much of this increase in value is attributable to the infrastructure and amenities built by the government as part of a TPS, and how much is simply a consequence of zoning conversion that brings new fringe land into the urban land market.

It is also noteworthy that the financial feasibility of TPS depends largely on whether there is high demand for land on the urban periphery. Only when such demand exists are both landowners and government able to sell land at a price high enough to make the endeavor worthwhile. If landowners doubt their ability to profit significantly from TPS, they may be unwilling to give up any land to the government. If government is unable to cover the costs of new infrastructure by auctioning off land, TPS can drain public finances, as it often has in the past. This suggests that it may prove difficult to use TPS in relatively static land markets, as in rural areas or even small cities.

Compensation and betterment charges, when calculated on the basis of unrealistic land values, lose much of their potential as policy instruments. That is why a modified version of TPS is plausible, requiring that neither compensation be paid nor a betterment charge be imposed, as long as both sides benefit significantly from the high resale value of the improved land. This is not a hypothetical situation; it was tried in another Indian state, Kerala, during the 1980s, with apparent success (Acharya 1989).

WHAT AFFECTS THE PACE OF DEVELOPMENT?

One difference between the way TPS was intended to work and the way it actually works is the unexpectedly long implementation time. Although on paper the preparation of a TPS is supposed to take around four years, the actual time it takes to complete all three stages (draft, preliminary, and final schemes) is much longer. Many TPS proposed by AMC and AUDA going as far back as in the early 1990s have not yet moved beyond the draft stage. It regularly takes more than a decade for a scheme to move from one stage to the next.

The primary cause of such delays is poor management of the sanctioning process by the state government. According to Ballaney (2009), Gujarat's town planning department has a severe shortage of staff and lacks technical capacity, and yet must conduct multiple rounds of detailed, in-house reviews on hundreds of TPS from various cities at the same time. She describes the current system as being overtly paternalistic. "It presumes that local capacities are inadequate, that they cannot be developed and that higher levels of government know better . . . It is clear that [the] role of the Development Authority is envisaged as being dependent; a vision that undermines the building of capacity at local levels" (Ballaney 2009, 27).

The delays in the preliminary and final stages of plans, however, cannot fully explain why projects cannot at least be started. According to the GTPUDA, AMC and AUDA may begin constructing roads after the draft scheme has been sanctioned. Yet satellite images of TPS areas long after the drafts have been approved indicate that infrastructure remains unbuilt for years. For example, figure 7.4a shows an aerial image of Hansol in northern Ahmedabad in November 2003. Figure 7.4b shows AMC's draft scheme for the area, which was sanctioned by the state government in September 2004. Figure 7.4c shows the same area in January 2010, more than five years later, with far fewer roads than planned in the TPS.

Why the delay? Because AUDA and AMC prepare a large number of town planning schemes at once, then implement them in phases over several years, as resources become available. This need for phasing is not mentioned in the development plan, however, and is done in an ad hoc manner. AMC is unable to predict the implementation of its TPS even five years into the future (Nayudu 2009). This suggests that while the development plan makes urban expansion appear predictable and neutral, a large amount of discretion rests with authorities, who prioritize certain areas over others for development.

Another reason for implementation delays is corruption. In 2008 a report in a local newspaper quoted real estate professionals complaining that increasing corruption and bureaucratic mismanagement in AMC and AUDA had delayed progress on TPS. "The level of corruption has gone up significantly, whether one wants plans approved, roads designed, or open space sanctioned," one developer said (Langa 2008, 16). In 2009 Navaneet Baloya, the chief town planner of AMC, was arrested on corruption charges (*Ahmedabad Mirror* 2009). The Estate and Town Development department, which is responsible for implementing TPS, has the bad reputation of being the most corrupt department within AMC. Between April 2010 and January 2011, 193 corruption-related complaints were lodged against this department, three times as many as against any other (Dave 2011).

The biggest roadblock between the design of TPS and the supply of serviced land for construction is the multiple and complex bureaucratic procedures that a landowner must go through to obtain permission to build on her serviced land. Such regulations have been put in place mostly by the state government's Revenue Department. For example, a typical landowner needs to obtain as many as 14 "no-objection" certificates from various government agencies before the Revenue Department permits him to use his plot for nonagricultural purposes. According to Patel et al. (2009), such restrictions on nonagricultural use date back to historical concerns regarding food security. They also ensure that government captures any value added due to zoning changes. Yet food security is no longer a significant concern, Patel and his coauthors argue, and revenue generated from nonagricultural assessment levies is negligible. Thus, the Revenue Department's conservative approach to monitoring nonagricultural use of land in urban regions has become "anachronistic and counterproductive" (Patel et al. 2009, 184).

Figure 7.4a
Hansol in Northern Ahmedabad Before the Draft Scheme, November 2003



Source: © Google Earth © 2012 GeoEye, Coordinates: 23°05'08.30"N, 72°36'52.35" E. Elev. 190 ft. Eye alt 8965 ft. Imagery date: 11/28/2003.

Figure 7.4b
Draft Scheme for AMC's TPS 67, Sanctioned September 2004



Source: Patel and Patel (2009). Used with permission.

Figure 7.4c
Hansol, January 2010



Source: © Google Earth © 2012 GeoEye, Coordinates: 23°05'08.30"N, 72°36'52.35" E. Elev. 190 ft. Eye alt 8965 ft. Imagery date: 01/08/2010.

According to Ballaney (2011), property developers estimate that for every 100 square miles of agricultural land that is zoned for urban residential development, at most 20 square miles is ultimately used for housing. The rest is tied up in the complex bureaucratic processes. If this is accurate, the rules set by the state government's Revenue Department are the single biggest impediment to the quick scaling up of TPS.

It is not surprising that the actual change in land use from agricultural to urban in a TPS area is very gradual. In fact, the process usually begins, illegally, even before an area has been designated as a TPS. Different landowners sell their land at different times. Some sell their land to speculators even before TPS identification, while others sell it directly to property developers after the construction of infrastructure and neighboring developments, to ensure that they get the highest price. All such land transactions are followed by a long bureaucratic process, as mentioned earlier, which prolongs the time before housing construction can begin.

DOES TPS HOUSE THE URBAN POOR?

TPS has been praised for providing land for low-income housing (Nair and Ahluwalia 2010). It is true that between 2004 and 2009, AUDA built more than 11,000 houses for the poor on land obtained through TPS (see figure 7.5). Marshall (2010) observes that while these 11,000 housing units may not be sufficient when compared to the estimated 884,000 people living in slums in Ahmedabad, TPS has done better in this regard than previous efforts to provide or upgrade low-income housing, such as the Slum Networking Project, which served around 8,400 households between 1996 and 2005. Yet it must be acknowledged that TPS has not delivered on its full potential to house the poor. Even though the GTPUDA calls for up to 10 percent of TPS land to be used for low-income housing, evidence suggests that in AUDA's schemes, less than 3 percent has been allocated for this purpose (see table 7.1 earlier in the chapter). More important, of the small amount of land that has been reserved, very little has actually been used to build any low-income housing. An investigation of the use of 172 plots, covering 336 acres (136 hectares), reserved by AMC between 1976 and 2006 for low-income housing revealed that only 6 percent of the originally allocated land was actually used for low-income housing (Joshi and Sanga 2009). The remaining land either had been illegally used for residential and commercial structures, has been left unused, or was still being used for agriculture.

In most TPS, there has not been much effort to include informal actors in the design process, either by acknowledging their claims on the land or by providing space for informal commercial activities. In fact, TPS has sometimes led to the displacement of existing informal settlements, including some that had been upgraded earlier as part of the Slum Networking Project (Nayudu 2009).

More recently, however, land acquired through TPS has been used to resettle households who have been displaced to make way for AMC's high-profile Sabarmati Riverfront Development Project. While the land created by the riv-

Figure 7.5
 Low-Income Housing Built by AUDA on Land from the Prahlad Nagar TPS



Source: Patel and Patel (2009). Used with permission.

erfront project is estimated to be worth 1,600 crore, or US\$360 million (*DNA* 2010), AMC has reportedly failed to provide even the promised 5,000 rupees (US\$110) to each resettled household (Nayudu 2008). It is also noteworthy that resettlement housing for the displaced is usually provided on the outskirts of the city, without access to schools, hospitals, water, or sewers, and is far from jobs and business opportunities. According to ActionAid, an NGO active in informal settlements in Ahmedabad, the “constant reshuffling of slums has led to a major employment crisis in this section of the society” (Nayudu 2008). Resettled households have typically turned to predatory lenders and have taken high-interest loans just to survive (Concerned Citizens of Ahmedabad 2010; IIM Ahmedabad 2010; Mahadevia 2011).⁸

8. When interviewed by a citizens’ committee in 2009, the head of one resettled household described his difficult circumstances in despair. His family had been herded onto a truck in the middle of the night in 2005 and deposited on a snake-infested plot of land on the outskirts of the city. “I am really desperate,” said the 40-year-old father of two, who four years after being

PUBLIC PARTICIPATION IN TPS

Hong and Needham (2007), in their in-depth exploration of land readjustment, highlight the importance of trust among the stakeholders. As Hong (2007, 21) points out, “Trust relations can facilitate cooperation between involved parties in land readjustment; yet, if these relations are broken or do not exist, land readjustment agencies will have to depend on law and coercion to force property transfers.” The starting point for the building of such trust relationships is to involve all stakeholders in the decision-making process.

Recent reports on TPS praise it for being participatory, especially compared to traditional land acquisition methods (Ballaney 2009; Nair and Ahluwalia 2010; Patel 2007). Ballaney (2008), for example, describes TPS as being democratic, equitable, inclusive, transparent, nondisruptive, and noncoercive. There is reason to be skeptical about such high claims. For one, unlike similar land readjustment schemes in other countries, TPS does not require the consent of the landowners to proceed (Doebele 1982).⁹ Nor is there any consultation with landowners during the preparation of the draft scheme. Only after the draft scheme has been prepared are the landowners invited to a meeting at which the government planners present the scheme. Although the planners are required to respond to all “reasonable” objections raised by the landowners, either at the meeting or later in writing, and they must try to incorporate these objections into the plan, the decision of what is reasonable is ultimately left to the discretion of the planners.

Once a draft scheme is sanctioned, the state government appoints a “quasi-judicial” official known as a town planning officer (TPO) to supervise and implement the scheme. The TPO is supposed to consult regularly with the landowners, but only on matters related to the particulars of their individual plots, not regarding the overall direction of the scheme.

According to AUDA and AMC officials, some issues commonly raised by landowners include the following (Joshi 2011; V. Patel 2011):

- Individual owners try to negotiate to reduce the percentage of land taken by the authorities.
- Individual owners ask for higher monetary compensation for land taken.
- Individual owners object if their final plot is not in the same place as their original plot, fearing that the need to exchange land with other landowners could create disagreements. This is particularly relevant if the newly

relocated was considering suicide because he could no longer make ends meet. “I can’t see my future. I can’t see my children’s future . . . All my dreams have been smashed by these people who relocated us” (IIM Ahmedabad 2010).

9. In Japan, for example, the consent of two-thirds of the landowners, owning two-thirds or more of the land, is required (Doebele 1982).

constituted plot has some undesirable land use adjacent to it, such as a garbage dump or an informal settlement.

- Individual owners usually ask for the road in front of their plot to be widened. This is because Gujarat's zoning and building codes allow taller buildings and more commercial activity on properties abutting wider roads, making such property more valuable (AUDA 2006).
- Disputes also arise regarding ownership of original plots.

Although landowners do have several opportunities to request changes in their favor, the TPO has a high degree of discretion regarding whether to make any changes based on these requests. This opens up possibilities for corruption, which, as noted earlier, has been a significant problem in the town planning system in Ahmedabad.

Public participation in TPS is restricted to landowners, and only in regard to matters related to their individual plots. No collective input is sought from all stakeholders regarding the layout of the road network, types of open space, or other public amenities (Ballaney 2009). Since landowners typically sell their plots once the scheme is completed, their own interest in the outcome is limited to receiving a final plot that can be sold at a high price.

It is noteworthy that a number of court cases related to TPS have been filed in the Gujarat High Court, and some have even gone up to the Supreme Court of India.¹⁰ Landowners have gone to court for various reasons, such as seeking higher compensation for land, refusing to hand over land, and demanding that authorities clear informal settlements on their plots. A brief review of cases dating back to the 1940s suggests that the courts typically uphold the decisions made by the authorities, usually invoking the notion of public good.¹¹ There is, however, a new twist to the story. Although the constitutional validity of the GTPUDA was upheld in the 1980s,¹² it could again face challenges in light of the 74th constitutional amendment, passed in 1992, which requires that state governments devolve power to local governments. In fact, such a case was brought before the Kerala High Court in early 2011, leading to the town planning acts of that state, dating back to the 1930s, being struck from the books.¹³

10. It is difficult to ascertain exactly how many court cases there have been over the decades, but an online database of Indian legal reports dating back to the nineteenth century (<http://www.indiankanoon.com>) yielded more than 400 cases when the search terms "town planning scheme" and "Ahmedabad" were used. The earliest one was in 1944.

11. See, for example, *Rajan Sankalchand Patel v. State of Gujarat* (1996); *Hasmukh Shah v. Ahmedabad Municipal Corporation* (2000).

12. See, for example, *Prakash Amichand Shah v. State of Gujarat* (1981); *Prakash Amichand Shah v. State of Gujarat & Ors* (1985).

13. *Sri. V. Shivaprasad v. State of Kerala* (2011).

Conclusions

This chapter began by asking how governments can most effectively influence the spatial growth of cities. Understanding how TPS works in Ahmedabad, India, can be a useful lens through which to examine this question.

While TPS has lately captured the imagination of urban planners in India, it is really an old idea. TPS languished for decades before finding its moment in the late twentieth century. Although it was conceived in a very different historical era, the economic and ideological context of urban planning in India in the 1990s suited TPS well, for several reasons: (1) the increasing pace of urbanization required an alternative approach to old ways of land acquisition on the urban fringe, which coincided with the government's changing and more positive attitude toward urban growth; (2) master planning of the old kind had been discredited for lacking implementation strategies; (3) overall economic growth had led to rapidly increasing land values, making TPS potentially more lucrative for both landowners and government; (4) the liberalization of the economy had led to a shift toward a more market-driven approach to urban growth, one requiring less government intervention; and (5) the role of public participation in city planning was beginning to gain currency in India. Such changes in the urban policy environment led to new excitement about TPS.

What do we know about TPS now? At first glance, TPS appears to be a market-driven approach, but the degree of planning necessary to implement it is significant. Government at various levels still controls the process more than is commonly portrayed. TPS is not an alternative to old government-controlled master planning because it relies on such plans to guide the overall growth of urban areas. In other words, TPS is only one means of influencing the overall structure of a city, and as such it is only as beneficial to that city as the larger vision underlying such efforts. As we have noted, master planning continues to be done in a manner that fails to address the economic and political realities on the ground. Yet to discard the master plan as a tool would be to throw the baby out with the bathwater. What is needed instead is a new type of master plan, one that anticipates and guides the growth of cities by understanding their role in the larger, regional economic geography.

Even though metropolitan-level institutions, such as AUDA, were created to address this macro objective, in reality the lucrative nature of TPS—that it can generate large revenues through land sales—has diverted the attention of AUDA to relatively micro concerns. This has also inadvertently deprived AMC of a source of revenue that could be used for planned expansion of the city.¹⁴ Also,

14. As far back as the late 1980s, the National Commission on Urbanisation observed, “State governments have often reacted by creating new agencies and authorities, such as Special Planning Bodies and Development Authorities, to undertake urban government functions outside the scope of the municipalities. Many assets which could have yielded revenue to local bodies (especially land), stood transferred to these new authorities. Being nominated, many of them

TPS is an incremental approach that by itself cannot address broader concerns regarding the appropriate fit between the urban form and the larger ecological landscape within which cities are situated. In other words, to turn TPS into a really powerful planning instrument for cities, it must be incorporated into the overall planning strategy of phased urban expansion necessary for a vibrant regional economy and, at the same time, one that contributes to the sustainability of the regional landscape.

Regarding the democratic underpinnings of TPS, it is paradoxical that a planning idea that was conceived in 1915, by a colonial government, could be seen as “participatory” in the twenty-first century. While TPS has been promoted as such, in fact the state government retains most of the decision-making power. The only members of the public who have any say in the preparation of TPS are the documented landowners, who are not all poor rural farmers, but also include speculators and wealthy developers who might have purchased land anticipating the city’s decision to grow in a particular direction.

Needless to say, not all households are equally knowledgeable about urban growth plans. This is particularly true for poor households who might have informally settled on the urban periphery, lacking access to formal housing areas. These informal settlers are not consulted in developing TPS; neither can they lodge formal claims for compensation. As for the formal landowners, they are consulted, but only after the initial plan has been made. Individual landowners can request changes later, but such requests have to be approved by town planning officers, who are appointed by state government, not local authorities, and have broad discretionary powers.

There clearly needs to be greater transparency in how a TPS is designed, but the question conventionally asked of land readjustment projects—that is, how landowners can be convinced to give up part of their land—is not as important here, given the fact that landowners stand to benefit greatly from TPS. In fact, if one were to start to think of TPS as benefits to be conferred on a select group of private individuals, the question may be recast: who should be favored with TPS, and can everyone else be kept from demanding it? That is why there have been instances of “entire villages” approaching AUDA to request that their land be used for TPS (Ahmed 2007). Conversely, there are concerns that the government is discriminating against parts of the city with high minority populations by *not* preparing TPS for these areas.

Another difference between the conventional understanding of TPS and the reality on the ground is that even though TPS is promoted as a means of expanding

have functioned without taking into consideration the aspirations of the local people and, by and large, have lapsed into an ad hoc style of operating. Whilst there is no evidence that the existence of these specialised agencies has brought about any improvement of the cities and towns, there has certainly been rapid deterioration in the capacity of local bodies to manage them” (National Commission on Urbanisation 1988, 11).

urban infrastructure quickly, the process is stalled by long delays. Such delays are largely a result of various bureaucratic procedures imposed by the state government to control cities. These procedures are outdated and ultimately weaken the incentives that are necessary for the speedy implementation of TPS. It is clear by now that if TPS is to serve as an effective mechanism for influencing urban growth, local government must be given more authority for sanctioning plans, managing land auctions, revising land use rules and regulations—such as FAR (floor area ratio) and TDR (transferable development rights)—and, in general, creating the right conditions for both economic growth and equitable distribution of economic opportunities.

While the equal sharing of profits between government and landowners gives TPS an aura of market efficiency and fairness, land values are, in fact, severely underestimated. In other words, estimations of land values, on the basis of which the seemingly rational calculations regarding betterment charges are conducted, are far below market prices. While this kind of underestimation does hurt the government's ability to capture increases in land values, there is a risk that if the government raises betterment charges, it may threaten the social compact and political feasibility underlying TPS. In any case, the government does benefit financially from TPS, perhaps not as much from betterment charges as from public auctioning of appropriated land. This, too, reduces the pressure for accurate land valuation. It also raises the question of whether the time-consuming process of estimating land values and trading compensation and betterment charges could be done away with altogether, without significantly hurting either the government's or the landowners' ability to profit from their land. If the government were to rely only on land auctions, that would simplify the TPS process and make it easily replicable.

Lastly, while TPS has been portrayed as a market-friendly mechanism, provisions for low-income housing have been included, although merely as a nod to the pro-poor stance that marked previous urban policies. In the past, for example, public policies were justified on the grounds that the housing market could not respond to the needs of the urban poor, and that the cost of housing had to be reduced, either through rent control or by subsidizing the costs of buying land, providing services, or building housing. Moreover, since the urban poor constituted a majority of the population, their needs were considered central to any policy initiative. That is why the Slum Networking Project for upgrading informal housing, implemented soon after the liberalization of the Indian economy in the early 1990s, received so much attention in Ahmedabad, before TPS emerged as a better planning approach. The new policy environment called for more acceptance of market forces; but for this new approach to be broadly accepted, the old concerns for the urban poor could not be ignored. That is why all planning schemes, TPS included, had to have a provision for low-income housing, even though it was more a symbolic gesture than a central element of the policy package.

It is no surprise, then, that even though TPS allocates land for housing the poor, it has not actually built much low-income housing. This is not to say that TPS will never serve the poor's needs. With revenue from TPS, the government could subsidize low-income housing elsewhere in the city. Instead of actually constructing Soviet-style high-rises for the poor in TPS areas (see figure 7.5), the government could use the resources generated by TPS to upgrade services in existing low-income areas of the city. To implement such schemes in an efficient way, local authorities, and not state governments, must be given more autonomy to generate and manage resources in an equitable way.

TPS is not a silver bullet that will solve all the problems of past haphazard urban growth. It is one useful tool among many others—including property tax reform, impact fees and betterment charges, government acquisition of land for fair compensation, and the judicious use of land use laws, incentives, and regulations—which collectively can create an environment for more orderly urban growth. One essential condition for any of these tools to be effective, however, is a capable local government that has been sufficiently empowered to deal with rapid urban expansion through a variety of means.

REFERENCES

- Acharya, B. P. 1989. Kerala's experience with plot reconstitution. *Urban India* 8–9:74–117.
- Adhvaryu, B. 2011. The Ahmedabad urban development plan-making process: A critical review. *Planning Practice and Research* 26(2):229–250.
- Adusumilli, U. 2009. Town planning schemes in Maharashtra. Working Paper. Hyderabad: Centre for Good Governance.
- Ahmed, S. K. 2007. Town planning scheme propelled state's urban growth. *Express India*.
Ahmedabad Mirror. 2009. AMC chief town planner caught taking bribe. 8 May.
- Annez, P. C., A. Bertaud, B. Patel, and V. K. Phatak. 2010. Working with the market: Approach to reducing urban slums in India. Policy Research Working Paper 5475. Washington, DC: World Bank.
- Archer, R. W. 1992. *Land pooling/readjustment versus plot reconstitution for the planned development of Indian cities*. Bangkok: Urban Land Program, Human Settlements Division, Asian Institute of Technology.
- AUDA (Ahmedabad Urban Development Authority). 2006. General development control regulations. Ahmedabad. http://www.egovamc.com/bp/gdcr_final.pdf.
- . 2007. *Public-private partnership for road infrastructure development*. Ahmedabad. http://www.auda.org.in/library/ring_road.pdf.
- AUDA (Ahmedabad Urban Development Authority) and AMC (Ahmedabad Municipal Corporation). 2006. City development plan, Ahmedabad, 2006–2012. Ahmedabad.
- Baker, L. 1992. India: Private/public partnership in land development. Working Paper. Washington, DC: United States Agency for International Development.
- Ballaney, S. 2008. *The town planning mechanism in Gujarat, India*. Washington, DC: World Bank. <http://www.hcp.co.in/downloads/35/Town%20Planning%20of%20Gujarat.pdf>.

- . 2009. The town planning scheme mechanism in Gujarat—A documentation of the planning mechanism as practiced (draft version). Working Paper. Hyderabad: Centre for Good Governance. <http://www.cgg.gov.in/workingpapers2/TPS%20for%20Center%20for%20Good%20Governance%206%20sent%20on%2027%20August%202009.pdf>.
- . 2010. The town planning scheme mechanism, Gujarat. Presentation at the Annual World Bank Conference on Land Policy and Administration, Washington, DC (26–28 April). <http://siteresources.worldbank.org/INTHOUSINGLAND/Resources/339552-1272658002920/Ballaney.pdf>.
- . 2011. Interview by authors (January).
- Ballaney, S., and B. Patel. 2009. Using the “Development Plan—Town Planning Scheme” mechanism to appropriate land and build urban infrastructure. In *India Infrastructure Report 2009: Land—A Critical Resource for Infrastructure*, 190–204. New Delhi: Oxford University Press.
- Brown, J. M. 1994. *Modern India: The origins of an Asian democracy*. 2nd ed. Oxford, U.K.: Oxford University Press.
- Caemmerer, H. P. 1939. *A manual on the origin and development of Washington*. Washington, DC: Government Printing Office.
- Chakravarti, V. K. 1999. Ahmedabad urban body decision stirs a hornet’s nest. *Indian Express*, 17 June.
- CITYNET. 1995. Municipal land management in Asia: A comparative study. New York: United Nations. http://www.unescap.org/huset/m_land/.
- Concerned Citizens of Ahmedabad. 2010. *Report of a public hearing on habitat and livelihood displacements in Ahmedabad*. Ahmedabad: Our Inclusive Ahmedabad (a forum of Concerned Citizens of Ahmedabad).
- Dave, J. 2011. “Corrupt” estate department blamed for illegal buildings in Ahmedabad. *DNA*, 30 January.
- DNA*. 2010. Sabarmati Riverfront expands its borders. 5 September.
- Doebele, W. A. 1982. *Land readjustment: A different approach to financing urbanization*. Lexington, MA: Lexington Books.
- Gujarat Legislative and Parliamentary Affairs Department. 1976. The Gujarat Town Planning and Urban Development Act. Gandhinagar: Government Printing, Publications, and Stationery. http://www.egovamc.com/right_info/PRO/tdo/05-A-TPACT-1976.pdf.
- Home, R. K. 1997. *Of planting and planning: The making of British colonial cities*. London: E & FN Spon.
- . 2002. Why was land readjustment adopted in British India but not in Britain?: A historical exploration. Paper presented at the Workshop on Land Readjustment. Cambridge, MA: Lincoln Institute of Land Policy.
- . 2007. Land readjustment as a method of development land assembly: A comparative overview. *Town Planning Review* 78(4):459–483.
- Hong, Y.-H. 2007. Assembling land for urban development: Issues and opportunities. In *Analyzing land readjustment: Economics, law, and collective action*, ed. Y.-H. Hong and B. Needham. Cambridge, MA: Lincoln Institute of Land Policy.
- Hong, Y.-H., and B. Needham, eds. 2007. *Analyzing land readjustment: Economics, law, and collective action*. Cambridge, MA: Lincoln Institute of Land Policy.
- Hindu*. 2010. Land pooling mooted for planned growth. 9 August.

- IIM (Indian Institute of Management) Ahmedabad. 2010. *The globalizing state, public services and the new governance of urban local communities in India*. Newsletter 2. *Indian Express*. 1999a. Farmers' rally turns violent. 15 June.
- . 1999b. Scheme will benefit farmers—AUDA chairman. 14 June.
- Joshi, R. B. 2011. Interview by authors (January).
- Joshi, R., and P. Sanga. 2009. Land reservations for the urban poor: The case of town planning schemes in Ahmedabad. Working Paper 4. Ahmedabad: Centre for Urban Equity. <http://scept.ac.in/download/cuewp/cue-wp-004.pdf>.
- JNNURM (Jawaharlal Nehru National Urban Renewal Mission). 2005a. *Rent control reform*. JNNURM Primer. http://jnnurm.nic.in/wp-content/uploads/2011/01/Mandatory_Primer_3-RCR.pdf.
- . 2005b. *Repeal of Urban Land Ceiling and Regulation Act (ULCRA)*. JNNURM Primer. http://jnnurm.nic.in/wp-content/uploads/2011/01/Mandatory_Primer_5-RepealULCRA.pdf.
- Kleinhammans, S. 2009. Re-envisioning the Indian city: Informality and temporality. Master's thesis, Department of Architecture, Massachusetts Institute of Technology, Cambridge, MA.
- Lahiri, T. 2010. Where's that land acquisition law? *India Real Time* (blog), *Wall Street Journal*, 18 August. <http://blogs.wsj.com/indiarealtime/2010/08/18/wheres-that-land-acquisition-law/>.
- Langa, M. 2008. AUDA projects are trapped in mess of alleged corruption. *DNA*, 15 July.
- Mahadevia, D. 2009. Urban land market and access of the poor. In *India: Urban Poverty Report*, ed. India, Ministry of Housing and Urban Poverty Alleviation, 199–221. New Delhi: Oxford University Press.
- . 2011. *Tenure security and urban social protection in India*. Research Report 05. Sussex, U.K.: Centre for Social Protection, Institute for Development Studies.
- Marshall, S. 2010. Of squatters and schemes: Considering city-level strategies for housing the poor in India. Master's thesis, Department of Urban Studies and Planning, Massachusetts Institute of Technology, Cambridge, MA.
- Menon, A. G. K. 1997. Imagining the Indian city. *Economic and Political Weekly* 32(46):2932.
- Mirams, A. E. 1919. Town planning in Bombay under the Bombay Town Planning Act, 1915. Lecture, Town Planning Institute, London.
- . 1923–1924. Comments. *Journal of Town Planning Institute* 10:195–197.
- MMRDA (Mumbai Metropolitan Region Development Authority). 1999. Urban land policy. In *Regional plan for Mumbai Metropolitan Region, 1996–2011*, 225–226. Mumbai.
- Mohan, R. 2006. Managing metros. *Seminar* (January):86–92.
- Mullin, J. 1976. American perceptions of German city planning at the turn of the century. *Urbanism Past and Present* 1(3):5–15.
- Nair, R., and I. J. Ahluwalia. 2010. Expand our towns for urban growth: Why we must, and how we can. *Indian Express*, 24 February.
- National Commission on Urbanisation. 1988. *Report of the National Commission on Urbanisation*. Vol. 1. New Delhi: Government of India Press.
- Nayudu, U. 2008. Mega city dream a nightmare for slum dwellers. *Indian Express*, 15 October.

- . 2009. Civic body's town planning scheme threatens its own slum networking project. *Indian Express*, 1 September.
- 99acres.com. 2011. Residential land in Vatva, Ahmedabad City and East. <http://www.99acres.com/Residential-Land-in-Vatva-Ahmedabad%20City%20&%20East-for-Sale-spj-3546471>.
- NIUA (National Institute of Urban Affairs) and AMC (Ahmedabad Municipal Corporation). 2006. AMC comments in response to Appraisal of City Development Plan Ahmedabad. http://www.urbanindia.nic.in/programme/ud/cdp_appraisals_niua/ahmedabad_niua.pdf.
- Patel, B. 2007. Making urban planning work: Gujarat's town planning scheme mechanism. <http://indiausp.net/?q=node/151>.
- . 2011. Interview by authors (January).
- Patel, B., S. Ballaney, C. K. Koshy, and M. Nohn. 2009. Reforming urban land management in Gujarat. In *India Infrastructure Report 2009: Land—A Critical Resource for Infrastructure*, 176–189. New Delhi: Oxford University Press.
- Patel, S., and B. Patel. 2009. (Creating and) unlocking land values to finance urban infrastructure—Use of urban planning and the town planning scheme mechanism in Gujarat (presentation). Bangalore.
- Patel, V. 2011. Interview by authors (January).
- Peterson, G. E. 2009. *Unlocking land values to finance urban infrastructure*. Washington, DC: World Bank and Public-Private Infrastructure Advisory Facility.
- Rao, M. G., and R. M. Bird. 2010. Urban governance and finance in India. Working Paper 2010-68. New Delhi: National Institute of Public Finance and Policy.
- Robb, P. G. 2002. *A history of India*. Houndmills, U.K.: Palgrave.
- Schnidman, F. 1988. Land readjustment. *Urban Land* 47(2):6.
- Sridhar, K. S., and A. V. Reddy. 2009. *Land as a municipal financing option: A pilot study from India*. Bangalore: Public Affairs Centre.
- Times of India*. 2011. 265 land-grabbing cases in Ahmedabad dist. 4 March.
- Tiwari, D. P. 2002. Challenges in urban planning for local bodies in India. <http://www.gisdevelopment.net/application/urban/overview/urbano0037.htm>.
- UN Human Settlements Programme. 2009. Planning sustainable cities: Global report on human settlements 2009. London: Earthscan.
- Vaidya, C. 1986. Taxation as an instrument to improve urban land management in India. *Nagarlok* 18(1):25–37.
- . 2011. Interview by authors (January).
- Vaidya, C., and H. Vaidya. 2008. Creative financing of urban infrastructure in India through market-based financing and public-private partnership option. Paper presented at the 9th Metropolitan Congress, Sydney (22–26 October).
- World Bank. 1985. Gujarat Urban Development Project—Staff appraisal report.