

# Urban Land Management and Planning

## - Indian Context

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**Abstract**—Land has always been the prime resources for planning and development of any area. Land is such a resource, which is constant and cannot be created. Therefore the importance of optimum usage of land in a developing city is obvious. The main challenge of physical planners is the proper and effective land use planning with the allocation of all the physical and social amenities for existing and the growing population of the area and its hinterlands. Land pooling reconstitution and other associated techniques are appropriate urban land management tools.

**Keywords**—land; planning; land pooling; reconstitution;

### I. INTRODUCTION

“Land management” is defined as an activity on the ground, using appropriate technologies in the respective land use systems. It is known by different names in different parts of the world; basically all are land management tools. In India land management is based on the policies of Economic Liberalization (1991) and Democratic Decentralisation (1993) together with ever increasing shortage of urban land. Strong land owner opposition to forcible land acquisition, combined with extremely limited fiscal capacity has left the urban local bodies (ULBs) with very few options to develop well-planned and serviced urban land. Land pooling and reconstitution (LPR) is a tool that addresses both these issues by allowing the land owners to share the gain in the land value post provision of infrastructure and services. In lieu, the land owners pay betterment charges and contribute a part of their land to fund the infrastructure and services.

#### A. Need to effectively manage growth

Cities and towns are crucial to the economic well being of India. For this, it is imperative that its cities and towns are transformed and pressures of new growth are dealt with so that they are more livable, efficient, and environmentally sustainable. Only then will the rapid pace of economic growth that India is undergoing be sustained and the targets of environmental sustainability of the world achieved.

To manage the transformation of India’s cities and towns and effectively manage new growth requires effective urban planning protocols, processes, and institutions underpinned by

effective legislation. To effectively manage the new growth implies that the agricultural land at the periphery of the cities and towns or smaller settlements that are not yet “urban” is transformed to be made suitable for urban or non-agricultural uses. This essentially means that the irregular landholdings and plots will have to be given regular shapes; they must be ordered; each plot must be given access; infrastructure services such as water supply and drainage must be provided; land must be appropriated for providing roads, parks, social amenities, and low-income housing, development controls must be prescribed to result in a good quality-built form and levy development or betterment charges to offset the cost of developing the physical and social infrastructure. But most importantly, all of this must happen in a timely manner and such that it is acceptable to the “landowners” to avoid conflict in the growth management process.

### II. LAND POOLING AND RECONSTITUTION

Simply put, in LPR, a number of small holdings are pooled together, a part of land is taken from each plot for provision of infrastructure and public facilities and the rest returned to the original land owners. It is basically a land management tool and is used all over the world under different names with slight modifications in their working. “Fig. 1,” shows the characteristics of land readjustment.

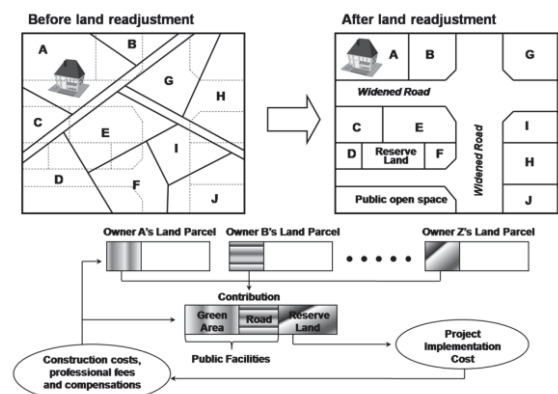


Fig. 1. An illustration of the LR process  
Source: Montandon and de souza, 2007

Extensively used internationally, LPR can trace its roots to Holland and Germany in the 1890s. It quickly spread across the globe including Europe (e.g. Sweden, Finland, France and Belgium), Asia (e.g. Japan, South Korea, Thailand, Indonesia, India and Nepal), the Middle East (e.g. Israel, Lebanon and Palestine) and Australia (“Table I”). It is used primarily for peri-urban expansion.

TABLE I. INTERNATIONAL EXPERIENCES ON LAND READJUSTMENT AND OTHER ASSOCIATED TECHNIQUES

Country	Legal Origins		
	Related Regulations	Period / Year(s)	Term /Technique applied
Japan	Introduced through the Agriculture Land Consolidation Act and then through the Former Land Readjustment Act	1899 and 1955	kukakuseiri
Germany	Former Lex Adickes, Land Consolidation Act LCA; Also referenced Baugesetzbuch BauGB and Law on Adjustment of Agriculture LAA	LCA 1902 BauGB 1986 LAA 1990	Baulanduml egung
India	Bombay Town Planning Act	1915	Plot Reconstituti on
Australia (Western )	Western Australian Town Planning and Development Act	Framework from 1928, current TPA of 1984	Land Pooling
Turkey	Municipal Expropriation Law 2497 (1934); current 2942 (2005), Building Amnesty Law 2981; Reconstruction Law 3194 (1985)	1934 1983 1985 2005	Land Readjustmen t
South Korea	Introduced through the City Planning Act and recently through the Residential Land Development Promotion Act	1934 1980	Land Readjustmen t
Taiwan	Indirectly in the Republic’s constitution & Agrarian Land Consolidation Program	1949 1958	Land Consolidatio n
Spain	Land Use Law	1956	Reparcelacio n
Indonasi a	Basic Agrarian Law No 5, Spatial Use Management Law, Law on Housing and Settlement	1960 1992	Land Consolidatio n
North Korea	Five lines of nature remodelling, Nature remarking policy and the Agricultural Law	1976 then Late 90s	Land Realligmen t
Canada	Local Government Act (chapter 323)	1983 and later updates	Replotting Schemes
Colombi a	Urban Reform Law; Territorial Development Law	1989 1997	Readjust de Tierras
Nepal	Land Acquisition Act, Town Development Act	1976 and 1988	Land Plotting
Thailand	Land Readjustment Act BE-2547	2005	Experience with Land sharing before Land Readjustmen

Country	Legal Origins		
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Source: Author compiled

### III. LAND MANAGEMENT TECHNIQUES AVAILABLE IN INDIA

The strategies available for access to urban land could be through Guided land development for large areas (called urbanizable blocks in Haryana); Land pooling and reconstitution (institutionalized as Town Planning Schemes in Gujarat and other States); Land reconstitution / redevelopment (for insitu upgrading in small parcels in core areas); Acquisition for public purpose under the Land Acquisition Act, 1894; Joint Sector Model of land assembly and development (Greater Noida, CIDCO, New Mumbai, etc.); Transferable Development Rights (for built up areas); Saleable FAR and mixed use concept (for regeneration of inner city); Land Pooling and Redistribution Scheme (Town Planning Scheme, Gujarat and Maharashtra).

#### A. Land Acquisition Act, 1894

In India, the Land Acquisition Act, 1894 gives the right for Government authorities to acquire parcels of land for the implementation of development projects. The origin of the practice of land acquisition by public entities in India goes back to 1824, when the British Government of India instituted regulations to facilitate urban land public acquisition from private owners. In fact, the obligation for owners to give up their land had to find a legitimate justification. The initial reason advanced to acquiring the land against their will was the need for constructing public buildings in Bengal provinces. These regulations enabled the British government to take possession of the land for the construction of roads and canals. From 1850 on, the scope of these laws was extended to other provinces in order to facilitate the operation of further infrastructure projects such as railways.

The Land Acquisition Act was edited in 1894. It harmonized and consolidated previous regulations into one single act, applicable within the whole British India. After India’s independence in 1947, the Indian Government started using this act as a tool to purchase land at a lower price than that on the regular market, as it was meant to be used in the public interest. Several amendments have been made on this act, but its procedures have not changed.

The Land Acquisition, Rehabilitation & Resettlement Bill, 2011 aims at balancing the need of land for economic development projects with the needs of consequently displaced populations. It is meant to replace the Land Acquisition Act, 1894. Introduced in Lok Sabha, it has yet to be approved by the Parliament. Nevertheless, if it is implemented, Public Private Partnership (PPP) and private companies will need to obtain the agreement of 80 per cent of

families affected by the project to acquire land; while at present agreement from 80 per cent of the landowners only is required. Besides, compensations to owners will increase, both in rural and urban areas. Moreover, a Social Impact Assessment being required for every land acquisition, this is likely to further delay the process. It should thus become more and more difficult for developers to acquire land, even for a legitimate public purpose.

### B. Town Planning Schemes(TPS)

In India, the Bombay Town Planning Act of 1915 allowed the use of LPR in the form of Town Planning Schemes (TPS) in the erstwhile Bombay Presidency. Later, it became the basis of the TPS enabling act in Gujarat - the Gujarat Town Planning and Urban Development Act (GTPUDA), 1976.

A Town Planning or Plot Reconstitution Scheme provides collaborative means of undertaking and financing land development without the need for compulsory land acquisition, but with the involvement of land owners. At the same time, it helps to provide serviced plots in orderly layouts to accommodate urban expansion. The cost for provision of infrastructure is recovered through contributions from land owners. What distinguishes these schemes from bulk land acquisition or selective acquisition of land under reservation is the entitlement of the land owners to the profits and benefits of the scheme. The entire scheme of land development and servicing can be self-financing while the local authority can secure lands free of cost for public purposes and EWS housing. The Bombay Town Planning Act, 1954, as applicable in Gujarat and Maharashtra, empowers a Planning Authority to pool or assemble lands for the purpose of implementing Town Planning Schemes and reconstitute land in accordance with the scheme. The reconstituted plots are allotted to the land owners in proportion to their original land holdings.

TPS was widely used in Maharashtra in the first half of the 20th Century. For example, large parts of Mahim, Khar and Borivali in Mumbai were developed through TPS. However, its use declined when the Maharashtra Regional & Town Planning Act, 1966 shifted the focus for the implementation of the city master plan from TPS to detailed Development Plans (DPs). Among the reasons for the shift was the long time taken between TPS initiation and final government approval (average of 15 years) and the fact that an ownership dispute over a single land parcel could hold up the entire scheme. In practice, DPs were rarely prepared, while the use of TPS declined.

On the other hand, TPS found a favorable environment in Gujarat, especially after the 1986 & 1999 amendments to the GTPUDA, which enabled: (a) possession of land for construction of roads after approval of the Draft TPS – 1999 Amendment (“Fig. 2”). Since land values rise with roads, this has helped ensure land owner support. (b) Sale of plots (up to 15% of scheme area) to finance the scheme (1986

Amendment) (c) tighter time limits in the process (1999 Amend.).

Further, the TPS process does not settle land ownership disputes; it just transfers them to the newly reconstituted plot, thereby not holding up the TPS approval process. As a result, TPS has become the predominant urban expansion tool in all the major cities in Gujarat. For example, Ahmedabad Urban Development Authority (AUDA) has prepared over 109 schemes and Ahmedabad Municipal Corporation (AMC) has prepared 61 in the last 4 decades.



Fig. 2. Section of LPR Scheme depicting original and new plots  
Source: TPS 50 Scheme, AUDA

Apart from Gujarat and Maharashtra, a few other states, notably Andhra Pradesh, Karnataka, Punjab and Kerala have TPS-enabling legislation, albeit with little use of the mechanism. Instead of using TPS, Punjab only permits conversion of large parcels of agricultural land to urban use. For example, a 100 hectare agricultural land may be allowed conversion if 45% is used for public facilities and infrastructure, and the remaining 55% for residential use.

### C. Land readjustment / pooling

Land re-adjustment is a process whereby a public authority assembles numerous small parcels of raw land without paying compensation to the owners. The authority then sub-divides such assembled lands for urban use returning most of the building sites to the original owners in proportion to the value of their land contribution and permitting them the right of alienating such sites. The authority retains a portion of the assembled lands, applying them partly to provide civic amenities such as roads, parks and gardens or schools, and the remainder land for public sale to recover the cost of development. Thus, land re-adjustment acts as tool to achieve unified control over large areas of land and as an instrument of financing public service installations in the process of planned urban growth.

### D. Guided Urban Development

The concept of Guided Urban Development (GUD) emerged in response to ad hoc, uncontrolled urban development with no regard to infrastructure services. It also

aims to secure a limited availability of urban land for economically weaker sections. GUD had been applied in Chennai under the World Bank-assisted Tamil Nadu Urban Development Project by Chennai Metropolitan Development Authority (CMDA). The objectives of the scheme are as follows:

- Ensure provision of serviced plots for low income families at affordable prices (approximately 75% of total plots to be reserved for EWS / LIG); and
- Provide incentives to the land owner / private developer to participate in the provision of low income shelter by guaranteeing fair return on investments (profit of 20-30%).

#### E. Joint Development Model

Under a legislative act in the state of Haryana, certain planned areas are designated to allow private developers to assemble parcels of land. The act provides for the licensing of private developers to purchase land directly from land owners and develop such lands for residential purpose according to the conditions, which include:

- Reservation of 20% of the developed residential plots for EWS and LIG category and their allotment as per prices and norms set by HUDA (Haryana Urban Development Authority);
- Sale of another 25% plots on no profit no loss basis; and
- Remaining 55% plots to be priced and sold directly by the developer.

Initially, the model started with the plotted development, but over time it has shifted to apartments. The joint development approach has been extensively applied in Gurgaon and other cities adjoining Delhi.

#### F. Transfer of Development Rights(TDRs)

In determining the 'fair price of land' to be acquired, Governments generally try to rely on the past records of sales transactions. These are rarely reported or recorded correctly since transaction taxes are high and the role of 'black money' in the economy is large. Today, Local Bodies or the State Governments do not have adequate funds to acquire the necessary land even at the recorded low rates. A pragmatic solution to this problem could be the use of 'Transfer of Development Rights'. The Urban Development Plans Formulation and Implementation (UDPFI) Guidelines, MOUD, Government of India (1996), define *Transfer of Development Rights (TDRs)* as, 'Development Right to transfer the potential of a plot designated for a public purpose in a plan, expressed in terms of total permissible built space calculated on the basis of Floor Space Index or Floor Area Ratio allowable for that plot, for utilization by the owner himself or by way of transfer by him to someone else from the present location to a specified area in the plan, as additional built up space over and above the permissible limit in lieu of compensation for the surrender of the concerned plot free from all encumbrances to the Planning and Development Authority'. Mumbai is the first city in India, which has adopted the TDR concept in a regulated manner as an alternative mechanism for land acquisition for providing the

essential amenities in accordance with the development plan proposal, for slum redevelopment and urban renewal through reconstruction of dilapidated buildings.

#### G. Accommodation Reservation

The land owner can develop the facility for which the land is reserved (such as a library), hand it over to the Mumbai Municipal Corporation (BMC) free of cost and then utilize the development right equivalent to the full permissible FSI for his own purpose. In case of Mumbai, this measure is likely to succeed as land prices are several times higher than construction cost. But where land prices are not that high or are less than construction cost such a measure is unlikely to succeed.

## IV. CONCLUSION

India has a land planning history that dates back since 1824. Initially the process was strategized by the British government to make available land for public infrastructure and services. Though the legislations have been amended several times the procedure remains the same. Land pooling, reconstitution and plotting are land management tools which needs to be effectively shaped to achieve a planned development. The study points out that the basic ideas and principles are been used under different names supported by various legislations in parts of India for the past 20 decades. A single process consolidating the pros and eliminating the cons of all these techniques supported by a strong legal set up need to be modeled which could be applied to all Indian cities. The success of TPS in Gujarat shows that similar schemes with modifications can be applied to all other Cities in India.

Land is a free gift of nature. But the critical factor associated with land is its relative scarcity. Planning and management can play a significant role in the fulfilments of future land needs. Planning potentially has the ability to orchestrate a number of tools so that land supply and land demand can be brought into balance.

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