



Real estate market led land development strategies for regional economic corridors – A tale of two mega projects



Jay Mittal ^{a,*}, Anil Kashyap ^{b,1}

^a Graduate Program in Community Planning, Auburn University, 104 Dudley Hall, Auburn, AL 36849, USA

^b RICS School of Built Environment, Block – F2, Fifth Floor, Amity University, Sector – 125, Noida, 201313 UP, India

ARTICLE INFO

Article history:

Available online 18 February 2015

Keywords:

Land readjustment
Land acquisition
Regional transportation corridors
Land value capture
Real estate

ABSTRACT

The rapid population growth has outpaced the planning interventions in most large Indian cities resulting into unplanned, leapfrogged physical development and considerable transport challenges for intra-city and regional traffic. As an afterthought, these concerns have been addressed by formulation of spatial development strategies to guide rapid urban expansion creating planned real estate development opportunities, and to ease regional traffic movements. This paper is based on two unique case studies of regional transportation corridors developed in the fringe areas of rapidly growing mega cities – Kundli-Manesar-Palwal Global Corridor (KMPGC) in the national capital region of Delhi (16 million people and the largest city in India) and Sardar Patel Ring Road (SPRR) in the City of Ahmadabad, India (6 million people and the seventh largest city in India). Both the cases employed unique land development strategies to achieve the larger public purpose while creating planned land and real estate development opportunities. The KMPGC Delhi case employed compulsory purchase for reserving 325-foot wide right-of-way (ROW) and created multiple economic nodes as theme cities, strategically located along its 135 km (84 miles) corridor. While, the case of SPRR Ahmadabad employed land readjustment (LR) technique for reserving 76 km (47 miles) long and 200-foot wide ROW of a regional ring road. Using these two cases, this paper explains both types of land development processes and the financing models involved in these cases, and compares benefits and constraints of compulsory purchase and LR technique, especially in context of regional level real estate and economic development opportunities via new real estate markets as spatial corridors and economic nodes. The paper finally recommends a new hybrid model – a strategy for rapidly growing cities, where both models can be used in a hybrid form to achieve regional level public asset, create real estate market opportunities in fast growing fringe areas and achieve a planned development.

© 2015 Elsevier Ltd. All rights reserved.

Introduction

World over cities are faced with enormous challenges in terms of growing population, greenhouse gas emissions, and sustaining the economic growth to stay competitive. Cities are striving to meet the demand for critical infrastructure such as efficient transportation, reliable energy supply, safe drinking water, sanitation, schools and hospitals as key social infrastructure and serviced land

for planned real estate development to play central roles in the meeting the needs of rapid urbanization (KPMG, 2012).

Cities in India are rapidly developing due to major rural to urban migration, and growing economic opportunities in cities. The Indian economy has undergone radical reforms in past two decades by moving away from the path of public sector dominated import-substitution economy to emerging market economy. Some of the significant economic reforms are the rationalization of tax levies and custom duties, elimination of industrial licensing requirements and reduction in controls on foreign trade and investment in real estate and infrastructure as asset classes (Rao, 2000). Growth in the economy has experienced a steady growth during the previous decade. However, economic slowdown continued through 2012–13 (Deloitte, 2013) due to global sentiments in trade and investments. Government of India and institutional investors are

* Corresponding author. Tel.: +1 334 844 8409, +1 513 250 9131 (mobile); fax: +1 334 844 5419.

E-mail addresses: jay.mittal@auburn.edu (J. Mittal), akashyap@rics.org (A. Kashyap).

¹ Tel.: +91 120 667 3000, +91 120 667 3028; fax: +91 120 667 3050.

looking for ways to participate and bridge the gap by pumping investments in infrastructure assets on medium to long term basis. As governments and infrastructure sponsors struggle to attract new sources of financing, the innovative development and financing models are quickly becoming the key themes for further research into their operationalization and suitability.

Cities are engines of economic growth. Currently India is facing the challenges of further simplification of procedures and relaxing the barriers for business activities, unemployment, and development of world-class infrastructure and allowing foreign direct investments (FDIs) in more areas. Spatial planning and development strategies help deliver the vision of planners, policy makers and city governments to provide space for living, working and related infrastructure provisions (Healey, 2004). Since, land is a state subject as per the Constitution of India, respective state governments formulate their own spatial development strategies. Similarly, the process of plan preparation and implementation is also undertaken under specific State Acts. The macro level urban development plans identify broad land use and infrastructure networks at local and regional scale every 10 years, in consultation with public and published as statutory document under the state's planning Acts. This same process is followed in most state jurisdictions in India with some variations. For example, in the State of Haryana (One of the case study area), the development plans are prepared and enforced by the State whereas in the case of larger metro cities a designated Development Authority with statutory power discharges this function.

The vision of Strategic Plan of Government of India Ministry of Urban Development (2011–16) is to 'promote cities as engines of economic growth through improvement in the quality of urban life by facilitating infrastructure with high service levels, and provide efficient governance'. The objective of the National Urban Transport Policy (2006) is also to ensure safe, affordable, reliable and sustainable access to urban population. These policies envisage integration of land use and transport planning measures to minimize the travel needs which would require huge capital investment. Thus innovative financing mechanism using land as a resource would need to be explored to achieve the objectives. The cities must not only meet the mobility needs of the current and future urban population. The McKinsey (2010) report also estimated that by the end of 2030, over 590 million people in India will live in cities, 68 of which will be million-plus cities. Over 70% of the net new jobs will be in cities and \$1.2 trillion will be required to finance the urban infrastructure investment, which is over eight times of the investments made in Indian cities today. It also requires over 30 billion ft² of paved roads (McKinsey Global Institute, 2010). This changing demography has created greater demand for housing and need for more serviced urban land (Mathur, 2012). The enormity of growth pressure, limited serviced urban land combined with cash strapped state government and municipal authorities, has led to urban growth preceding any planning intervention in most Indian cities. The net result of which is visible in urban growth being fragmented, leap-frogged, and *ad-hoc* in most mega-cities with a million-plus population. Since it is the civic authority's responsibility to provide for infrastructure, the budget constrained municipal authorities attempt to devise various innovative tools to finance urban development. In the current economic climate, India's infrastructure deficit is creating significant challenges for the country's continued economic growth (KPMG, 2012). India's infrastructural investment up to 2030 is estimated at US\$690bn (HPC Report, 2011). The magnitude of the infrastructural investment challenge runs far beyond the capacity of the public sector alone. Therefore, interventions in the form of innovative land development and monetization techniques are required to create the conditions

conducive for implementation of mega infrastructure projects such as ring roads and express highways.

In this paper, we present the two land development models that were used in the two cases: The first model uses land readjustment (LR) technique, which is commonly used at neighborhood scale planning for servicing land with urban infrastructure and the second model is compulsory purchase, which is commonly used in pooling land for any small or large scale public projects. The paper finally proposes a hybrid strategy for future.

Land development strategies: a comparison

This section presents three land development strategies: Land Readjustment Mechanism, the concept of Land Value Capture and the Eminent domain based Compulsory Purchase that were also used in the case studies discussed later.

Land readjustment mechanism

Land readjustment (LR) has a fairly long history; literature dates the usage of the technique back to 1899 in Germany and Netherlands, and 1923 in Japan. However, many Asian countries such as South Korea (Karki, 2004), Indonesia (Agarwal, 2000), Taiwan (Lin, 2005), Nepal (Karki, 2004), Thailand (Archer, 1992), Sri Lanka also use it. More detailed discussion on worldwide usage of LR is available in Turk (2008), Larsson (1997), Karki (2004) and Schlindman (1988). In 1915, the British brought the LR technique to India and the process has been used there ever since (Mittal, 2014b; Bertaud, 2010; Home, 2002; Mathur, 2012; Sanyal & Deuskar, 2012, 153). This LR technique as practiced in India was originally introduced by the British Colonial Government in 1915, which was modified via legislation updates first in 1954, and then in 1976 when the Gujarat Town Planning and Urban Development Act, 1976 was prepared and later, amended update in 1999.

Land readjustment is a "market savvy" way of financing infrastructure (Sanyal & Deuskar, 2012: 152). LR is used in many countries to reconfigure underperforming land parcels after pooling contiguous land parcels and servicing areas with basic infrastructure to achieve a well-coordinated, planned development. Land readjustment (LR) is a technique for peri-urban or suburban land development that combines several elements, such as pooling of property rights, physical re-organization of land parcels and preparation of a layout plan, all, with an aim to achieve planned urban growth via urban infrastructure provision in a self-financing way.

The LR is an area planning tool, commonly employed at neighborhood scale for planning 200–400 acre land area. In LR, a fixed percentage of land from each participating landowner's lot holding is appropriated to reserve the right-of-way (ROW) for the new roads, land for parks and playgrounds, schools and low income housing and other public amenities. Additionally, a fixed percentage of land is also appropriated to create a land bank in the form of finished residential and commercial lots for sale purposes. This land bank generates funds to cover part costs of infrastructure development (Ballaney & Patel, 2009; Gautam, 2012; Mathur, 2012 & Sorensen, 2000). As Ballaney and Patel (2009, 204) pointed out appropriately, that LR, unlike the compulsory purchase (that thwarts the land market), LR "uses the land market and does not thwart it," although it requires regulatory tools to support the process.

Owing to the permanent legal and physical changes attributed to the original land parcel boundaries, its size and uses, the LR technique requires greater degree of participation between the planning agency and landowners to achieve consensus during the planning stage. When originally irregular shaped rural parcels are as shown in Fig. 1 are converted into more developable urban

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات