

Employment Intensity of Output: An Analysis of Non-Agriculture Sectors

Real Estate and Construction Sector



**Employment Intensity of Output:
An Analysis of Non-Agriculture Sectors**

Real Estate and Construction Sector

P.K. Saxena

S.K. Yadav

**Institute of Applied Manpower Research
Planning Commission, Government of India**

Acknowledgements

The authors are grateful to Planning Commission for giving financial support to conduct this important project.

The authors put on records their gratitude to IAMR faculty Dr. G.P. Joshi, Dy. Director and Sh. D. Indrakumar, Asst. Director for conducting the field survey along with authors. IAMR extends sincere thanks to the concerned Central and State Government Officials, representatives of Industry associations/federations, industrial establishments, representatives of Confederation of Real Estate Developers of India (CREDAI) and Builders Association of India (BAI), etc.

The authors would also like to thank all the government officials, representatives from associations/enterprises and all data providing agencies whose secondary data are used for this study.

Thanks are also due to Mrs. Dipika Sen, Asstt. Editor for editing the report and Mr. Ashok Kumar for secretarial assistance.

Contents

<i>Executive Summary</i>	<i>ix</i>
I Introduction	1
1.1 Genesis of the Study	1
1.2 Hypotheses	1
1.3 Selection of Real Estate and Construction Sector for the Study	2
1.4 Real Estate and Construction	3
1.5 Importance of Real Estate and Construction	4
1.6 Composition of Real Estate and Construction Sector	4
1.7 Real Estate and Construction in India	5
1.8 Issues for the Real Estate and Construction Sector	7
1.9 Study Design	8
II Growth and Dynamics of Output and Employment	9
2.1 Growth of Output in Real Estate and Construction in India	9
2.2 Housing Development Scenario	10
2.3 Rural Housing	11
2.4 Jawaharlal Nehru National Urban Renewal Mission (JNNURM)	13
2.5 Employment Scenario	13
III Investment and Employment Scenario	16
3.1 Contribution of Real Estate and Construction in Gross Domestic Product	16
3.2 Investment Patterns	16
3.3 Lending Patterns of Financial Institutions	19
3.4 Domestic Savings and Capital Formation	20
3.5 Employment Scenario	21
IV Implications of Technological Development and Outsourcing/Sub-contracting on Employment	24
4.1 Technological Advancement	24
4.2 Outsourcing/Sub-contracting	25

V	Impediments/Constraints/Challenges for the Real Estate and Construction	27
5.1	Administrative Issues	27
5.2	Procedural Issues	30
5.3	Financial Issues	33
5.4	Other Issues	33
VI	Policy Implications and the Way Ahead	36
6.1	Administrative Issues	36
6.2	Procedural Issues	36
6.3	Financial Issues	37
6.4	Other Issues	38
6.5	The Way Ahead	39
	Appendices	
I	Statement indicating state-wise distribution of Net State Domestic Product (2004-05 prices) for real estate services (including real estate, ownership of dwellings and business services)and Construction and their production in total 2004-05 to 2009-10	41
II	List of Associations/Organisations visited for Real Estate and Construction Sector	42
III	Distribution of Total Workers by sub-sectors of Real Estate and Construction Sector (as per NIC 2004) in 2009-10 in India	47
IV	State-wise employment in Real Estate and Construction Sector in India 2009-10	48
V	Statement indicating Comprehensive Checklist of Papers/ Documents required to be submitted for NOCs/Permissions which are a pre-requisite for Plan Sanction application in some states	49
VI	The Indian Real Estate Transparency Index (RETT) 2011	50
	Bibliography	51
	List of Tables	
2.1	Percentage Share of Gross Domestic Product at Factor Cost in Real Estate and Construction Sector	9
2.2	Financial Targets and Achievements (Rs. Crore) under Indira Awas Yojana (IAY) 1999-2000 – 2009-2010	12
2.3	Physical Achievements (numbers) under Indira Awas Yojana (IAY), 1999-2000 – 2009-2010	12

2.4	Distribution of Real Estate and Construction Sector Workers according to National Classification of Occupation (2004)in 2009-10 in India	15
3.1	Growth of GDP by Sectors in India, 2001-02 – 2015-16 (UD\$ Billion)	16
3.2	Year-wise Outlay (actual expenditure) on housing sector, 1999-2000 – 2003-04	17
3.3	Sector-wise and year-wise FDI equity inflows (US \$ million)	18
3.4	Gross Bank Credit to Housing and Rural Estates, 2000 to 2010-11	20
3.5	Number of workers in Real Estate and Construction sector in India by Sector	22
3.6	State-wise Distribution of Employment during 2004-05 and 2009-10 in Real Estate and Construction Sector in India	33
5.1	State-wise Stamp Duty Rates (%), 2012-13	28
5.2	Description of various activities and time taken for approval of a real estate project	31

List of Boxes

1	Factors for Growth of Real Estate and Construction Sector	7
2	Land acquisition – An important issue for Real Estate and Construction Sector	29
3	Delay in Completion of Projects	32
4	Skill development initiative taken by NSDC and CREDAI, Pune (Kushal Project)	38

Executive Summary

Given the slow pace of agricultural growth, its declining share in the gross value added, and negative marginal labour productivity, the performance of the secondary and tertiary sectors would be the key to sustaining the high economic growth and consequent poverty reduction. However, sluggish growth in employment is observed for non-agricultural economy also. The employment share of the industry and services has increased sharply in the last 20 years, but within them real estate + construction remains very low, at 22.7 per cent and 24.4 per cent respectively in 2009-10.

Factors for recent growth of the Real Estate and Construction Sector are as follows:

Demand Factors

- Increasing urbanization
- Demographic dividend
- Rise of middle income group and their increasing ability to afford to purchase houses
- Significant growth of services sector particularly of finance, banking, insurance, software, communication, etc.
- Phenomenal growth of organized retail trade, shopping malls, etc.

Supply Factors

- Increased Foreign Direct Investment (FDI) coupled with domestic investment
- Favourable lending patterns of banks/financial institutions for housing and commercial loans
- Increase in Plan Outlay, Gross Domestic Savings, Gross Domestic Capital Formation for infrastructure
- Increased allocation for Pradhan Mantri Gram Sadak Yojana (PMGSY), Indira Awaas Yojana (IAY), and MGNREGA.
- Increasing investment in infrastructure

The hypotheses framed for the study are as below:

- 1) Whether increases in investment, increased FDI and Government initiatives (resulting in increased scale of operation) resulted in an increase at employment in certain sectors?
- 2) Whether change in production techniques/processes (be imported or indigenous – due to change in relative prices) in favour of capital intensive technology replaces labour?
- 3) Whether outsourcing and sub-contracting of certain operations result in employment decline?

Growth and Dynamics of Output

The GDP growth rate, which till late 1970s was 3.5% per annum, was observed to be about 6.0% in the 80s and early 90s and subsequently touched 8.0-9.0% in the 2000s. Rapid growth in India's GDP has been a result of policy interventions undertaken in the 1990s towards improving the business climate of the country, which translated into increased investment by domestic and foreign institutional investors. During 2001-02 – 2004-05, in comparison to real estate services and construction, India's GDP increased at a much fast pace. But on the other hand, during 2004-05 – 2009-10, GDP in real estate services and construction rose at a faster pace than that of India.

For fulfilling the need for housing and tackling housing shortage particularly for the poorest, the government had taken a number of initiatives. These include Indira Awaas Yojana, Rajiv Awas Yojana, Jawaharlal Nehru National Urban Renewal Mission, etc.

Investment and Employment Scenario

Investment Scenario

Fiscal incentives for the housing sector provided in successive budgets together with liberal investment and credit policies and reforms brought the housing and real estate sector to the centrestage of the Indian economy. It merits mention that in the second half of the decade i.e. during 2004-05 – 2009-10 investment in Government sponsored infrastructure and employment generation programmes increased in rapid strides.

The Government of India in 2005 permitted FDI up to 100% in townships, housing, built-up infrastructure and construction development projects. The inflow of funding catalysed the organized development. During the period 2004-05 – 2009-10, the total FDI inflows increased by around six times. On the other hand, during the same period, the inflows in housing & real estate sector rose by more than 200 times.

Employment Scenario

In real estate sector, largest chunk of employment continues to be in the unorganized sector. Nevertheless, during the decadal period i.e. 1999-2000 – 2009-10, the relative proportion of employment in organized sector increased by about two and a half times. This phenomenal increase might be due to allowing of 100 per cent FDI in real estate and development of townships. The increasing inflow of FDI and increasing investments in real estate sector might have paved the way for large real estate developers leading to a rise in organized sector employment. During 1999-2000 – 2009-10, in construction, the share of employment in unorganized sector declined from 77.7 per cent to 66.2 per cent leading to a rise in organized

sector employment share from 26.3 per cent to 33.8 per cent. It indicates that construction activities in organized sector have increased substantially in spite of recession.

Implications of Technological Development and Outsourcing/Sub-contracting on Employment

The construction sector is characterized by increasing level of mechanization on the one hand, and traditional material/inputs are being replaced on the other. Developers now adopt ‘precast concrete and engineering homes’ technology in their projects after the encouraging results of these technologies in Europe and the Middle East. A number of real estate developers have adopted this building system that offers speed, quality and value. At the same time, the use of such technology helps in saving up to 64% of the total man-hours needed for conventional methods. Thus, the technological development on the one hand displaces labour, mainly unskilled, and on the other creates a demand for skilled and technical personnel.

In the real estate sector, the preparatory work of the project including purchase/acquisition of land, planning and designing of the project, approval of the project, etc. is done by the real estate developers. The components of outsourcing include construction of the project, marketing the real estate space, etc.

Impediments/Constraints/Challenges for the Real Estate and Construction

Administrative issues

A large number of laws governing various aspects of real estate and construction sector date back to the 19th century. The stamp duty rates are very high and vary widely from state to state. In contrast, the maximum rate levied in most developed markets whether in Singapore or Europe is in the range of 1-2 per cent.

Land acquisition is a major problem for major projects especially infrastructure projects.

Given the scarcity and high value of urban land, the present Floor Area Ratio is inadequate.

Procedural issues

While India is among the top countries in terms of housing and work space needs, it ranks 181st in construction permission processes according to the World Bank’s Doing Business 2012 Report. There are 34 procedures and the average time taken is 227 days.

Financial Issues

Financing options are presently skewed in favour of personal loans vis-à-vis developer financing. Only 5-7 per cent of the loans disbursed by these housing finance companies go to builders and

institutional developers. All this leads to builders and developers approaching private sources of finance at high interest rates, which ultimately leads to higher real estate prices.

Other issues

The sector is facing the shortage of core professionals as well as both the skilled and unskilled labour. On the one hand, this sector is facing the shortage of skilled personnel, and on the other hand, after MGNREGA gained momentum, there has been a reverse migration of labour from metros to rural areas creating shortage of unskilled labour.

The poor state of technology opted by the construction sector adversely affects its performance. Use of low-grade technology in the construction sector leads to low value addition and low productivity.

There are total 43 central and state labour laws applicable in industries; out of which, 27 labour laws alone are applicable in construction sector. During the discussions held with a number of stakeholders, it emerged that multiplicity of labour laws acted as a detriment for the growth of employment in this sector and discourages employers to engage more persons.

As per the provisions of the labour Law for Construction Workers, one percent cess collected from the employer on construction projects costing more than Rs. 10 lakhs, and the proceeds were to be used for augmenting resources of Buildings & Other Construction Workers' Welfare Boards. But during the discussions it was reflected that though the money was being collected from the builders/contractors, yet it was not utilised for the welfare of the workers.

Policy implications and the way ahead

Administrative issues

- There is a need to rationalize the laws governing the real estate sector.
- There is a need for some fundamental reforms like tackling the high stamp duty issue which makes even honest citizens deal in black money.
- With roads, tramways and rail connections to the surrounding areas, a lot of rural land will be 'developed'. All these parcels of land will add to the total supply of real estate and this will work to keep prices down.

Procedural issues

- There is a need to thoroughly review and modernize the municipal laws/procedures in the light of the latest developments in urban infrastructure, transport, pollution control etc.
- In this context, the Ministry of Housing and Urban Poverty Alleviation, Government of India has taken a lead by constituting a Committee on 'streamlining approval procedures for real estate projects.

- For seeking building permission, some of the stakeholders indicated that the Bihar Model could be adopted. In Bihar Model, the approval was not sought from the Government Departments. For this, a number of certified architects were on the panel, and the plan was to be prepared and got certified by the architect. In addition to it, the concerned party had to submit an affidavit that the building will be constructed as per the certified plan of the architect.
- The contract procedures should be simplified and be made transparent. Although some steps have already been taken in this regard, still there is a need to simplify the contract procedures and tendering work. It will further help in increasing the construction activities and thereby employment.
- There is a need for an appropriate dispute resolution mechanism in construction sector. It is suggested that there should be a fast-track procedure for dispute redressal so that implementation of projects is not delayed.

Financial issues

- Real estate mutual funds, pension funds and insurance companies are the major investors in the housing sector in developed countries. As the gestation period of real estate projects is more than five years, on an average, it is necessary that developers have access to such long-term funding sources.
- If external commercial borrowing was allowed, then the cost of real estate property could come down significantly.
- There is a very high incidence of direct and indirect taxes for construction and construction related activities as compared to other sectors. There is a need to reduce the burden of multiple tax regimes and simplify the taxation system.

Other issues

- As there is a great dearth of skilled and technical personnel, there is an urgent need to enhance and strengthen their supply.
- To meet the growing demand of personnel for the real estate and construction, adequate supply of professional, technical and skilled personnel should be ensured. MGNREGA should be implemented in a rational way so that jobs are created during the lean agricultural season, and the supply of unskilled labour for industry and services sectors is not affected.
- Adoption of superior technology should be encouraged by introducing higher specification and technical conditions in bid documents.
- The labour laws should be simplified to evolve one labour law for construction sector, which will be applicable for both organized and unorganized sector.

- A large amount collected as 1 percent cess from the employers on construction projects for augmenting resources of Buildings & Other Construction Workers' Welfare Boards is lying unspent which needs to be spent rationally.

The way ahead

The sector does not even have a status of 'special' or 'industry'. Real estate development should be given special status at par with industry. An industry status to the sector will bring about major transformation in the outlook and nature of the sector. It would encourage investment, attract large companies, and most importantly, inculcate corporate culture and industry discipline in the sector, which would immensely benefit the economy in general, and the consumers in particular. Construction activities are employing a large chunk of skilled and unskilled workers with heavy investment. It is therefore suggested that there should be a separate department/ministry to deal with construction activities in the country. It will further boost the growth of real estate & construction sector.

CHAPTER I

Introduction

1.1 Genesis of the Study

Given the slow pace of agricultural growth, its declining share in the gross value added, and negative marginal labour productivity, the key to sustain the high economic growth and of consequent poverty reduction will be the performance of the secondary and tertiary sectors. However, the sluggish growth in employment is observed for non-agricultural economy also. The employment share of industry and services has increased sharply in the last 20 years, but thereof it remains very low, at 22.7 per cent and 24.4 per cent respectively, in 2009-10 et al. (Mehrotra, 2012). In this background, the objective of this study is to identify the reasons for sluggish growth in employment generation in the non-agricultural economy at the national level.

1.2 Hypotheses

The hypotheses framed for the study are as below:

- 1) Whether increases in investment, increased FDI and Government initiatives (resulting in increased scale of operation) resulted in increase at employment in certain sectors?
- 2) Whether change in production techniques/processes (be imported or indigenous – due to change in relative prices) in favour of capital intensive technology replaces labour? This may partly be induced by rise in wages, replacement of technology due to sustainability and competitiveness, and response to business cycle.
- 3) Whether outsourcing and sub-contracting of certain operations result in employment decline?
This may be because of rise in wages, restrictive labour regulations and desire to keep costs down. Employers are observed to be increasingly relying on outsourcing major operations.

The term ‘real estate’ is defined as land, including the air above it and the ground below it, and any building or structure on it. It is also referred to as ‘realty’. It covers residential housing, commercial offices, trading spaces such as theatres, hotels and restaurants, retail outlets, industrial buildings such as factories and government buildings. Real estate involves the purchase, sale, and development of land, residential and non-residential buildings. The main players in the real estate market are the landlords, developers, builders, real estate agents, tenants and buyers. Segments of construction include real estate and infrastructure both; infrastructure includes roads, railways, urban infrastructure, ports, airports and power etc.

1.3 Selection of Real Estate and Construction Sector for the Study

During the period 1999-2000 - 2009-10, real estate services (including real estate, ownership of dwellings and business services) both in terms of Gross Domestic Product (GDP) and employment, increased substantially. During the first half of the decade i.e. 1999-2000 - 2004-05, the GDP at factor cost (at 2004-05 prices) increased at a Compound Annual Growth Rate (CAGR) of 10.66 per cent, while in the second half i.e. 2004-05 - 2009-10, it declined marginally to 9.45 per cent. However, it merits mention here that in both the periods, the CAGR of real estate services was higher than that of the total economy. But interestingly, the CAGR of total economy was 6.75 per cent in the first half, which increased significantly in the second half to 8.62 per cent. Furthermore, the relative share of real estate services in total GDP of the economy increased from 7.48 per cent in 1999-2000 to 9.30 per cent in 2009-10.

Construction sector has high employment and GVA growth during the decade 1999-2000 to 2009-10 and accounts for the highest employment elasticity; while electricity, gas and water supply accounts for lowest among sectors of the non-agricultural economy. Since construction sector shows its employment elasticity as greater than 1 (1.15), it can be representative of an employment- generating sector with labour intensive growth. In this context, prior to selecting sectors it is important to measure their share in employment and GVA. Employment elasticity of the construction sector has increased from 0.78 to 1.19 from the period 1999-2000 – 2004-05 to 2004-05 – 2009-10. Growth rate of employment has also increased from 8.21 per cent to 11.12 per cent during the period 1999-00 – 2004-05 to 2004-05 – 2009-10. But, in spite of the double increase in growth rate of employment and employment elasticity, CAGR of GVA in this sector has not increased; rather it decreased during the period 1999-00 – 2004-05 to 2004-05 – 2009-10. While during 1999-2000 – 2004-05, CAGR of GVA was 8.90 per cent, it decreased to 7.64 per cent during 2004-05 – 2009-10.

Regarding the growth of employment, real estate services present a distressing scenario. In the first half of the decade, employment increased by rapid strides at a CAGR of 11.73 per cent; while in the second half, it fell drastically to 4.35 per cent. Nevertheless, it has been far better than the overall CAGR of the economy, which was just 2.89 per cent in the first half, but in the second half, it came flat to 0.12 per cent. The resultant effect of declining CAGR in employment in real estate services, led to declining employment elasticity from 1.09 during the first half to just 0.48 in the second half. On the other hand, employment elasticity for the whole economy which was 0.44 during the first half became almost negligible (0.01) during the second half.

Construction sector witnessed a huge increase in employment. During 1999-2000, there were 17.54 million workers employed in this sector, which increased to 26.02 million in 2004-05. Employment has increased by 8.48 million workers at the rate of 8.21 per cent per annum. But during 2004-05 to 2009-10, employment increased to the tune of 18.06 million realizing an annual growth rate of 11.12 per cent in spite of the recession period of 2008.

Analysis of state-wise construction sector employment indicates that the share of construction sector employment in India was highest in Uttar Pradesh (17.8 percent), followed by Rajasthan (11.8 percent), and Tamil Nadu (6.9 percent). On the other hand, the share of construction sector employment in the total state employment was highest in Tripura (35.7 percent), followed by Jharkhand (21.0 percent), Rajasthan (19.2 percent), and similar trend was observed in other states also.

Regarding the state-wise distribution of Net State Domestic Product (2004-05 prices) for real estate services, it appears that there are wide inter-state disparities (Appendix I). For instance, Maharashtra alone accounted for one-fifth of the total share among the states. The four Southern states, namely, Tamil Nadu, Andhra Pradesh, Karnataka and Kerala formed just more than one-third of the total share of states. The relative share of Uttar Pradesh and Delhi each was just less than one-tenth. It follows further from the Appendix I that during 2004-05 – 2009-10, the relative proportion of the real estate services in total increased marginally from 9.3 per cent to 9.5 per cent. Among the states, Tamil Nadu witnessed the most pronounced increase. The major states realizing moderate increase were Andhra Pradesh, Karnataka, Kerala, West Bengal, Haryana, and Delhi. On the other hand, a number of states recorded a proportionate fall in their share in total. These included Maharashtra, Madhya Pradesh, Gujarat, Assam, Bihar, Chhattisgarh, Orissa, Punjab, Jharkhand, Uttar Pradesh, Rajasthan, etc. The Net State Domestic Product of construction sector during 2009-10 was highest in Himachal Pradesh (19.8 percent) followed by Arunachal Pradesh (19.2 per cent) and J & K state (17.0 percent) (Appendix I).

1.4 Real Estate and Construction

The four factors that influence real estate are (i) demographics, (ii) interest rates, (iii) economy, and (iv) government policies. Demographic statistics are often overlooked but the significant factor that affects is how real estate is priced and what types of properties are in demand. The customer profiles has, in the past seven years veered increasingly towards the young, working population with strong incomes and a large appetite for mortgage loans (Jyoti, 2010). Changes in interest rates can greatly influence a person's ability to purchase a residential property. That is because, as the interest rates fall, the cost to obtain a mortgage to buy a home decreases, which creates a higher demand for real estate, and this pushes prices up. Conversely, as interest rates rise, the cost to obtain a mortgage increases, thus lowering the demand and prices of real estate. The overall health of the economy is generally measured by economic indicators such as the GDP, employment data, manufacturing activity, the prices of goods, etc. Government policies including tax credits, deductions and subsidies are some of the ways through which the government can temporarily boost the demand for real estate for as long as they are in place.

India's booming infrastructure sector is fuelling demand for all kinds of construction equipments. Before opening up of the Indian economy, and the entry of international majors, much of infrastructure development and construction in the real estate sector was done manually.

But with the infrastructure sectors undergoing a dramatic change – with 60-storeyed skyscrapers being built in cities like Mumbai, and thousands of kilometers of expressways and highways being laid across the sub-continent – builders and contractors are acquiring sophisticated equipments to execute the multi-million-dollar projects. For the construction-equipment sector, which has adapted rapidly to the changed scenario, this is indeed a good news, as it paves the way for an exciting future (Indo-Italian Chamber, 2008).

In the years ahead, the construction industry in India has to overcome various challenges with respect to housing, environment, transportation, power or natural hazards. Technocrats associated with the Indian construction industry need to employ innovative technologies and skilled project handling strategies to overcome these challenges. The outstanding performance under demanding situations in the past will stand in good stead and give confidence to the Indian construction industry to bring about an overall development in the mega-projects, and improved work conditions (Laskar and Murthy, 2004)

1.5 Importance of Real Estate and Construction

Real estate and construction sector plays a crucial role in the Indian economy. The real estate and construction industry has significant linkages (both direct and indirect) with nearly 300 sectors like cement, steel, paints, and building hardware which not only contribute to capital formation and generation of employment and income opportunities, but also catalyze and stimulate economic growth. Therefore, investment in housing and real estate activities can be considered a barometer of growth of the entire economy (Economic Survey, 2011-12). It is estimated that the overall employment generation in the economy on account of additional investment in the construction/housing sectors is eight times the direct employment (IIM Ahmedabad, 2005). In view of the substantial use of cement, steel, marble/ceramic tiles, electrical wiring, PVC pipes and various types of fittings; construction activity has a multiplier effect on industrial demand for these items (MoHUPA, 2007). Estimates show that for every rupee that is invested in housing and construction, 0.78 gets added to GDP. Housing ranks fourth in terms of the multiplier effect on the economy and third amongst 14 major industries in terms of total linkage effect. Keeping the importance of this sector in mind, for the first time, a separate chapter on real estate and construction was included in the Tenth Plan Document of the Planning Commission.

1.6 Composition of Real Estate and Construction Sector

The activities of the real estate sector encompass the housing and construction sectors also. As per National Industrial Classification, Central Statistical Organisation, Government of India, the major activities of real estate include:

- Purchase, sale letting of leased residential buildings
- Purchase, sale letting of leased non-residential buildings
- Operating of real estate of self-owned residential buildings

- Operating of real estate of self-owned non-residential buildings
- Developing and subdividing real estate into lots
- Lessors of real property
- Real estate activities with own or leased property n.e.c.
- Real estate activities on a fee or contract basis. [This class includes buying, selling, renting, managing and appraising real estate on a fee or contract basis. This class also includes the service activities provided by Munshi.]
- Residential (Housing & Development)
- Industrial (Industrial Parks, Factories, Plants, etc.)
- Corporate (Office, Research Centres)
- Commercial (Retail: Malls, Shops, Showrooms; Hotels; etc.)

Construction/Infrastructure

- Roads
- Railways
- Urban infrastructure (improved housing, waters supply and sanitation, schools universities, health and security, etc.)
- Ports
- Airports
- Power

1.7 Real Estate and Construction in India

Real estate has historically been viewed as a local phenomenon. This combination of local knowledge and predominantly local tradability was the primary reason why discussions of globalization in the 1990s and earlier, overlooked the real estate industry as a possible participant in the ongoing phenomenon of increasing global economic integration. In the last decade, however, globalization has increasingly involved the internationalization of services sectors as much as of manufacturing, and the various sub-sectors of the real estate industry have been enthusiastic participants in this global surge. Builders, brokerage firms, consulting and services firms, real estate finance firms and investors have extended their area of operations beyond local markets to a world-wide base (Bardhan and Kroll, 2007). Developments in the real estate sector are being influenced by the developments in the retail, hospitality and entertainment (e.g., hotels, resorts, cinema theatres) industries, economic services (e.g., hospitals, schools) and information technology (IT)-enabled services (e.g. call centres) etc. and vice versa (Planning Commission, 2002).

In India, Construction has accounted for around 40 per cent of the development investment during the past 50 years. At present, around 10 per cent of the nation's working population depends on construction sector for its livelihood. The Indian construction industry employs

around 44 million people. The total market value of under-construction projects in India has crossed the \$100-billion mark for the first time in 2010. The industry is expected to become 120 billion dollars in size by 2012. In the latter part of the decade (2000s), the working force moved away from agriculture was absorbed as unskilled ones in construction sector (Indian Construction Industry,2012). Construction accounts for nearly 65 per cent of the total investment in infrastructure and is expected to be the biggest beneficiary of the surge in infrastructure investment over the next five years. Investment in construction accounts for nearly 11 per cent of India's Gross Domestic Product. Nearly ₹ 239.68 billion is likely to be invested in the infrastructure sector over the next five to 10 years – in power, roads, bridges, city infrastructure, ports, airports, telecommunications, which would provide a huge boost to the construction industry as a whole. Investment into this sector could go up to ₹ 93.36 billion by 2010 (Indo-Italian Chamber, 2008).

The 12th plan envisages a growth rate of over 8 percent per annum, and would need infusion of substantial capital, estimated at over Rs.50 lakh crores to build India's physical Infrastructure. The development of physical infrastructure, through such massive investments would need commensurate growth in delivery potentials of construction industry which in turn necessitates evolution of reformed practices and establishment of institutions (Planning Commission, 2012).

A joint study by Price Waterhouse Coopers (PWC) and Urban Land Institute of India (ULI) has cited India as one of the emerging markets for real estate sector in the Asia Pacific region. The study classifies India as semi-transparent market in the Asia Pacific region, and ranks it at 41st on a global transparency scoring scale. It places Mumbai (ranked 3rd), New Delhi (5th), and Bangalore (10th) among the top 10 prospective cities for real estate investment for the year 2011. Mumbai and New Delhi in that order capture the top two places in terms of city development prospects for the year 2011.

Box 1: Factors for Growth of Real Estate and Construction Sector

Demand Factors	Supply Factors
<ul style="list-style-type: none">• Increasing urbanization• Demographic dividend• Rise of middle income group and their increasing affordability to purchase houses• Significant growth of services sector particularly of finance, banking, insurance, software, communication, etc. creating demand for commercial and residential space• Phenomenal growth of organized retail trade, shopping malls, etc. leading to increasing demand for commercial and residential space	<ul style="list-style-type: none">• Increased Foreign Direct Investment (FDI) coupled with domestic investment• Favourable lending patterns of banks/financial institutions for housing and commercial loans• Increase in Plan Outlay, Gross Domestic Savings, Gross Domestic Capital Formation,• Increased share of Construction Sector in GDP• Increased allocation for Pradhan Mantri Gram Sadak Yojana (PMGSY), Indira Awaas Yojana (IAY), etc.• Increasing investment in infrastructure

1.8 Issues for the Real Estate and Construction Sector

For conducting the study, certain probing research questions were evolved which are as below:

- What has been the pattern of growth of employment in real estate and construction sector?
- Which factors have led to growth of employment in this sector?
- Which are the constraints/impediments inhibiting the growth of employment in this sector? and
- Which policy measures are to be adopted to contain these constraints/impediments?

1.9 The Study Design

The study is mainly based upon the secondary data from NSSO, CSO, Ministries/Departments, and Industry associations/Sector-specific associations etc. In addition, various reports/documents pertaining to labour regulations, industrial policy, sectoral lending pattern of banks/financial institutions were also examined. For identifying various issues pertaining to employment and output, Focus Group Discussions (FGDs) with various stakeholders i.e. Government Officials, representatives from associations/enterprises, etc. were conducted at various locations. To

supplement it, concerned associations were contacted. A structured questionnaire was canvassed to these associations and detailed discussions were held on sector-specific issues. In the absence of sector-specific universe, in consultation with these associations, some enterprises were identified across the country. A structured questionnaire was canvassed to these enterprises and detailed discussions about the sector were held. A list of the representatives of the associations/organizations contacted is placed at Appendix II.

CHAPTER II

Growth and Dynamics of Investment and Employment

2.1 Growth of Output in Real Estate and Construction in India

Prior to the year 1999-2000, the GDP contribution of real estate services (including real estate, ownership of dwellings, and business services) remained constantly very low. For instance, during 1993-94 - 1999-2000, the contribution of real estate services to GDP could increase from Rs. 317 crore in 1993-94 to just Rs. 413 in 1999-2000 (at 1993-94 prices), accounting for only 0.04 per cent at both the times. It follows from the data in Table 2.1 that at constant prices, the GDP share of the real estate sector (including ownership of dwellings and business services) to GDP fluctuated a lot. From 2005-06 - 2007-08, it kept on declining reasonably, but in 2009-10, it increased significantly. After that, it has been following a decelerating trend. Currently, about 5 per cent of India's GDP is contributed by the housing sector.

The share of construction sector in the total GDP during 1999-2000 was 6.5 percent which increased to 7.9 percent in 2005-06 and after fluctuating in between remained at 7.9 percent in 2010-11. The relative increase in construction sector might have paved the way for increase in employment in the sector.

Table 2.1: Percentage share of Gross Domestic Product at Factor Cost in Real Estate and Construction Sector

Sl. No.	Year	Real Estate	Construction
1	2005-06	10.6	7.9
2	2006-07	9.5	8.0
3	2007-08	8.7	8.1
4	2008-09	10.4	8.0
5	2009-10@	7.8	7.9
6	2010-11*	6.9	7.9

@Provisional estimates; *Quick estimates

Note: Real Estate Includes Real Estate, ownership of dwellings and Business Services.

Source: Central Statistical Organisation, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

The Indian real estate market size is expected to touch US\$ 180 billion by 2020. Recent growth in the Indian economy has stimulated the demand for land and developed real estate across industries. The demand for residential, commercial and retail real estate is rising throughout India, accompanied by increased demand for hotel accommodation and improved infrastructure. India is going to produce an estimated 2 million new graduates from various Indian universities during this year, creating a demand for 100 million square feet of office and industrial space.

Further, large number of Fortune 500 and other reputed companies will attract more companies to initiate their operational bases in India, thus creating more demand for corporate space.

Due to increase in investment in infrastructure, construction activities have increased tremendously. According to 10th Five Year Plan, there was an actual investment of Rs.9,06,074 crore in infrastructure development. Highest investment was made in Electricity (37.55 per cent) followed by Roads & Bridges (14.03 percent) and Irrigation including watershed (11.78 percent). During the 11th Plan, a total of Rs. 20, 54,205 crore of investment was made according to revised projections, which increased more than double (2.27 times) from the 10th Plan. During the 11th Plan, according to revised projections, highest investment was made in Electricity (32.06 percent) followed by Telecommunications (16.80 percent) and Roads & Bridges (13.57 percent) (Planning Commission, 2010). The increased investment in infrastructure projects leads to construction in organized construction sector, which in turn results in employment creation, particularly for skilled persons.

2.2 Housing Development Scenario

Increase in urbanisation and urban population

People are continuously migrating from rural to urban areas for employment pushing the demand for housing. According to 2001 Census, out of the total population of 102.9 crore in India, 29.4 crore was residing in urban areas which was 28.6 per cent of the total population. In 2011 Census, out of the total population of 121.0 crore, 45.6 crore were residing in urban areas, which was 37.7 per cent of total population. From 2001 to 2011 there was an increase of 9.1 per cent of population in urban areas leading to huge additional housing requirements. As per 2001 census, the total number of houses in India was 259.09 million of which only 233.28 million were occupied; the rest were found vacant. According to 2011 Census, there are 330.83 million houses in India, out of which 24.67 million (7.5 per cent) were vacant and 306.16 million (92.5 per cent) were occupied. During 2001 and 2011 census there was an increase of 71.74 million houses which is 27.68 per cent growth in number of houses between two censuses. Rural-urban break-up of houses indicates that 67 per cent of houses were in rural areas and remaining 33 per cent were in urban areas.

However, around 5.03 per cent of India's population is still houseless (2001 Census) (including 4.03 percent institutional population). The three major bottlenecks in the construction of houses are: (a) lack of knowhow on making disaster-resistant housing, (b) lack of knowhow for effectively using local material in house construction, and (c) inadequate finances. The State Governments in association with the Central Government have undertaken several housing projects to provide houses to the needy.

According to the Report of the Technical Group on estimation of housing shortage constituted in the context of formulation of Eleventh Five-Year Plan, housing shortage is estimated to be

around 24.71 million. About 99 per cent of such households are from Economically Weaker Sections (EWS) and low-income groups (Planning Commission, 2007). It has been estimated that by 2025 i.e. in 14 years, nearly half a billion Indians will need new urban homes. This is equal to the needs of China, North America and Western Europe put together. In this context, the rationale for an aggressive and ambitious policy of affordable housing cannot be overemphasized. This aspect is elaborated elsewhere in the report (FICCI, 2011). The infrastructure of India's towns is at present very poor. Sewage, water, sanitation, roads and housing are woefully inadequate for their inhabitants. A combination of several initiatives of urbanization needs to address the basic amenities of the urban poor who are largely employed in the informal sector and suffer from multiple deprivations and vulnerabilities that include lack of access to basic amenities such as water supply, sanitation, health care, education, social security and decent housing (Planning Commission, 2011).

Housing development: Policies and programmes

The 1994 Policy in its section on "Goals" sought to increase supply of land serviced by basic minimum services with a view to promoting a healthy environment. The National Housing & Habitat Policy, 1998 laid greater emphasis on the aspect of "Habitat" as a supplementary focus to housing. The National Housing and Habitat Policy, 2007 seeks to enhance the spotlight on 'habitat' with a 'Regional Planning approach' so as to further deepen the role of Government as a 'facilitator' and 'regulator.' The Policy reaffirms the importance of small and medium urban agglomerates/towns which have potential for future urban growth. The housing business is largely in the private sector. The Government should consider using land as leverage for market based strategies and Public Private Partnerships (PPP) models to greatly improve the scope of affordable housing for weaker sections (Planning Commission, 2011). Even as first-time buyers are exhausting their savings to buy a home, realty rates in India are going through the roof. The property prices increased by 12 per cent propelling India to third position among 53 countries where prices have appreciated in the past year (*The Times of India*, 2012).

2.3 Rural Housing

For fulfilling the need for rural housing and tackling housing shortage particularly for the poorest, the government had taken a number of initiatives. Some are as below:

Indira Awas Yojana

The Indira Awaas Yojana (IAY) is a flagship scheme of the Ministry of Rural Development to provide houses to the Below Poverty Line (BPL) families in the rural areas. It has been in operation since 1985-86. Rural housing is one of the six components of Bharat Nirman Programme. This large investment in rural housing under IAY had given a boost to the construction and housing sector. The data in Tables 2.2 and 2.3 give an overview of financial and physical performance under IAY. It follows from the tables that during the period 1999- 2000, an amount of Rs. 1907.64 crore was spent, and as many as 9,27,659 houses were constructed. It merits mention here that between the two periods i.e. 1999- 2000 - 2004-05 and 2004-05 - 2009-

10, the extent of expenditure and number of houses constructed has recorded a substantial increase in the first period, while a phenomenal increase was witnessed in the later period. Since its inception till date, about 218.69 lakh houses have been constructed/upgraded by spending an amount of Rs.52365.76 crore (upto 11/01/2010).

Table 2.2: Financial targets and achievements (Rs. crore) under Indira Awas Yojana (IAY), 1999-2000 - 2009-2010

(As on 31st March)

Description	1999-2000	2004-05	2009-10
Opening Balance as on 1 st April	501.02	477.74	4321.81
Total allocation	2132.34	3279.25	13181.32
Total release of funds	1917.62	3842.52	13295.22
Total Available Funds (TAFs)	2418.63	4320.26	17956.54
Total utilisation of funds	1907.64	3262.09	13465.73
%age of Utilisation on TAFs	78.87	75.51	74.99

Sources: Annual Reports of various years, Ministry of Rural Development, Government of India, New Delhi

Table 2.3: Physical Achievements (numbers), under Indira Awas Yojana (IAY), 1999-2000 - 2009-2010

(As on 31st March)

Description	1999-2000	2004-05	2009-10
Annual target for the Year	1271619	1562356	4052243
Total houses sanctioned during the year	N. A.	N. A.	4227000
Total houses under construction	420345	492396	2273030
Total houses completed	925679	1521305	3385619
%age of target achieved	72.80	97.37	83.55

Sources: Same as for Table 2.2

Rajiv Awas Yojana (RAY)

In pursuance of the Government's vision of creating a Slum-free India, a new scheme 'Rajiv Awas Yojana' (RAY) was launched in June, 2011. The Phase I of the scheme is for a period of two years from the date of approval of the scheme with a budget of Rs. 5,000 crores. The Scheme is expected to cover about 250 cities, across the entire country by the end of 12th Plan (2017). As in December, 2011, 6 States have completed the process of Slum Survey & Entry into Slum MIS; 27 States/UTs have initiated the process of GIS Mapping & 17 States have initiated preparation of City/State Plans of Action. The Affordable Housing in Partnership Scheme, which is intended to encourage PPPs for creation of affordable housing stock is dovetailed into RAY.

2.4 Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

For the improvement of infrastructure and basic services to the poor, as a Mission Mode approach, the JNNURM was launched in December 2005. The Mission comprises two Sub-Missions – one for Basic Services to the Urban Poor (BSUP) and the other for Urban Infrastructure and Governance (UIG). BSUP is being implemented in select 65 cities. The duration of the Mission is 7 years (2005-2012). Smaller cities/towns are covered under Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) and Integrated Housing and Slum Development Programme (IHSDP). Under BSUP & IHSDP, by 31st December, 2011, more than 15.70 lakhs houses were sanctioned and more than 5.2 lakhs houses were completed. As many as 1517 projects costing more than Rs. 39,931crores have been approved. Besides attracting private investment, unlocking the value of land for financing infrastructure projects, with intelligent use of Impact Fees and higher FSI, should form a core element of policy initiatives. Better management of property taxes and realization of fair user charges are other sources which need to be tapped by urban local bodies (Planning Commission, 2011).

2.5 Employment Scenario

The distribution of employment by National Industrial Classification for real estate and construction sector is given at Appendix III. It appears from the Appendix that within the real estate sector, just half of employment is concentrated in sub-sector, namely, real estate activities on a fee or contract basis. It includes all those dealers who deal in buying, selling, renting, managing and apprising of real estate on a fee or contract basis. With the expansion of construction activity, this sub-sector has grown a lot. There has been a mushrooming of property dealers, real estate agents, and alike Most of them are doing the marketing i.e. sale, purchase, renting, etc. on their own, while some of them are the authorized agents of the big real estate developers for marketing their property. Within the real estate, other significant sub-sectors are purchase, sale letting up residential buildings; and real estate activities with own or leased property, n.e.c. accounting for 21.46 per cent and 14.67 per cent respectively. Other somewhat reasonable sub-sector emerges as operating of real estate of self-owned residential building (7.94 per cent).

Within the construction sector, the bulk of the workers were engaged in NIC 45201, namely ‘General Construction’ (About 75 percent). It could be supported by the fact that in recent years, there has been an enormous expansion of construction of residential apartments/buildings across the country. The other major sub-sector which employs 16 per cent of workers is ‘Construction and maintenance of roads, rail-beds, bridges, tunnels, pipelines, rope-ways, ports, harbours, runways, etc. Nearly 3 per cent of workers are engaged in the construction work such as glazing, plastering, painting etc.

The state-wise employment in real estate reflects a highly dispersed scenario. The four Southern region states taken together accounts for around 42 per cent of the real estate activity in the country (Appendix IV). Among these states, the highest proportion was of Karnataka i.e. 13.53 percent and lowest of Kerala (7.73 per cent). Individually, the most prominent states emerged were Maharashtra (15.34 per cent) and Delhi (14.61 per cent).

The other reasonably important states were Uttar Pradesh accounting for 5.90 per cent, followed by Haryana (5.48 per cent), and Rajasthan forming 5.30 per cent of the total. Appendix IV reflects further that in total employment, the share of real estate sector is just 0.15 per cent. Among the states/UTS, the highest share was reported by Delhi i.e. around 2 per cent, while in most of the states/UTs, it was well below the national average of 0.15 per cent, while in some states it was above the national average. During 2009-10, regarding state's share in total construction sector employment – it was highest in Uttar Pradesh i.e. 17.82 per cent, followed by Rajasthan i.e. 11.87 per cent, Andhra Pradesh 7.14 per cent and so on. Furthermore, the percentage share of construction sector employment in total state employment was highest in Tripura i.e. 35.70 per cent, followed by Jharkhand 21.04 per cent, and Rajasthan 19.23 per cent and so on.

It follows from Table 2.4 that the real estate sector is characterized by the dominance of educated, professional, technical and skilled personnel. It is evident from the data in Table 2.4 that occupational pattern in real estate is dominated largely by other associate professionals (37.3 per cent) and corporate managers (35.1 per cent). Other noticeable occupations were other professionals (10.0 per cent), followed by office clerks (6.0 per cent), personnel and protective services (5.5 per cent) and so on. The table reflects further that regarding the construction sector workers, highest percentage of workers covered under NCO 93 includes Labourers in Mining, Construction, Manufacturing & Transport (51.64 percent); followed by NCO 71 i.e. Extraction and Building Trade Workers (36.52 percent); and NCO 92 i.e. Agriculture, Fishery and Related Labourers (4.33 percent). Just 1.99 percent of workers were engaged in NCO 12 as Corporate Managers and 1.99 percent were engaged in NCO 72 as Metal, Machinery and Related Trade Workers. Around 4.41 of workers were in Other Occupations.

Table 2.4: Distribution of Real Estate and Construction Sector Workers according to National Classification of Occupation (2004) in 2009-10 in India

Real Estate				Construction			
NCO	Description	Number	Percentage	NCO	Description	Total Workers	Percentage to total
34	Other Associate Professionals	262087	37.3	93	Labourers in Mining, Construction, Manufacturing & Transport	22760090	51.64
12	Corporate Managers	246287	35.1	71	Extraction and Building Trade Workers	16098584	36.52
24	Other Professionals	70548	10.0	92	Agriculture, Fishery and Related Labourers	1907144	4.33
41	Office Clerks	42288	6.0	12	Corporate Managers	874879	1.99
51	Personal and Protective Services	38490	5.5	72	Metal, Machinery and Related Trade Workers	490198	1.11
	Others	-	-		Others	1946292	4.41
	Total	702650	100.0		Total Workers	44077172	100.00

Note: 'Others' includes other than described in the table.

Source: NSS report on Employment and Unemployment 66th Round: 2009-10, Ministry of Statistics and Programme Implementation, Government of India, New Delhi

CHAPTER III

Investment and Employment Scenario

3.1 Contribution of Real Estate and Construction in Gross Domestic Product

In the last 30 years, India's population has doubled, and its economy as measured by Gross Domestic Product (GDP) at market prices has grown by over 50 times. The GDP growth rate, which till late 1970s was growing at 3.5% per annum, was observed to be about 6.0% in the 80s and early 90s and subsequently touched 8.0-9.0% in the 2000s. Rapid growth in India's GDP has been a result of policy interventions undertaken in the 1990s towards improving the business climate of the country, which translated into increased investment by domestic and foreign institutional investors. It appears from the data in Table 3.1 that during 2001-02 - 2004-05, in comparison to real estate services and construction, India's GDP increased at a much fast pace. But on the other hand, during 2004-05 - 2009-10, GDP in real estate services and construction rose at a faster pace than that of India's GDP. Currently, about 5 per cent of India's GDP is contributed by the housing sector. With institutional credit for housing investment growing at a CAGR of about 18 to 20% per annum in the next three to five years, the housing sector's contribution to GDP is likely to increase to 6% (Economic Survey, 2011-12).

Table 3.1: Growth of GDP by Sectors in India, 2001-02 - 2015-16 (UD \$ Billions)

Sector	2001-02	2004-05	2009-10	2015-16*
Real estate services	30	59	118	197
Construction	28	51	98	164
India's GDP	242	756	1240	2080

*Projected; Source: Royal Institution of Chartered Surveyors (2011), *Real Estate and Construction Professionals in India by 2020, India*

3.2 Investment Patterns

Fiscal incentives for the housing sector provided in successive budgets together with liberal investment and credit policies and reforms brought the housing and real estate sector to the centre stage of the Indian economy. The policy measures include permission for FDI in townships, housing, built-up infrastructure, and construction development projects, including SEZs, under the automatic route, which has attracted foreign investors into this sector.

Plan outlay

As per the available data, of plan outlay on housing sector during 1999-2000 - 2003-04 (Table 3.2), has increased significantly. Though during the one year i.e. from 1999-2000 to 2000-01, it declined marginally, yet afterwards it rose consistently. The increased outlay resulted in rising proportion of housing sector in total from 2.2 per cent in 1999-2000 to 3.8 per cent in 2003-04. The much-required capital in the last few years has facilitated widespread development of residential, office, retail and hotel space in the country. It has also been instrumental in organizing the market to a large extent and bringing it closer to real estate markets in other developing countries around the world. The most exciting fact about these developments is the growth that we witness today is a sign of the emerging far-reaching and long-term trends that will drive robust growth for the sector in the years to come (National Realty, 2009).

Table 3.2: Year-wise Outlay (actual expenditure) on housing sector, 1999-2000 - 2003-04

(Rs. Crore)	
Annual Plan	Actual amount spent
1999-2000	3516.4 (2.2)
2000-01	3588.4 (1.9)
2001-02	6674.5 (3.6)
2002-03	7685.0 (3.7)
2003-04	8476.0 (3.8)

Note: Figures in parentheses denote percentage to the total

Sources: Planning Commission, Government of India, New Delhi

During 1999-2000, total annual plan outlay was Rs.160, 608 crore which increased to Rs. 263, 665 crore in 2004-05 and Rs.762, 465 crore in 2009-10. From 1999-2000 to 2004-05 the outlay increased 1.64 times, while it increased 2.89 times from 2004-05 to 2009-10. Emphasis was also given on housing and urban development. Owing to comparatively higher outlay in the second half of the decade, the employment growth was higher in this period.

It merits mention that in the second half of the decade i.e. during 2004-05 – 2009-10 investment in Government sponsored infrastructure and employment generation programmes increased by rapid strides. For instance, under Prime Minister's Gram Sadak Yojana (PMGSY), during 2000-01 to 2004-05, the expenditure remained almost stagnant. But during 2004-05 to 2009-10, it increased phenomenally from Rs. 2,468 crores to Rs. 18,500 crores. During the second half of the decade, the launching of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) paved the way for heavy investment in labour intensive infrastructure projects. The approved outlay under MGNREGS during 2008-09 was Rs. 30,000.19 crores, which increased substantially during 2009-10 to Rs. 39,100 crores.

Foreign Direct Investment (FDI)

Earlier the real estate market was being characterized by small players. None of the local developers had a truly national presence and large companies were still not fully involved in real estate development. None of the current players had the financial strength to invest in large-scale development projects. Till 2005, FDI in the real estate was allowed only for the development of integrated townships. The Government of India vide Press Note No. 2 of 2005 permitted FDI up to 100% under the 'automatic route' in townships, housing, built-up infrastructure and construction development projects. The inflow of funding catalysed the organized development. However, in 2008 the global meltdown in real estate produced a corresponding downturn in the Indian real estate sector. The growing flow of FDI into Indian real estate has been encouraging increased transparency. Developers in order to attract funding, have revamped their accounting and management systems to meet due diligence standards. Customers have also benefited from a hassle-free accounting system. The modern real estate developer is keenly informed about market trends, basing his information on market research and rich experience. Young business leaders, armed with management degrees and international exposure, have also added value to this positive trend.

It appears from Table 3.3 that during the period 2004-05 – 2009-10, the FDI inflows increased phenomenally in India. During this period, the total inflows increased by around six times. On the other hand, during the same period, the inflows in housing & real estate sector rose by more than 200 times. The huge inflows of FDI in these sectors have facilitated a lot in increasing output and employment in these sectors. Relaxing the FDI regulations for the real estate sector opened the floodgates for foreign capital inflow into realty sector. However, FDI in 2010-11 came down drastically from outpouring in 2009-10 to 2010-11. The level of FDI in the real estate sector, which was at a low in 2010-11 is unlikely to show a quantum jump this year, courtesy slow GDP growth rate, high debt levels of the real estate developers, labour shortage, economic crisis in the US and Europe – according to experts (Business Standard, 2011).

Table 3.3: Sector-wise and year-wise FDI equity inflows (US \$ million)

Sector	Period				
	2004-05	2005-06	2006-07	2009-10	2010-11
Housing & Real Estate	5.85	46.95	468.56	2,935.37	1,226.60
Construction	146.20	182.69	988.45	2,855.33	1,103.02
Total	3,218.69	5,539.72	12,491.77	25,834.41	19,426.93

Source: Department of Industrial Policy and Promotion, Government of India, New Delhi

The Government of India in March 2005 amended existing norms to allow 100 per cent FDI in the construction business. This liberalization act cleared the path for foreign investment to meet the demand into development of the commercial and residential real estate sectors. It has also encouraged several large financial firms and private equity funds to launch exclusive funds targeting the Indian real estate sector.

Out of the total FDI received so far in housing, real estate and construction, 51.37 per cent was in housing and real estate, and 48.63 per cent was in construction. In 2010-11 FDI was 52.94 per cent and 47.06 per cent respectively in both sectors. But during 2005-06, 20.52 per cent FDI was in Housing and Real Estate and 79.48 per cent was in Construction. Indian construction received majority of FDI from Mauritius (55.15 per cent) followed by Cyprus (8.79 per cent) and Singapore (8.74 percent).

Data indicate that there is a huge influx of FDI in India in all sectors, especially in Construction, Housing and Real Estate sectors which led to increase in construction activities and thereby created employment in both organized and unorganized sectors of construction. The FDI distribution among various sub-sectors of construction sector indicates that majority of FDI was received in Construction (others) (88.58 per cent), followed by Roads and Highways (10.80 per cent) and warehouses (0.62 per cent).

3.3 Lending Patterns of Financial Institutions

One of the main reasons for rapid growth of housing sector in the country has been the astronomical increase in housing loan over a period of time. This growth was the result of a number of factors like rapid growth of services sector, particularly finance and software, growth of middle-class segment, strengthening of nuclear family system, high housing rentals, etc. It appears from Table 3.4 that during 2000 to 2005, housing and real estate loans increased substantially. But after 2005 there was an abrupt rise both in housing and real estate loans. Within one year only, in volume terms, both the loans became more than double and afterwards continued to increase substantially. According to a study conducted by Housing Development and Finance Corporation Ltd, over a period of time, the affordability factor which denotes the number of years' income to purchase a house has improved (Sinha, 2012). For instance, in 1999 the affordability factor was 6.6, which declined to 4.7 in 2005, and remained at the same level in 2010 also.

Table 3.4: Gross Bank Credit to Housing and Rural Estates, 2000 to 2010-11

(Rs. crore)

Year	Housing Loans	Real estate loans
March 2000	14,100	1,644
March 2001	16,137	1,783
March 2002	22,346	2,596
March 2003	36,587	5,894
March 2004	51,981	5,577
March 2005	75,173	10,612
March 2006	185,203	26,723
March 2007	230,994	45,206
March 2008	255,653	62,276
March 2009	279,365	92,421
March 2010	300,929	92,128
March 2011	346,110	111,836

Notes: 1. Data are provisional and relate to selected commercial banks which cover around 90-95 per cent of total non-food credit extended by all scheduled commercial banks.
 2. Gross bank credit data include bills rediscounted with Reserve Bank, Exim Bank, other financial institutions and inter-bank participations.

Sources: Annual Reports of various years of Reserve Bank of India, New Delhi

3.4 Domestic Savings and Capital Formation

As per the data available from the Central Statistical Organisation (CSO), the net domestic savings is on increase since 1999-2000. Gross domestic saving was Rs. 4,84,256 crore, which increased to Rs.1,000,424 crore during 2004-05, and it further increased to Rs. 21,82,970 crore during 2009-10. Gross domestic savings increased about two times from 1999-2000 to 2004-05, while it increased 2.18 times from 2004-05 to 2010-11. It is assumed that in Indian system, savings are mainly used for purchasing or construction of houses and property for living and investment purposes. Increase in savings ultimately has a positive impact on the construction activities which in turn increases employment in construction sector.

Gross Domestic Capital Formation (GDCF) has also increased during the decade. The GDCF at current prices was Rs.506,244 crore in 1999-2000 which increased to 1,013,761 crore in 2004-05, and it further increased to 2,332,380 crore in 2009-10. The GDCF increased 2.00 times from 1999-2000 to 2004-05 and 2.30 times from 2004-05 to 2009-10. While GDCG at constant prices has increased 1.57 times from 1999-2000 to 2004-05, it increased 2.28 times from 2004-05 to 2009-10.

Capital formation in construction was Rs. 5,504 crore during 1999-2000 which was 1.1 percent of total capital formation in all sectors and 0.3 percent of total GDP in all sectors. Capital formation increased to Rs.25818 crore during 2004-05 which was 3.5 percent of total capital formation and 1.1 percent of total GDP in all sectors. During 2009-10, capital formation in construction sector further increased to Rs.8, 62,910 crore. Data indicate that a massive increase is observed in the decade in capital formation in construction sector which is very high among sectors. This increase in capital formation in all sectors and especially in construction sector led to increase in construction activities and hence increase in employment in construction sector.

3.5 Employment Scenario

It appears from Table 3.5 that in real estate sector, largest chunk of employment continues to be in the unorganized sector. Nevertheless, during the decadal period i.e. 1999-2000 – 2009-10, the relative proportion of employment in organized sector increased by about two and a half times. In the year 1999-2000, the relative proportion of organized sector in employment was just 5.5 per cent, which declined further to 4.0 in 2004-05. But during 2004-05 to 2009-10, it increased sharply to 12.3 per unit. This phenomenal increase might be due to allowing of 100 per cent FDI in real estate and development of townships. The increasing inflow of FDI and increasing investments in real estate sector might have paved the way for large real estate developers leading to a rise in organized sector employment.

Analysis of data further revealed that the share of total employment in construction in organized and unorganized sector was 26.3 per cent and 77.7 per cent respectively in 1999-2000. Percentage share of employment in organized construction has decreased from 26.3 per cent to 24.4 per cent during 1999-2000 to 2004-05, while employment in organized sector has increased from 24.4 to 33.8 per cent during 2004-05 to 2009-10. During 2009-10 the difference between employment in organized and unorganized sector has been reduced substantially. It indicates that construction activities in organized sector have increased substantially in spite of recession.

Table 3.5: Distribution of workers (in million) in Real Estate and construction sector in India by Sector

Sl. No.	Sector	Year					
		1999-2000		2004-05		2009-10	
		Real Estate	Construction	Real Estate	Construction	Real Estate	Construction
1.	Organised	0.01 (5.5)	4.62 (26.3)	0.02 (4.0)	6.35 (24.4)	0.09 (12.3)	14.92 (33.8)
2.	Unorganised	0.17 (94.5)	12.92 (77.7)	0.48 (96.0)	19.66 (75.6)	0.62 (87.7)	29.16 (66.2)
3.	Total	0.18 (100.0)	17.54 (100.0)	0.50 (100.0)	26.02 (100.0)	0.70 (100.0)	44.08 (100.0)

Note: Figures in parentheses denote percentage to the total

Source: Report on “Working Group on creating employment in the 12th Plan”, Planning Commission, 2011, New Delhi

The data in Table 3.6 give an overview of state-wise employment in real estate and construction sector at two points of time i.e. 2004-05 and 2009-10. Regarding real estate employment, in terms of volume of employment, the four Southern region states, and Maharashtra and Delhi accounted for the major share of employment. It merits mention here that during a span of only five years i.e. from 2004-05 - 2009-10, the real estate employment in Delhi increased almost tenfold. Other major states which witnessed a phenomenal increase were Karnataka, Chhattisgarh, Andhra Pradesh and Maharashtra. It is interesting to note that some states namely Orissa, Punjab, Rajasthan and Gujarat experienced a drastic fall in employment in real estate.

In construction, during the period 2004-05 – 2009-10, certain states like Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh, have witnessed a very sharp growth of employment. On the other hand, states like Maharashtra and Gujarat could achieve very little growth of employment. Chhattisgarh was the only state to have shown a decline in employment over a period of time.

Table 3.6: State-wise Distribution of Employment during 2004-05 and 2009-10 in Real Estate and Construction Sector in India

State/UT	Real Estate			Construction Sector			
	2004-05	2009-10	Compound Annual Growth Rate (%), 2004-05 to 2009-10	2004-05	2009-10	Compound Annual Growth Rate (%), 2004-05 to 2009-10	
Jammu & Kashmir	1890	2298	3.99	360779	478053	5.8	
Himachal Pradesh	292	692	18.84	358444	499824	6.9	
Punjab	23820	11361	-13.76	882227	1313659	8.3	
Haryana	19651	38478	14.38	725118	1068738	8.1	
Delhi	9455	102653	61.12	339807	280491	8.3	
Rajasthan	120794	37264	-20.96	2566448	5233601	15.3	
Uttar Pradesh	39478	41491	1.00	3708607	7854256	16.2	
Bihar	9260	12742	6.59	805454	2873470	29.0	
West Bengal	16120	29717	13.01	1455305	2048269	7.1	
Jharkhand	105	174	10.63	1187317	2121141	12.3	
Chhattisgarh	3235	12248	30.51	440772	405874	-1.6	
Madhya Pradesh	5177	5253	0.29	1121922	2222121	14.6	
Gujarat	10315	2878	-22.53	1050019	1266399	3.8	
Orissa	10526	0	-	1011363	1626523	10.0	
Maharashtra	47322	107776	17.89	2297653	2585583	2.4	
Andhra Pradesh	22972	73062	26.04	1836425	3147176	11.4	
Karnataka	24982	95099	30.65	1077236	1842847	11.3	
Kerala	28989	54291	13.37	1408260	1952271	6.7	
Tamil Nadu	57056	77789	6.40	1934900	30373448	9.4	

Source: Reports on Employment and Unemployment Surveys of 61st and 66th Rounds of National Sample Survey, Government of India, New Delhi.

CHAPTER IV

Implications of Technological Development and Outsourcing/sub-contracting on Employment

4.1 Technological Advancement

Rationale

In the recent times, technologies of both manufacturing and construction sectors have improved substantially, but not nearly to the same degree. Part of the reason for this different degree of improvement can be attributed to the basic differences between manufacturing and construction. Construction is essentially the process of moving and assembling materials and equipment into a completed, operational facility. Although many construction operations are repetitive, they are performed neither in a fixed sequence nor at a fixed location. Also, since construction unlike manufacturing rarely involves production of a standardized product, the demands on the material supply functions of buying, expediting, receiving, warehousing, and delivery are much more complex. For many of these reasons, the basic construction process of building stick by stick, piece by piece, has remained unchanged since the Middle Ages.

Advancements in technology have helped simplify lives and businesses in particular by making it faster and cost-effective. The realty and construction industry too is waking up to the benefits offered by technology and is looking at it as one of the solutions to tackle the labour crisis in the market. Citing the reasons for labour shortage, Naushad Panjwani, Executive Director, Knight Frank India says, “For the last few years, the shortage of skilled manpower is on the rise. With the urbanisation of rural India many projects are taking off in the non-metro destinations, hence migration has slowed down. With opportunities available closer to home, the preference is to stay put. Also, over the years many engineers have preferred to take up cushy ‘desk’ jobs over gruelling site jobs. Many engineers have excelled in finance and other glamorous jobs.” According to an Ernst and Young and FICCI report released last September, the industry is grappling with a 30% labour shortage. The gap is increasing ever since and the situation is expected to worsen as demand is expected to rise three-fold.

Technological developments in real estate and construction

Real estate and construction firms are feeling the pinch of skilled and unskilled labour shortage as infrastructure growth picks up and workers get tapped by retail and other service-oriented industries. Cost of acquiring and retaining talent is going up too. As labour becomes increasingly hard to find, it is believed that technology could provide a solution that is both speedy and cost-effective. There is always a need for new technology to bridge the gap between the speed of

construction and labour shortage. Machines prove to be very useful in aiding timely construction of big projects. But for small-scale projects developers still prefer the traditional method.

The construction sector is characterized by increasing level on mechanization on the one hand, and traditional material/inputs are being replaced on the other. To ensure that the construction is not hampered by the absence of labour, cranes are being used as an alternative for manual jobs like weight-lifting at the construction sites to ensure that the work is carried on in right momentum and there is no delay in completing the work on time. Machines which are used in construction of road are hot mix plant, paver finisher, road roller/vibrating road roller; JCB machines (excavator) and dumper and tippers and ordinary trucks for transports of material. Machines used in construction of building, houses, multistory/highrise buildings are transit mixture, concrete pump and JCB machines. Regarding replacement of material, for speedy completion of the work, bricks are being replaced by precast blocks, and concrete walls are also being made in place of brick walls. Developers are now adopting 'precast concrete and engineering homes' technology in their projects after the encouraging results of these technologies in Europe and the Middle East. A number of real estate developers have adopted this building system that offers speed, quality and value. At the same time, the use of such technology helps in saving up to 64% of the total man-hours needed for conventional methods. That is, if a building takes one year to raise using brick and mortar method, it can be completed in four months with precast and engineering homes method (Tiwari, 2012). Thus the technological development on one hand displaces labour mainly unskilled, and on the other creates demand for skilled and technical personnel.

4.2 Outsourcing/sub-contracting

Rationale

Outsourcing could be termed as a practice used by different companies to reduce costs by transferring portions of work to outside suppliers rather than completing it internally. It is an effective cost-saving strategy when used properly. It is sometimes more affordable to purchase goods/services from companies with comparative advantages than it is to produce the goods/services internally. Though outsourcing is not a novel concept for many business organizations, yet it is increasingly being used by clients in the real estate and construction sector and is impacting the planning, procurement and implementation of major projects. Traditionally, back-office functions like accounting, payroll and other routine administrative tasks were outsourced to third party service providers to make the projects cost-effective leading to efficient allocation of resources. Space, personnel and other resources devoted to routine and reasonably predictable tasks need not be located in head offices with high rents and tight labour supply. Given that spiralling costs have plagued the construction industry over the recent past, it is observed that clients operating large construction projects also examine the outsourcing tool as a means to reduce the project costs. Division of work has also been increased due to which sub-

contracting of work has become possible for timely completion of the projects within a short span of time.

Outsourcing/sub-contracting in real estate and construction

In the real estate sector, the preparatory work of the project including purchase/acquisition of land, planning and designing of the project, approval of the project, etc. is done by the real estate developers. The execution of the project i.e. the construction component is outsourced to builders. It is further outsourced/sub-contracted to small contractors. These include foundation work, brick work, plastering work, ceilings of roofs, flooring, etc. The mechanization of construction activities has also facilitated the process of outsourcing. During the discussions held with various stakeholders, it emerged that around 80-90% of the activities are done through sub-contracting. Another major component of work which is outsourced is marketing the real estate space. While real estate developers do direct marketing of their space to the customers, they also tie up with a number of real estate agents for marketing. For certain projects, some real estate developers exclusively outsource the marketing to their authorized real estate agents.

While having discussions with various stakeholders, it emerged that the contractors were not providing minimum wages for work of eight hours a day. They give four hours overtime to the workers. Thus, overtime allowance plus salary of workers become more than minimum wages per day. The pattern of overtime has also been changed. Contractors used to run two shifts (12 hrs in one shift) in 24 hrs (day and night) instead of three shifts. It reduces their total labour/workers. Contracting/sub-contracting of certain activities certainly reduces the employment. Contractors were not employing ample workforce, rather they preferred to give overtime to existing workers at a lower rate. It had resulted in increasing volume of output, while the employment of labour was kept at the minimum. Due to sub-contracting of various activities, the labour is highly unorganized, and the labour unions are unable to operate in this sector.

CHAPTER V

Impediments/Constraints/Challenges for the Real Estate and Construction

In recent years, though the real estate and construction has witnessed a substantial increase both in terms of output and employment, yet it is plagued with many impediments/constraints. Some of the impediments/constraints/challenges affecting the growth of this sector are described below:

5.1 Administrative Issues

Legislative issues

A large number of legislative laws governing the real estate and construction sector hampers its growth. It includes both the central and state laws. Some of these major laws include Indian Contract Act, 1872; Transfer of Property Act, 1882; Registrations Act, 1908; Land Acquisition Act, 1894; Rent Control Act; etc. A large number of laws governing various aspects of real estate and construction date back to the 19th century. Despite plethora of laws, the situation appears to be far from satisfactory and major amendments to existing laws are required to make them relevant to modern day requirements (Planning Commission, 2002).

Taxes and Stamp Duty rates

Stamp duty needs to be paid on all documents which are registered and the rate varies widely from state to state. For instance, among the state, the stamp duty rates vary from 14.7 per cent in Orissa to just 5 per cent in Tripura (Table 5.1). In contrast, the maximum rate levied in most developed markets whether in Singapore or Europe is in the range of 1-2 per cent. Even the National Housing and Habitat Policy, 1998, recommended a rationalization of stamp duty rate of 2-3 per cent (MoHUPA, 1998). There is also a need for some fundamental reforms like tackling the high stamp duty issue which makes even the honest citizens deal in black money (*Economic Survey*, 2010-11). The present provisions in various laws and their poor implementation have led to a situation where there is a considerable financial loss to the exchequer on account of understatement of sale proceeds, non-registration and consequent non-payment of stamp duty and avoidance of capital gains tax (Planning Commission, 2002). Recently proposed stamp duty hike on lease agreements in Maharashtra were expected to hit realty sector hard. Some analysts expect that the stamp duty hike to upset unorganized investors in the state, who buy flats to rent them and earn an annual return from their assets (Daily News Analysis, 2012).

Table 5.1: State-wise Stamp Duty Rates (%), 2012-13

S. No.	State	Stamp Duty Rate (%)
1.	Orissa	14.7
2.	Haryana	12.5
3.	Karnataka	10.5
4.	Gujarat	10
5.	Maharashtra	10
6.	Rajasthan	10
7.	Uttar Pradesh	10
8.	Bihar	9
9.	Kerala	8.5
10.	Assam	8.25
11.	Goa	8
12.	Himachal Pradesh	8
13.	Tamil Nadu	8
14.	Delhi	8
15.	Madhya Pradesh	7.5
16.	Nagaland	7.5
17.	Manipur	7
18.	West Bengal	7
19.	Punjab	6
20.	Andhra Pradesh	5
21.	Tripura	5

Source: <http://www.10toeverything.com/home/stamp>

Note: These rates may change any time and users of this site are requested to visit official State website for latest stamp duty rates in the respective states in India

Land Acquisition

Nowadays land acquisition is a major problem for major projects especially infrastructure projects such as roads and highways, transportation and ports, etc. Funds have been allocated for the projects but due to long land acquisition process, the projects are being delayed.

Box 2: Land Acquisition – An Important Issue for Real Estate and Construction Sector

The issue of land acquisition has assumed great importance as lot of agricultural land is being acquired by the government for industrial as well as urban development. In the absence of any uniform land acquisition policy throughout the country, every state government has its own policy. Owing to this, a lot of resentment has developed in the minds of farmers/agricultural land owners. At many places farmers opposed the land acquisition and demanded suitable compensation in lieu of their land. Land Acquisition Amendment Act is also pending in parliament. Recently, in July 2012 farmers of a village of Rewari District in Haryana were opposing the land acquisition. The violence broke out during the protest. Villagers under the aegis of “Sangharash Simiti” opposing land acquisition had clashed with police, torched several vehicles and blocked the Delhi-Jaipur National Highway as cops opened fire on a mob. Many people including policemen were injured during the protest. Government of Haryana appointed Justice (Retd.) Iqbal Singh as head of a Commission to enquiry to probe the incidence of violence in Rewari over land acquisition. Villagers were demanding that the process of acquiring their land be stalled till the enactment of a new central law on land acquisition. Like the farmers of Rewari district, farmers of a village in District Gautam Buddha Nagar of Uttar Pradesh also staged a protest against acquisition of their land. They were also demanding suitable compensation. In view of these incidents and many unreported ones, it is suggested that policy on land acquisition be strengthened and improved so that such incidents do not occur in future. A strong uniform and transparent land acquisition policy will pave the way for a steady and sustained growth of real estate and construction sector.

Source: IAMR survey, 2012

Court cases and litigations

During the course of the study, it emerged that owing to court cases and litigations many big projects are being delayed. In infrastructure projects such as roads and highways, court cases are a major problem. Settlement of court cases take a long time. Although it is a fundamental right of every citizen to go to court for justice, yet long process of court proceedings acts as a constraint in completion of project on time.

Land market issues

Another important issue in real estate development is that of title to property. In India, the State does not certify a title to housing or land property. The revenue records are not documents of title, and ownership is established only by the sequence of earlier transfers. The system, as it exists, imposes a responsibility on the part of the purchaser with regard to the inspection of the title. The result of this is tenuous titles to land and non-transparency in property transactions, thereby hampering large-scale real estate development (Planning Commission, 2002).

Road network

In India, the development of roads has long been neglected by our policy makers. Roads are a 'public goods' and, therefore, an area where State investment is required. However, the 'planned economy' has failed to invest sufficiently in roads. This has put pressure on land in cities, causing urban land prices to soar. Roads contribute to the supply of land by connecting villages to towns and thus make land available to the urban economy. This keeps land prices down. It also reduces the rural-urban migration, easing the pressure on cities.

Floor Area Ratio (FAR)/ Floor Space Index (FSI) norms

The Indian experience, however, marks a radical departure from global practice in adopting the global city wide Floor Space Index (FSI) or Floor Area Ratio (FAR) for individual plots. In Cities such as New York or Singapore, the FSI/FAR for individual plots can extend up to 5 or 7. Given the scarcity and high value of urban land, the most feasible solution is to go vertical. A sprawling urban spread comprising flat low rise structures usually G+5 i.e. ground plus five floors is more appropriate for an era of horse drawn carriages than high volume modern transport systems based on the internal combustion engine and beyond (FICCI, 2011).

5.2 Procedural Issues

Municipal laws, rules, and approval procedures

Most urban and municipal laws and regulations in India date back to half a century if not more. While India is among the top countries in terms of housing and work space needs, it ranks 181st in construction permission processes according to the World Bank's Doing Business 2012 Report. There are 34 procedures and the average time taken is 227 days. Some of the issues related to this sector include the hardening of interest rates and possible defaults; challenges associated with land acquisitions; high stamp duty; formalities and costs related to registration and mutation, some of which are unnecessary and superfluous; the Urban Land Ceiling Regulations Act (ULCRA) and existing lower floor area ratio in cities; and absence of a single window clearance system with standardization of bye-laws and processes (*Economic Survey*, 2011-12). Another serious malaise affecting investment in the real estate sector and housing development is the tardy process of planning approvals (Planning Commission, 2002). During the discussions held with various stakeholders, it emerged that online submission of documents for building permission could be an effective way for reducing delay in approval. It merits mention here that in Pune Municipal Corporation the online submission for building permission was introduced in 2011.

Development projects in Indian cities have to undergo a lengthy approval process which results in delays in projects, eventually escalating construction costs, which are borne by the user or the

buyer. India is ranked 177 out of 183 countries with respect to dealing with Construction Permits, which indicates the challenge developers face in India in development of real estate (Jones Lang Lasalle, 2011). An elaborative list indicating the NOCs/permissions required and the approving authorities are placed at Appendix V. The details of activities and approximate time taken for approval of a real estate project are given at Table 5.2. Furthermore, regarding Indian Real Estate Transparency Index, among the states, four southern states found place in first seven, other states being Maharashtra, Gujarat and NCR Delhi. The bottom states included Jharkhand, Bihar, Uttar Pradesh, Uttarakhand and so on (Appendix VI).

Table 5.2: Description of various activities and time taken for approval of real estate projects

Activity	Time taken (in months)
Conversion of land use	8-12
Project letter of intent and license/Intimation of disapproval (IOD)	4-6
Pre-construction approval from state level bodies	6-8
Pre-construction approval from central bodies	5-7
Approval for construction plan sanction	5-7
Approval for commencement of construction	2-3
Construction period	24-30
Inspection and approval procedure for building completion	2-3
Occupancy certificate receipt from date of completion of above	2-3
Approval process after land acquisition till commencement of construction	24-32

Source: *Indian Real Estate Transparency Index, 2011* (2011), Jones Lang Lasalle, New Delhi

For seeking building permission, some of the stakeholders indicated that the Bihar Model could be adopted. In Bihar Model, the approval was not sought from the Government Departments. For this, a number of certified architects were on the panel, and the plan was to be prepared and got certified by the architect. In addition to it, the concerned party had to submit an affidavit that the building will be constructed as per the certified plan of the architect.

Delay in Completion

One of the major concerns of the sector is delay in time schedule for completion of the projects. Delays in delivering projects can be because of insufficient initial capital to start the project on time, inefficient project management, delays in procurement of construction materials, labour issues, cash-flow problems manifesting in the middle of project construction and issues with land acquisition. During the discussions held with a number of developers they opined that two main reasons for most of the delays, which they claimed to be out of their control were: (1) delay in approval and formalities by authorities, and (2) shortage of raw material increases the cost and impacts the construction schedule. At present, construction activities are hampered on account of (a) delay in obtaining such statutory clearances and permission from multiple agencies, (b) delay in land acquisition seriously affects the projects and adds to their costs, and (c) Implementation

of plans also gets delayed due to many reasons. For example, financial constraints, lack of resource mobilization, over-ambitious plan proposals, lack of integration between spatial planning proposals with economic development plans and inadequate legislative support and enforcement (Planning Commission, 2011).

Box 3: Delay in Completion of Projects

The 135 km. long Kundali-Manesar-Palwal (KMP) Expressway joining Palwal to Kundali via Manesar and Bahadurgarh started from November, 2006 with the target of its completion within three years i.e. November, 2009; but missed several timelines of completion of the work. Before beginning of the work, all necessary approval and sanctions were taken including land acquirement and environment impact clearances. The project is being developed by the concessionaire's firm KMP Expressway Limited (KMPEL), and the project is divided into three phases. But in spite of all efforts, the project could not be completed so far and 66 per cent of the physical target has been achieved till date. Haryana State Industrial and Infrastructure Development Corporation (HSIIDC), the nodal agency, assigned to overview the progress of the Expressway decided to impose penalty to which the Government of Haryana accorded sanction. The project is delayed due to a number of factors including petitions pertaining to land acquisition pending before the Honourable Punjab and Haryana High Court. Besides land acquisition, change of scope in the project is another reason that has caused the delay. The project has been delayed almost by three years so far. This is a sorry state of affair in the real estate and construction sector. Slow progress of work on KMP expressway had affected the other construction projects to be mooted by HSIIDC. All cases related to important infrastructure projects should be dealt with on priority basis so that their timely completion is not affected.

Source: Same as for Box 1

Non-standardization of Bid Documents

There is no standardization of bid documents in India or states. Central and State government departments have their own bid documents and requirements. For filling up of these documents contractors have to attach many documents with tender documents which vary from department to department.

Long process of awarding contracts

Contract awarding is a long and time consuming process. A number of formalities and lot of documents are required for it. It has to be gone under various formalities and documentations. Sometimes awarding of the contracts for big projects takes years. In this long process of awarding contracts, sometimes the project itself loses its basic objective.

5.3 Financial Issues

Mobilisation of financial resources

Financing options are presently skewed in favour of personal loans vis-à-vis developer financing. Most housing finance companies cater mainly to individuals in the higher income group, who have reasonably assured credit worthiness. Only 5-7 per cent of the loans disbursed by these housing finance companies go to builders and institutional developers. All this leads to builders and developers approaching private sources of finance at high interest rates, which ultimately leads to higher real estate prices. With banks not favouring loans against land, the developers have to depend on private borrowing at exorbitant interest rates. The direct impact due to cost of finance itself is up to 10 percent to 25 per cent of the sale price. The high default rate among the developers is one of the factors dissuading housing finance companies from investing in this sector. The legal recovery mechanism is time consuming (Planning Commission, 2002). During the discussions held with a number of stakeholders, it emerged that in overseas, the financial loan was available at a very cheap rate i.e. 2-3 per cent per annum. But in the case of real estate, external commercial borrowing was not allowed. Thus, the real estate developers had to mobilize the financial resources locally at a very high rate. If the external commercial borrowing was allowed, the costing of real estate property could come down significantly.

Rising manpower and material costs

Recently, the costs of material and manpower have increased sharply. The costs of core material components like cement, iron, steel, etc. have risen a lot leading to substantial increase in construction costs. The situation was further aggravated by the fact that the supply of skilled workers could not cope up with the rising demand, resulting in the shortage of skilled workers, subsequently leading to rising wages. It was accompanied with the shortage of unskilled workers and their rising wages. The Government sponsored employment generation and asset creation programmes like MGNREGA have been one of the reasons for the reverse migration of workers from metropolitan cities to rural centres in the past 2-3 years, which is creating shortage of labour in the construction industry (Jones Lang Lasalle, 2011).

5.4 Other Issues

Skills Shortage

In recent times, the real estate and construction has witnessed a substantial growth. The sector is facing the shortage of core professionals as well as both the skilled and unskilled labour. On the one hand, this sector is facing the shortage of skilled personnel like Mason, Plumber, Electrician, Crane Operator, Barbender, etc., and on the other hand, after MGNREGA gained momentum, there has been reverse migration of labour from metros to rural areas creating shortage of unskilled labour. Regarding the shortage of skilled labour, their supply could not match with the

rising demand. The number of main institutes like Industrial Training Institutes/Centres which supply skilled personnel did not increase their intake proportionately. Regarding the shortage of unskilled personnel, in FICCI Survey on Labour/Skill Shortages for Industry, based upon the Herfindahl Index, construction and real estate sectors are getting adversely affected because of the MGNREGA Scheme. (FICCI Survey).

The research study conducted by the Royal Institute of Chartered Surveyors highlights a demand-supply gap in terms of number and expertise for the core professionals like civil engineers, architects, planners etc. Over the period of 2010-20, on an average, approximately 4.27 million civil engineers are required every year to meet the real estate (approx. 1.27 million civil engineers) and infrastructure (approx. 3 million civil engineers) requirements of the country. With a cumulative supply of a meagre 5.33million civil engineers in 2011, and only 27,000 of supply estimated to be coming into the market every year, the total supply of civil engineers would add up to only 7.78 million by 2020. Over the period of 2010-20, on an average, approximately 3,96,000 architects are required every year to meet the real estate (approximately 119,000 architects) and infrastructure (approximately 277,000) requirements of the country. With a cumulative supply of only 49,000 architects in 2011, and nearly 3,800 of supply estimated to be coming into the market every year, the total supply of architects would add up to only 84,000 by 2020 (RICS, 2011).

Affordable housing

The term “housing affordability” has come into widespread usage in the last 18-20 years or so. Generally, affordable and low-cost housing are often interchangeably used, but are quite different from each other. Low-cost housing is generally meant for Economical Weaker Section (EWS) category and comprises bare minimum housing facilities while affordable housing is mostly meant for Low Income Group (LIG) and Middle Income Group (MIG) and includes basic amenities like schools, hospitals and other community facilities and services. While the concept of affordable housing seems to be a simple solution to housing woes, its execution remained complicated due to unclear policy framework. Both the developed as well as the developing world have been facing problems of affordable housing. The difference perhaps is in the magnitude of the problem. International recognition of the urgent need for affordable housing has been pronounced many a time. In the World Urban Forum 2008 held in China, providing affordable housing was seen not as a mere sectoral objective but as a route to achieving the Millennium Development Goals (MDG). The UN Habitat and the United Nations Commission on Human Settlements (UNCHS) have been crying hoarse about the need to get housing at the top on the developmental agenda for decades now (National Realty, 2009).

Recently launched new Urban Housing & Habitat Policy lays emphasis on Government retaining its role in social housing so that affordable housing is made available to EWS and LIG of the population as they lack affordability and are hopelessly out-priced in urban land markets (MoHUPA, 2007). In this context, a number of states have initiated steps towards affordable

housing, for instance, in Uttar Pradesh affordable housing was initiated in September, 2012. Under this scheme, residential projects having an area of more than 3,000 sq. metres, 10 per dwelling units each were to be made for EWS and LIGs. For EWS, the income limit of the household was up to Rs. 5,000 per month, while for LIG, it was up to Rs. 10,000 per month.

Poor technology

The poor state of technology opted by the construction sector adversely affects its performance. Use of low-grade technology in the construction sector leads to low value addition and low productivity. Apart from this, poor or substandard quality of construction and quality construction tools is also one of the main reasons for this. Besides, the construction sector also lacks information about new technology. There is a need to enhance productivity through appropriate mechanization to meet the physical targets set in the plans. There is a clear case for encouraging mechanization to build up the sector's capacity to deliver the critical infrastructure needed for economic development.

Labour laws

Two specific labour laws are applicable to the building and other construction workers which are as below:

1. The Buildings & Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996; and
2. The Building and Other Construction Workers' Welfare Cess Act, 1996

While having discussions with a number of stakeholders, it emerged that the stringent provisions of Act 1 often led to harassment of builders/contractors by the concerned government officials. As per the provisions of the Act 2, the 1 percent cess collected from the employer on construction projects costing more than Rs. 10 lakhs, the proceeds were to be used for augmenting resources of Buildings & Other Construction Workers' Welfare Boards. But during the discussions it was reflected followed that though the money was being collected from the builders/contractors, yet it was not utilised for the welfare of the workers. It might have been lying unspent.

Multiple labour laws

There are total 43 central and state labour laws applicable in industries; out of which, 27 labour laws alone are applicable in construction sector. These multiple laws are one of the constraints in this sector. During the discussions held with a number of stakeholders, it emerged that multiplicity of labour laws acted as a detriment for the growth of employment in this sector and discourage employers to engage more persons.

CHAPTER VI

Policy Implications and the way ahead

Policy implications

Major policy implications are as below:

6.1 Administrative Issues

- There is a need to rationalize the legislative laws governing the real estate sector.
- The existing provisions in various laws and their poor implementation have led to a situation where there is a considerable financial loss to the exchequer on account of understatement of sale proceeds, non-registration and consequent non-payment of stamp duty, and avoidance of capital gains tax (Planning Commission, 2002). There is a need for some fundamental reforms like tackling the high stamp duty issue which makes even honest citizens deal in black money (Economic Survey, 2010-11).
- There is an urgent need to ensure compulsory registration of land deeds and also to computerize such records so as to create a database. The Andhra Pradesh experience is a good example to begin with where registration of sale of land/property is achieved within a month. The Tenth Plan Working Group on Information Technology for Masses has recommended for computerization of land records all over the country with computerised land/property documents and for making these available to the public at all levels, including in villages, by 2005.
- With roads, tramways and rail connections to the surrounding areas, a lot of rural land will be 'developed'. All these parcels of land will add to the total supply of real estate and this will work to keep prices down.

6.2 Procedural Issues

- There is a need to thoroughly review and modernize municipal laws/ procedures in the light of the latest developments in urban infrastructure, transport, pollution control etc. A committee of eminent persons from the concerned fields should be set up to formulate a model municipal law. Such a law must make provision for private investment in and supply of all public utilities and services. It must ensure that the municipal authority focuses its attention on data gathering, analysis, planning, organization and monitoring. In other words, the government should play the role of the facilitator more than that of the provider.
- In this context, the Ministry of Housing and Urban Poverty Alleviation, Government of India has taken a lead by constituting a Committee on 'streamlining approval procedures for real estate projects (MoUPA, 2012). The main objective is to suggest a systematic approach through which all cities and states can develop fast track, single-window

clearance mechanisms giving specific focus on simplification of procedural aspects, formulating single composite form with complete listing of sets of documents necessary to accord sanction by the authorities and automated system building plan approval with special emphasis on affordable housing.

- In India, construction contract awarding procedures are so lengthy and time consuming that construction activity takes lot of time to start with. It is suggested that contract procedures should be simplified and be made transparent. Although some steps have already been taken in this regard still there is a need to simplify the contract procedures and tendering work. It will further help in increasing the construction activities and employment.
- There is a need for an appropriate dispute resolution mechanism in construction sector. Due to disputes, construction projects could not be taken up. It increased the time gap between initiation and completion of projects. It is suggested that there should be a fast-track procedure for dispute redressal so that implementation of projects is not delayed.
- In the absence of a standard bid document, the processing of tenders is not smooth. Efforts have been made to standardize the bid document, but so far it has not been materialized. The Standard Bid Document will reduce unnecessary paper-work and reduce the time for processing of bid.

6.3 Financial Issues

- Real estate mutual funds, pension funds and insurance companies are the major investors in the housing sector in developed countries. In the United States, pension funds invest 5 per cent of their reserves in real estate equity and mortgages, whereas in India developers get very little financial help from these sources. Housing finance companies in India also need to be given access to pension, provident fund and insurance funds. As the gestation period of real estate projects is more than five years, on an average, it is necessary that developers have access to such long-term funding sources.
- During the discussions held with a number of stakeholders, it emerged that in overseas, financial loan was available at a very cheap rate i.e. 2-3 per cent per annum. But in case of real estate, external commercial borrowing was not allowed. Thus, the real estate developers had to mobilise the financial resources locally at a very high rate. If the external commercial borrowing was allowed, then the costing of real estate property could come down significantly.
- There is a very high incidence of direct and indirect taxes for construction and construction related activities as compared to other sectors. High taxation is at both the ends, at the input stage (construction material, equipment and land and services) and at the process stage (work contract tax) etc. There is a need to reduce the burden of multiple tax regimes and simplify the taxation system. Multiple taxes increase the cost of

construction which in turn reduces the construction activities and employment. There is a strong need to reduce the burden of multiple taxes in construction activities to reduce costs.

6.4 Other Issues

- Real estate and construction is witnessing rapid technological developments. As there is a great dearth of skilled and technical personnel, there is an urgent need to enhance and strengthen their supply.
- To meet the growing demand of personnel for the real estate and construction, adequate supply of professional, technical and skilled personnel is to be ensured. After making demand estimation for various categories, adjustments have to be made in the supply side by making changes in intake of professional and technical institutions. The MGNREGA is to be implemented in a rational way so that jobs are created during the lean agricultural season, and the supply of unskilled labour for industry and services sectors is not affected.

Box 4: Skill development initiative taken by NSDC and CREDAI, Pune (Kushal Project)

With a view to minimizing the demand supply gap for skilled personnel, National Skill Development Corporation (NSDC) along with Confederation of Real Estate Developers' Association of India (CREDAI), Pune has taken a big initiative by launching "Kushal" project on pilot basis in Pune to upgrade skills of construction workers. Through Kushal, the workers will be empowered with skills that will give a chance to earn a better livelihood, and in the process, this will improve the construction quality and reduce wastage. Initially, six trades were identified namely, plumbing, tiling, painting, carpentry/formwork/centering, fitting and bar bending, and masonry. All this is to be achieved on-job/on-site without any cost to the developer and the contractor. To enhance the supply of skilled personnel, some tailor-made programmes like Kushal could be launched at all India level.

Source: Same as for Box 1

- Upgraded technology is required in the manufacturing of construction material and in construction activities. Adoption of superior technology should be encouraged by introducing higher specification and technical conditions in bid documents.²⁰ Upgraded technology will definitely reduce the cost and time both and help in speedy completion of construction projects. There is a need to enhance productivity through appropriate mechanism to meet the physical targets set in the plans. There should be strong mechanism for monitoring of the projects to ensure timely completion of the work. The poor state of technology adopted by construction sector adversely affects the performance.
- While the concept of affordable housing seems to be a simple solution to housing woes, its execution remained complicated due to unclear policy framework. To cope up with the

problem of affordable housing, a number of measures are to be taken. Some of these could be speedy approvals of housing projects, provision of additional FSI, improving connectivity to suburbs, rationalization of transaction cost, creation of Special Residential Zones (SRZ), Private Public Participation (PPP model), etc.

- Out of the total 43 labour laws/Acts of Central and State Governments, 27 labour laws/Acts are applicable in construction sector. Presence of complex and large number of labour laws is not so easy to implement by the establishments. In this context, it has been suggested by the Working Group on Labour Laws and Other Regulations and National Labour Commission that these laws should be rationalized in organized sector and a umbrella legislation was needed for ensuring minimum level of protection to workers in unorganized sector (Planning Commission, 2006). Construction Industry Development Council also mooted the idea that there should be one unified law for construction industry to enable formation of a one authority which can oversee compliance of various requirements by construction companies (Planning Commission, 2007). There should be a simplified one construction law for construction sector which will be applicable for both organized and unorganized sector.
- A large amount collected as 1 percent cess from the employers on construction projects for augmenting resources of Buildings & Other Construction Workers' Welfare Boards is lying unspent which needs to be spent rationally.

6.5 The way ahead

Need of Industry Status to Real Estate

The real estate and construction also includes creation of infrastructure and social facilities like roads, water supply, water treatment, sanitation and sewerage, solid-waste treatment and also creation of educational, medical and recreational facilities as an integral part of development of satellite townships, in accordance with the elaborate rules and regulations and with the specific approval from the government concerned. Such projects tend to reduce the pressure on existing cities by providing low-priced alternatives and value for money to the customers. After purchasing agricultural land, realty firms create and provide most of the infrastructural facilities. It is only by creating these facilities that the raw land gets converted into developed land, and become fit for construction of houses and high-rise buildings for residential and commercial purposes, thus augmenting the housing stock of the nation. It is presumed that the activities of these companies are already covered by the definition of “infrastructure facility” but the position has become debatable as such activities are not covered by a specific clause.

The sector, however, is wallowing in neglect and does not even have a status, ‘special’ or ‘industry’. Real estate development should be given special status at par with industry. A legion

of prominent developers and builders, under the banner of NAREDCO (National Real Estate Development Council) and CREDAI (Confederation of Real Estate Developers' association of India), made several representations to the Union government to accord the sector long-standing demands like special status, infrastructure status to the housing sector, special economic zone (SEZ) incentives for promoting real estate development like housing finance, rental housing, deduction for irrecoverable rent and assessment for bank incremental deposits, etc., but nothing came of it. Budget 2012-13 has poured cold water on this sector yet again, and dashed the hopes of developers and builders.

An industry status to the sector will bring about major transformation in the outlook and nature of the sector. It would encourage investment, attract large companies, and most important, inculcate corporate culture and industry discipline in the sector, which would immensely benefit the economy in general, and the consumers in particular. Industry status would also help the sector get bank loans on average interest rates and at low collaterals against the existing high-risk rates. Further, it would help the sector get central and state subsidies in case developers move into backward regions or the northeastern regions and raise external commercial borrowings (ECBs). The sector is a major driver for economic growth and generates countless jobs against its various verticals. According to Anuj Puri, Chairman & Country Head, Jones Lang LaSalle India, "there is no doubt that real estate is indeed an industry for all practical purposes, and the fact that the health of a nation's real estate sector is often seen as indicative of its overall economic health. The Indian real estate sector definitely needs to be granted industry status" (Upadhyay, 2012). Construction activities are employing a large chunk of skilled and unskilled workers with heavy investment. It is therefore suggested that there should be separate department/ministry to deal with construction activities in the country. It will further boost the growth of real estate and construction sector.

Appendix I

Statement indicating state-wise distribution of Net State Domestic Product (2004-05 prices) for real estate services (including real estate, ownership of dwellings and business services) and Construction, and their proportion in total, 2004-05 to 2009-10

State	Real estate				Construction			
	State share in total (%)		Real estate services share in total of state (%)		State share in total (%)		Construction share in total of state (%)	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Andhra Pradesh	10.0	9.8	11.3	11.7	6.8	7.7	7.3	8.8
Arunachal Pradesh	0.0	0.0	2.1	2.6	0.3	0.3	21.1	19.2
Assam	0.5	0.3	2.2	1.9	1.5	1.4	7.0	8.4
Bihar	1.1	1.1	3.5	3.4	2.3	3.3	7.0	10.2
Chhattisgarh	1.2	0.9	6.7	5.8	1.5	1.8	7.6	10.3
Goa	0.3	0.3	6.1	6.4	0.6	0.5	11.5	10.4
Gujarat	4.8	3.9	6.4	5.2	5.8	7.4	7.3	9.4
Haryana	3.3	3.5	8.6	9.4	4.1	3.6	10.3	9.2
Himachal Pradesh	0.3	0.2	3.6	2.7	2.1	1.6	21.2	19.8
Jammu & Kashmir	0.5	0.3	4.8	3.7	2.0	1.5	18.4	17.0
Jharkhand	0.7	0.5	3.2	3.0	1.6	1.6	6.6	8.9
Karnataka	8.6	9.0	13.2	14.8	6.8	6.2	9.2	9.5
Kerala	4.7	4.9	10.2	11.5	6.5	5.4	13.3	12.2
Madhya Pradesh	3.2	2.5	7.2	6.3	4.2	4.2	9.0	10.0
Maharashtra	21.2	20.3	13.1	11.9	11.6	11.8	6.9	6.6
Orissa	2.0	1.5	6.5	5.8	3.6	3.0	11.5	10.7
Punjab	1.8	1.3	4.6	3.9	2.8	2.9	7.0	8.5
Rajasthan	4.0	3.2	8.0	7.5	6.9	5.4	13.2	11.9
Tamil Nadu	9.0	11.8	10.6	14.0	8.7	8.3	9.7	9.4
Uttar Pradesh	8.3	9.3	8.2	7.5	8.5	12.9	7.9	9.9
Uttarakhand	0.6	0.4	5.7	3.7	1.4	0.9	13.5	8.1
West Bengal	6.0	5.8	7.2	8.1	6.6	4.8	7.5	6.4
Delhi	8.2	9.0	19.7	20.5	4.3	7.3	9.9	7.3

Source: State Domestic Product (state series), Central Statistical Organisation,
Ministry of Statistics and Programme Implementation, Government of India, New Delhi

Appendix II

List of Associations/Organizations visited for Real Estate and Construction Sector

S. No.	Association/Organization
1	Dr. Manoj Singh Adviser Transport Division Planning Commission New Delhi
2	Brigadier (Retd.) R.R. Singh National Real Estate Development Council (NAREDCO) First Floor, 8, Community Centre East of Kailash New Delhi-110065 Tel. 91-11-26225795 Email naredco@narendco.in
3	Shri S. Ghoshal General Manager Confederation of Real Estate Developers of India (CREDAI) Ansal Bhawan, K.G. Marg, New Delhi Tel. No.43126262, 43126200
4	Dr. Manvendra Deswal Deputy Director Confederation of Indian Industry (CII) New Delhi
5	Mrs. Sunita H. khurana Director (RH) Ministry of Rural Development Krishi Bhawan, New Delhi Tel. No.23381300
6	Federation of Indian Chambers of Commerce & Industry FICCI House New Delhi
7	Shri D.S. Rajora Associated Chambers of Commerce & Industry of India (ASSOCHAM) New Delhi
8	Shri R. P. Swamy Secretary General Indian Chamber of Commerce and Industry (ICCI) Taimoor Nagar, New Friends Colony

	New Delhi
9	Shri Deepak Narain Director Department of Industrial Policy and Promotion Ministry of Commerce and Industry Udyog Bhawan, New Delhi
10	Shri Rajiv Sharma, President, Indirapuram Vaishali Builders' Association 55, Kamna, Sector-3, Vaishali, Ghaziabad
11	Shri Dalip Chenoy National Skill Development Corporation (NSDC) New Delhi
12	Shri Ravi Mittal, Adviser Infrastructure Div, Planning Commission New Delhi
13	President, Builders Association of India Ahmedabad
14	Hony. Secretary, Gujarat Contractor Association Ahmedabad
15	Commissioner Ahmedabad Municipal Corporation Ahmedabad
16	Dy. Commissioner Ahmedabad Municipal Corporation (South Zone) Ahmedabad
17	Housing Commissioner & Chairman Gujarat Housing Board Gandhinagar
18	President Gandhi Nagar Builder Association Gandhi Nagar
19	Shri. D. N. Chaturvedi Kharaujha Builders Pvt. Ltd. Varanasi
20	Shri Abhinav Pandey Vinayak Builders Varanasi
21	Shri Rishabh Chandra Jain ARC Builders Varanasi
22	Shri. S. K. Upadhyay

	Varanasi Development Authority Varanasi
23	Shri Rah Anurag Chandra Chandra Towers Pvt. Ltd. Varanasi
24	Shri Satnam Singh President Builder Association of India Delhi Centre, New Delhi.
25	Sh. H.S. Pasricha , Former Chairman Builder Association of India Delhi Centre and CEO of M/s. Winner Construction Company Ltd. Delhi
26	Mrs. S. R. Rajshekhar, Director (Housing) Ministry of Housing and Urban Poverty Alleviation Govt. of India, New Delhi
27	Sh. Umrao Singh, Joint Director Ministry of Housing and Urban Poverty Alleviation Govt. of India, New Delhi
28	Sh. Rajendar Nibalkar, Director PDC & Vice Chairman Pune Housing and Area Development Board Govt. of Maharashtra, Pune
29	Ms. Sonali Yadav, H. R. Manager Kumar Urban Development Ltd., Pune
30	Sh. Rajndera Raut, Executive Engineer Pune Municipal Corporation Pune
31	Sh. Sandeep Khandwe, Executive Engineer Pune Municipal Corporation, Pune
32	Sh. Vinod Jain, Proprietor Vinod Constructions, Pune
33	Sh. C. S. Prahar, Vice Chairman Builder Association of India Pune Centre, Pune
34	Sh. Nand Kumar Jethani, Secretary Builder Association of India Pune Centre, Pune
35	Sh. Neel Kanth Joshi, Office Bearer Builder Association of India Pune
36	Sh. M. B. Nambiar, Officer Bearer

	Builder Association of India, Pune and Proprietor of Millennium Engineer & Contractors Pvt. Ltd., Pune
37	Sh. Atul B. Chauhan, Executive Engineer Public Works Department, Pune
38	Sh. Suklikar, Dy. Director Town Planning and Urban Development Deptt., Govt. of Maharashtra, Pune
39	Sh. Rang Landge, Director Town Planning Maharashtra State, Pune
40	Sh. Praka;sh Chaplekar, Principal Academics “Kushal Project” Pune
41	Sh. Sunil Mahajan, Director Construction Industry Development Council New Delhi
42	Sh. Sushil M. Sionee, Relationship Officer Confederation of Real Estate Developers Association of India (CREDAI) New Delhi
43	Sh. S. I. Chunkhare Engineers & Contractors Pune
44	M. G. Kulkarni, Town Planner City Corporation Ltd. (Amanora Township) Pune
45	Manoj Kumar Sinha, CEO Kushal Project, Pune
46	Sh. Jai M. D. Jai Constructions Pune
47	Sh. Suryavanshi, M.D. Vaishnav Construction Pune
48	Shri Vishnu Khatri Additional Vice-Chairman Bhopal Development Authority Bhopal
49	Shri Vipin Jain Sheetalnath Builders Pvt. Ltd. Bhopal

50	Shri U. A. Kaveeshwar M.P. Housing and Infrastructure Development Board Bhopal
51	Shri V. P. Malviya, Chief Architect Bhopal Development Authority Bhopal
52	Shri Rupesh Gorkhe Agarwal Construction Co. Bhopal
53	Shri C. K. Sadhav M. P. Housing and Infrastructure Development Board Bhopal
54	Shri Suniel Moolchandani Chinar Building, Bhopal
55	Shri Paul Ekka Assistant Engineer Bhopal Municipal Corporation, Bhopal
56	Shri Varun Malik C. I. Builders, Bhopal
57	Shri Ashok Khare, Chief Engineer Directorate of Urban Administration and Development Bhopal
58	Shri V. P. Kishrestha, Joint Director Directorate of Town and Country Planning Bhopal
59	Shri Ajay Mohgaonkar CREDAI, Bhopal
60	Shri Sandeep Singh Shree Builders and Developers Bhopal
61	Shri Sameer Gupta Fortune Builders Bhopal
62	Shri Sanjay Jain Raj Homes Pvt. Ltd. Bhopal

Source: Fieldwork

Appendix III

Distribution of Total Workers by sub-sectors of Real Estate and Construction Sector (as per NIC 2004) in 2009-10 in India

Real Estate				Construction			
NIC 2004	Description	Employment (number)	Percentage to total	NIC 2004	Description	Total Workers (PS+SS)	Percentage to total
70200	Real estate activities on a fee or contract basis [This class includes buying, selling, renting, managing and appraising real estate on a fee or contract basis. This class also includes the service activities provided by Munshi.]	350942	49.95	45201	General construction (including alteration, addition, repair and maintenance) of residential buildings, carried out on own-account basis or on a fee or contract basis	30969185	70.26
70101	Purchase, sale, letting of leased residential buildings	150787	21.46	45202	General construction (including alteration, addition, repair and maintenance) of non-residential buildings, carried out on own-account basis or on a fee or contract basis	1998330	4.53
70109	Real estate activities with own or leased property n.e.c.	103113	14.67	45203	Construction and maintenance of roads, rail-beds, bridges, tunnels, pipelines, rope-ways, ports, harbours and runways etc	682379	15.57
70103	Operating of real estate of self owned residential buildings	55804	7.94	45205	Construction and maintenance of waterways and water reservoirs	662487	1.50
70105	Developing and subdividing real estate into lots	24725	3.52	45303	Electrical installation work for constructions	656699	1.49
70102	Purchase, sale, letting of leased non-residential buildings	9128	1.30	45402	Glazing, plastering, painting and decorating, floor sanding and other similar finishing work	1366389	3.10
	Others				Others	1561703	3.55
	Total	702650	100.00		Total workers	44077172	100.00
	Total Workers in all Sectors	460.22 million	0.15 percent of total employment		Total workers in all sectors	460.22 (Millions)	9.57 percent of total employment

Note: Others includes other than described in the table; Sources: NSS Report on Employment and Unemployment, 66th Round, 2009-10, Ministry of Statistics and Programme Implementation, Government of India, New Delhi

State-wise employment in Real Estate and Construction Sector in India, 2009-10

State/UT	Real Estate				Construction		
	Employment in Real Estate	Total employment in all sectors	State's percentage share in Total	Real estate's percentage share in Total	Construction Employment	State's Percentage share in total	Construction Percentage share in total Employment
Jammu & Kashmir	2298	4743098	0.33	0.05	478053	1.08	10.08
Himachal Pradesh	692	3353592	0.10	0.02	499824	1.13	14.90
Punjab	11361	10433367	1.62	0.11	1313659	2.98	12.59
Chandigarh	6372	463649	0.91	1.37	45644	0.10	9.84
Uttarakhand	5002	3980963	0.71	0.13	514357	1.17	12.92
Haryana	38478	9614598	5.48	0.40	1068738	2.42	11.12
Delhi	102653	5906426	14.61	1.74	280491	0.64	4.75
Rajasthan	37264	27217315	5.30	0.14	5233601	11.87	19.23
Uttar Pradesh	41491	65935340	5.90	0.06	7854256	17.82	11.91
Bihar	12742	26906370	1.81	0.05	2873470	6.52	10.68
Manipur	95	842805	0.01	0.01	102590	0.23	12.17
Tripura	674	1351505	0.10	0.05	482484	1.09	35.70
West Bengal	29717	34192928	4.23	0.09	2048269	4.65	5.99
Jharkhand	174	10080571	0.02	0.00	2121141	4.81	21.04
Chhattisgarh	12248	10004200	1.74	0.12	405874	0.92	4.06
Madhya Pradesh	5253	28542858	0.75	0.02	2222121	5.04	7.79
Gujarat	2878	24650250	0.41	0.01	1266399	2.87	5.14
Dadra & Nagar Haveli	623	106377	0.09	0.59	7780	0.02	7.31
Maharashtra	107776	49071469	15.34	0.22	2585583	5.87	5.27
Andhra Pradesh	73062	39885368	10.40	0.18	3147176	7.14	7.89
Karnataka	95099	26749942	13.53	0.36	1842847	4.18	6.89
Goa	1401	574241	0.20	0.24	40818	0.09	7.11
Kerala	54291	12937351	7.73	0.42	1952271	4.43	15.09
Tamil Nadu	77789	29986734	11.07	0.26	3037348	6.89	10.13
Puducherry	984	546491	0.14	0.18	74362	0.17	13.61
A & N Islands	210	190484	0.03	0.11	25176	0.06	13.22
Sikkim	-	-	-	-	31851	0.07	12.06
Arunachal Pradesh	-	-	-	-	28622	0.06	6.11
Nagaland	-	-	-	-	37946	0.09	4.50
Mizoram	-	-	-	-	29922	0.07	6.57
Meghalaya	-	-	-	-	74595	0.17	6.35
Assam	-	-	-	-	423967	0.96	3.88
Odisha	-	-	-	-	1626523	3.69	10.03
Daman and Diu	-	-	-	-	1504	0.00	1.52
Lakshadweep	-	-	-	-	3237	0.01	10.39
Total	702652	460216318	100.00	0.15	44077184	100.00	9.58

Source: Report on Employment and Unemployment of 66th Round of National Sample Survey Organisation, Govt. of India, New Delhi

Appendix V

Statement indicating Comprehensive Checklist of Papers/Documents required to be submitted for NOCs/Permissions which are a pre-requisite for Plan Sanction application in some states.

Sl. No.	Pre required NOCs/Permissions	Pre-Approval Authority
1.	Permission for change of land use in the Development Plan	Development Authority
2.	Sanction of Development Plan	Development Authority
3.	Bifurcation or amalgamation of plot	Development Authority
4.	Non Agricultural/Royalty/Subdivision/Amalgamation from Collector	Development Authority
5.	Approval in case of buildings permissible under special circumstances	Development Authority
6.	Approval of layout plan in case of group housing schemes where sital area of group housing exceeds 4,000 sq. mtrs.	Development Authority
7.	NOC from State Pollution Control Board	State Pollution Control Board
8.	NOC from Water Board	Water Supply and Sewerage Board
9.	NOC from Electricity Board	Electricity Board
10.	NOC from Fire Service Department	Fire Service Dept.
11.	Site Elevation certificate from local authority after receiving details from recommended institutions by AAI	
12.	Practicing engineers, architects, town planning association plan showing civil aviation distances from airport reference point	
13.	NOC from Airport Authority of India	Airport Authority of India
14.	NOC from Indian Air Force	Indian Air Force
15.	Defence NOC	
16.	NOC from Ministry of Environment and Forest Clearance	MOEF of India
17.	NOC from Slum Clearance Board	State Slum Clearances & Improvement Board
18.	NOC from District Magistrate for Cinema Hall and Petrol Bunks	District Magistrate
19.	NOC for Industries	Director of Factories and Boilers
20.	NOC from Railways	Central Railway Department and Zonal Office
21.	NOC from Highways	NHAI / PWD
22.	Traffic NOC	Traffic Department
23.	Storm Water Drain NOC	Storm Water Drain cell of Local Authority
24.	NOC from High Rise Committee for bldgs. Above 70 mtrs	High Rise Committee
25.	Consent to Operate (for earthquake resistance along with plan approval)	Development Authority / Municipality
26.	NOC from State Housing Area Development Authority (MHADA)	Revenue Dept.
27.	Urban Land Ceiling NOC, if required	Revenue Dept.
28.	Labour Department NOC	Labour Commissioner
29.	Pest Control NOC	Health Department
30.	Heritage NOC for listed building	Heritage Department
31.	Permission Under Coastal Regulation Zone (State Government (for Less than 5 Cr.), Central Government (for more than 5 Cr.)	
32.	Forest Department NOC	
33.	RCC designer's certificate on structural stability	
34.	Peer review on structural design	

Source: National Secretariat, Confederation of Real Estate Developers' Association of India, New Delhi

Appendix VI

The Indian Real Estate Transparency Index (RETI) 2011

State	Indian Real Estate Transparency Index 2011	Inclusive and Sustainable Development	Protection of Property Rights	Progressive Business Environment	Reforms in Urban Local Bodies	Availability of Market Information
Andhara Pradesh	1	4	2	1	3	5
Tamil Nadu	2	2	3	9	2	2
Maharashtra	3	10	16	6	1	1
Gujarat	4	14	1	5	4	8
NCR Delhi	5	12	7	2	8	3
Karnataka	6	9	9	7	5	4
Kerala	7	7	11	10	10	12
West Bengal	8	3	19	12	6	6
Rajasthan	9	15	4	11	12	9
Orissa	10	6	15	8	13	15
Madhya Pradesh	11	11	6	17	11	11
Haryana	12	19	5	4	17	7
Chhattisgarh	13	8	14	15	7	16
Punjab	14	18	12	3	14	14
Goa	15	13	8	13	19	13
Uttarakhand	16	1	18	14	18	17
Assam	17	5	17	19	16	19
Uttar Pradesh	18	20	10	20	9	10
Bihar	19	17	20	18	15	18
Jharkhand	20	16	13	16	20	20

Source: Real Estate Intelligence Service (Jones Lang LaSalle)

Bibliography

Bardhan, Ashok and Kroll, Cynthia, A. (2007), Globalization and the Real Estate Industry: Issues, Implications, Opportunities, Paper Prepared for the Sloan Industry

Business Standard (2011), “Real Estate FDI Worries may continue this year”, October 9, New Delhi

Central Statistical Organisation, Quick Estimates of National Income (various years), Ministry of Statistics and Programme Implementation, Government of India, New Delhi

Daily News Analysis (2012), Mumbai, March 28
Date of retrieval (January 17th, 2012)

Department of Industrial Policy and Promotion, (Annual Reports for various years), Ministry of Commerce and Industries, Government of India, New Delhi.

Economic Survey 2010-11, Ministry of Finance, Government of India, New Delhi
Economic Survey 2011-12, Ministry of Finance, Government of India, New Delhi

Economic Survey 2011-12, Ministry of Finance, Government of India, New Delhi

FDI in India, Website: www.indiaground.com/real-estate-fdi.aspx, Date of retrieval (February 16th, 2012)

Federation of Indian Chamber of Commerce and industry (2011), *Urban Infrastructure in India*, New Delhi

Federation of Indian Chamber of Commerce and Industry, *FICCI Survey on Labour/Skill Shortage for Industry*, New Delhi

Indian Construction Industry – Wikipedia, http://en.wikipedia.org/wiki/Indian_construction_industry, Date of retrieval (January 17th, 2012)

Indian Real Estate Transparency Index, 2011 (2011), Jones Lang Lasalle, New Delhi

Jyoti, Akash Deep (2010), India’s Real Estate Sector in Quiet Revolution Mode, *CREDAI Real Estate Review*, April- June, New Delhi

Laskar, Arghadeep and C.V.R. Murthy (2004), Challenges Before Construction Industry in India”, IIT Kanpur, website. [11tx.ac.in/.../2004 – Challenges-construction-industry-proceedings](http://11tx.ac.in/.../2004-Challenges-construction-industry-proceedings),

Mehrotra, Santosh; Gandhi, Ankita; Sahoo, Bimal Kishore; Saha, Partha (2012), Creating Employment in the Twelfth Five-Year Plan, *Economic and Political Weekly*, Vol. XLVII, No. 19, May 12

Ministry of Housing and Urban Poverty Alleviation (1998) National Housing and Habitat Policy, Government of India, New Delhi

Ministry of Rural Development, Annual Reports of various years, Government of India, New Delhi

National Housing and Habitat Policy (2007), Ministry of Housing and Urban Poverty Alleviation Government of India, New Delhi

Overview of Construction Industry in India (2008), Indo-Italian Chamber of Industry, Mumbai, India

Planning Commission (2002), Tenth Five Year Plan, 2002-07, Government of India, New Delhi

Planning Commission (2002), *Tenth Five Year Plan*, 2002-07, Government of India, New Delhi

Planning Commission (2007), *Eleventh Five Year Plan, 2007-12*, Government of India, New Delhi

Planning Commission (2010), Investment in Infrastructure, *Eleventh Five Year Plan, 2007-12*, Government of India, New Delhi

Planning Commission (2011), *An Approach to the Twelfth Five Year Plan*, Government of India, New Delhi

Planning Commission (2011), *An Approach to the Twelfth Five Year Plan*, Government of India, New Delhi

Planning Commission (2012), “Working Group on Construction” 12th Plan, 2011-12, Government of India, New Delhi

Registrar General & Census Commission of India (2001), *Census of India, 2001*, Government of India, New Delhi

Reports of Employment & Unemployment Surveys of 61st and 66th Rounds of National Sample Survey, Government of India, New Delhi

Sinha, Prabhakar (2012), Affordability Factor improves Five Fold, *The Times of India*, New Delhi, June 2.

The Times of India, India No. 3 in Realty Price Rise, June 6, New Delhi

Tiwari, A.K. (2012), Prefabricated Homes, *The Times of India*, New Delhi , June 9

Royal Institution of Chartered Surveyors (2011), *RICS Research-Real Estate and Construction Professionals in India by 2020*, India

Rao, P.S.N. (2009) Affordable Housing- The New Paradigm?, *National Realty*, Vol. Issue III, October- December, New Delhi

Ministry of Housing and Urban Poverty Alleviation (2007) National Housing and Habitat Policy, Government of India, New Delhi

Federation of Indian Chamber of Commerce and industry (2011), *Urban Infrastructure in India*, New Delhi

Tenth Five Year Plan, 2002-07, Planning Commission (2002), Government of India, New Delhi

Planning Commission (2006), *Report of the Working Group on Labour Laws and Other Regulations*, New Delhi

Planning Commission (2007), *Report of the Working Group on Construction*, New Delhi

Economic Survey 2010-11, Ministry of Finance, Government of India, New Delhi

Ministry of Housing and Urban Poverty Alleviation (2012), Committee on 'streamlining approval procedures for real estate projects, Government of India, New Delhi

Upadhayay, Alok Kumar (2012), *Granting Realty Sector an Industry status would prove win-win situation*, *National Realty*, *National Realty*, March, 11, New Delhi

INSTITUTE OF APPLIED MANPOWER RESEARCH

City Office: 53, Lodhi Estate, New Delhi-110 003

Phone: +91 (0) 11 24697081; 24697082

Fax: +91 (0) 11 2778 3467

Web: <http://iamrindia.gov.in> E-mail: DG.IAMR@nic.in

Campus: Sector A-7, Narela Institutional Area, Delhi-110 040

Phone: + 91 (0) 11 27787215/6/7

Fax: +91(0) 11 27783467

Web: <http://iamrindia.gov.in> E-mail: DG.IAMR@nic.in