



AFFORDABLE HOUSING – REALITY CHALLENGE A CASE STUDY IN BANGALORE CITY

Hemalatha Ramakrishnan¹

¹Institute of Management, Christ University, India

ABSTRACT

The city of Bangalore witnessed several changes in the trading of goods and services from pre-independence period. The city has transformed from selling local produce to setting up the nucleus of the Information Technology industry in the country. This phenomenal growth is also witnessed in the expansion of the geographic boundaries of the city. The city's developmental fate has changed hands through several bureaucratic powers. The government has segregated the powers based on smaller geographical areas or wards, functional development required and many other criteria. This led many developmental projects to be initiated in isolation, lack of funds and resources and coordination which has largely affected the common man's day-to-day life.

With the city attracting large numbers of people from the rural hinterlands, other cities and even other countries seeking job employment, the population has multiplied. This has further caused bottlenecks in infrastructure development, particularly housing for the teeming population. In specific, the lower middle and lower classes of the society are bereft of any hope to own a house of their own. The government's land allocation efficiency is under question. The government decided to invite private participation to aid housing for these sections of the society. Though affordable housing is not a new concept there was marginal effort from private participants. The government further encouraged private participation by allowing players to build multi-storeyed housing. All these changes influenced an upward pressure on property prices. The case study tries to explore the supply and demand gaps in the market, role of government and private players and challenges of affordable housing.

KEYWORDS: Affordable Housing, Demand, Population, Price ,Scarcity, Supply

INTRODUCTION

Bangalore the capital city of Karnataka is located in the region of Deccan Plateau, developed as one of the IT hubs, the city is a home to almost all the reputed IT and multinational companies being operated in the country. Being the third largest populated city in the country, is also referred to as the Silicon Valley of India. The emerging city has the potential to become one of the wanted destinations of every business group. It is a breeding ground of sectors like Information Technology, Industrial globalization, outsourcing place for BPO and Call centers, Aviation industry, Nano Technology, Bio Technology, Medical Research & Developments, Garments & Apparel Exports, as well as Space Research, and above all Retail business opportunities. Due to the increasing number of companies in the city, people from all over the world come to work here. Bangalore is abundant with super markets, malls, multiplexes, specialty healthcare centers, educational institutes having a positive influence on the real estate scenario of the market. The influx of population is rising in the city giving additional rise in the demand of residential, industrial and commercial properties in Bangalore (**refer Annexure I**).

The growth trend in city's population is shown(Annexure – I). The phenomenal growth of the city was spurred by the governmental agencies and public sector industries and later on it was led by the booming IT sector. Bangalore city has a salubrious climate, a high quality of life, a cosmopolitan ambience and social diversity and the city is often called “IT Hub of Asia” and also “Silicon Valley of India.” Bangalore is now competing with other Indian cities (like Hyderabad and Chennai) as well as Asian cities (like Manila and Kuala Lumpur) to attract and generate domestic and international activities and investments and to make the city more competitive.

Population in Bangalore city has been spontaneous due to various reasons. As per census between 1850 to 1941 there has been increase due to influence of PSUs and textile industry. From 1941 the state capital is highly influenced due to military industry and between 1981 to 2001 there has been high influence due to software and services industry. A common accepted fact about the evolution of the city is that migration plays an important role in the growth of its population, however in the case of Bangalore 60% of its growth comes from natural growth. The large proportion of the migrants population are well educated and qualified.(**refer Annexure- II**). Annexure indicates the level of migration of urban

agglomeration to total population. Highest within the city is mostly inter district at 40%, while intra district it is 23%, interstate it is 35.51% and international it is.44%.

(**Annexure IV**) explains the type of migrants and purpose of settlement to the city. Maximum population has been for employment from inter-state as well from inter-district. This implies there is high level of pull factor that has caused congestion and the need for shelter has increased. While business dependence among inter-state, inter-district and intra district shows a similar trend between 1991-01. Education has been highest from international as well inter state at 19.55% and 6.16% respectively. Observation also reveals the extent of increase in population and migration has tremendously increased the demand for housing. But real scenarios and notification indicates that the city has been experiencing with acute scarcity within the Central Business District as well in the allocation of layout development. Bangalore Development Authority has been equitable in its distribution and allocation based on the categories of demographic features. The development authority ensures justice in promoting to meet the requirement of the growing citizens. Much has been to cater to the needs of the priority sector while the elite and middle have been able to benefit as per their ability and potential earning.

One of the major reasons for the growing property market in the city is its well developed infrastructure and basic amenities. Bangalore has a much improved transportation system and every part of the city is well connected with each other thus very easily accessible. The city claims of 24hours water and electricity supply. With numerous opportunities available for the investment, the city has attracted a huge number of investors from all over the world. The investment in the properties of Bangalore is assured of offering maximum return due to its thriving real estate market.

REAL ESTATE IN BANGALORE: based on the 2011 provisional figures published by Directorate of census operations in Karnataka, the total population in Bangalore has increased from 32% to 46.68% between 2001-11. The total population in Bangalore is 9.588,910 lakhs. Number of males (5,025,498) and females (4,563,412) and the literacy rate between male-female is 91.82% and 84.80% respectively. The density of population has increased to 4,378 per sq.km (2011) from 2,985 sq.km (2001). The real estate market has strengthened in the affordable and mid-segment housing. Recent housing has witnessed an average of 15-50% appreciation in affordable product, while average off take is 40-60% in mid high segment. This is obvious there is a steady demand and there is a steady supply and the city is continuous to witness a positive and many new launch in reality segment despite

of uncertainty in the global market. With affordability factor .there is take off for small sized vertical portion in vertical buildings and fundamentally pre-launch offers have increased tremendously.

Bangalore real estate market holds a special place in the landscape of Indian real estate sector as it is being considered a stable market compared to its counterparts like Delhi and Mumbai. The ‘Garden City’ has rapidly emerged as a realty hub and has become a prominent realty centre in terms of creating new business opportunities.

Traditional origin of the city is described as only with four walls: Historical limit of the city, were based on four gates namely North- old petta- focussed on silk, garments, jewellery, this includes North West- implemented in 1970s has contributed to the city’s growth to promote traditional small scale industries, East- a second commercial hub in the cantonment area, large industrial establishments started during second world war and as well as development of International park and supports logistics infrastructure facilities. Next is South east- a dynamic axis of industrial development with a mix of traditional industries and information technology. From the western zone- a centrally located with residential locations as well manufacturing industries, North south- engaged in trade and business, North east- households employed in services, administrative services, are mainly located and development of national international airport. The four walls limit has moved on the city from square to a star shaped and to a radio segment city. This urban sprawl has increased congestion in all directions, increase vehicular mobility, delay in completion of infrastructure projects causing inconvenience to the present citizens of Bangalore City.

Organization structure: Bangalore Development Authority came into being with effect from 16th January 1976, under a separate Act of the State Legislature. This Authority combined in itself the planning and development functions of (CITB) City Improvement Trust Board. From then onwards Bangalore Development Authority is the Planning and Development Agency for the Bangalore Metropolitan Area.

The main objective of the organization is to cater to the needs of the growing city. The employees strength in the Bangalore Development Authority as on 31st March 2004 was 925 comprising 170 departments and 755 employees of Bangalore Development Authority. At the top level is the chairman who proceeds and approves all decision making. He co-ordinates with the State government frames policies and introduces amendments in the system. Below

him are eight department Heads, they have been assigned with responsibilities in day today activities of the administration.

The functional divisions of the organization is divided into eight main departments. Each of the above department are exclusive in discharging their duties and responsibility. The salient features of the Bangalore Development Authority Act which ensures planning, implementation and as well co-ordination. Bangalore Development Authority as Planning Authority under the Karnataka Town and Country Planning Act is the agency for drawing up development Plan and Town Planning schemes in Bangalore Metropolitan Area. The authority can take up land acquisition and development schemes and housing schemes. Bangalore Development Authority has power for controlling the developments and enforcement of the plan and also has powers to implement developmental schemes. The Act empowers Bangalore Development Authority to issue directions to other Authorities like Bangalore City Corporation and Bru Hath MahanagarePalike connected with development activities.

With increase emphasis on urban governance urban master plan is periodically published once in ten years. The Karnataka Town and Country planning as per the KPTCL Act 1961 required and mandates the master plan. Two plans were update in the year 1995 and in 2005. The Master Plan – 2015 covers a Local Planning Area of 1307 sq km and consists of 387 villages, 7 City Municipal Councils (CMCs) and 1 Town Municipal Council (TMC). The Master Plan of Bangalore serves as the foundation for developing strategic plans and local area plans, and finally, for designing neighbourhoods. Objectives of the new land use zones and zonal regulations contained in the master plan were to safeguard public interest, strengthen and respond to the Bangalore city's complexity by being anticipatory and readily responsive, make realistic regulations, create flexible land use zones and above all facilitate implementation. It has to ensure a high level of "urban efficiency". The preparation of the master plan offered an opportunity to do so for achieving higher efficiency, the master plan should proceed from an understanding of the current spatial issues and infrastructure requirements along with a credible anticipation of the various social and economic needs and requirements of the multidimensional Bangalore society.

Push in metropolis growth: A commonly accepted fact about the evolution of a city is migration plays an important role In the growth of its population, however in case of Bangalore over 60% of its growth comes from natural growth the migration population constitutes about 25%. (**refer Annexure II**). Age wise demographic profile of Bangalore

population reveals that between 1991-2001 presents marked change leading to a decrease of 0-6 child population, the number of adults between 20-29 years remains constant and a significant growth of all social classes above 40 years. This profile shows a marked domination of people in the age group that the capability of being gainfully employed (15-50) which underlies that the strong attraction that Bangalore exerts and its influence over this group sustained by migration and longer life expectancy.

The city has been largely influenced on various factors that has pressurized to growth:

- Bangalore international Airport (North Bangalore)
- Bangalore-Mysore infrastructure Corridor (South-West Bangalore)
- Information Technology Corridor(South East Bangalore)
- Bangalore metro rail under different phases
- Location of large-scale manufacturing industries (East and North Bangalore)
- Location of IT/ITES/Biotech Industries (East and South Bangalore)
- Development of five integrated townships in the BMR
- Responsive energy and power supply projects
- Proposed and completed ORR and IRR peripheral ring road around Bangalore
- Urban basic delivery projects proposed by the local self government institutions (LSGIs) in the city (funded through the Jawaharlal Nehru National Urban Renewal Mission)
- Key factors bolstering growth in demand for affordable housing could be that urban population in the city is predicted to grow more than 40%.
- Rising demand for affordable homes with far out spacing inflation and wage growth there is increase demand
- A culture of home ownership within the Indian culture and inclination for home ownership
- However affordable housing has hitherto remained inadequate due to shortage of homes and policy measures in the past have failed to address the concern
- Commercial banks and other financing organizations have been averse to finance for affordable housing due to high risk
- Reemployment opportunities, scope for entrepreneurial ventures and availability of skilled manpower
- Population growth backed by favourable demographics

- Acute shortage of housing stock
- Increasing Urbanization
- Increasing Nuclearization
- Rising Affordability and consumer quality index
- Increasing penetration of housing finance

The above mentioned factors signifies the symptoms of development and crossing the boundary in the growth of the city. With advantage or announcement of fiscal policy measures such as interest rate subsidies, tax allowances, and better institutionalization of the real estate practices, has created interest among real estate builders. There are variety of participants in the property market in providing housing needs for the flowing population. The reality developers can be classified as premium housing providers- catering to the specification of high end users with high income network, moderate affordable housing – catering to the needs of the lower, average and high middle income groups, while the unorganized and informal groups of economically weaker sections have been taken care by the administrative authorities.

Prior to privatization and between 1983 and 1990, urban area of the city increased from 202 sq.km to 284 sq km. In 2003 the city's area increased to 565 sq km indicating a 100% increase in 12 years and an average progression about 2200 hectares per year with a growth rate of 5.4%.

In the absence of defined natural boundary the city has spread in all directions and along major roads. Development along roads is generally industrial and the intermediary areas between these radial roads are occupied residential development

After the influence of the new economic policy expansion of the city between 1990 to 2003 indicates a significant progress. The star like growth array of the city mark the change from a concentric spatial growth to a sectoral and linear radial development. Massive development in the North East and in the South, linear developments along Hosur road and Whitefield road in the east and also during the same period there has been an increase in the total residential area built and occupied and it amounts to 44 sq km. The 2.89% annual growth rate of the residential area built and occupied does not match the annual population growth rate at 3.28% during the same period., which implies that demand for households are increasing. Deficit is compensated by smaller sized housing and most probably by densification of space already developed. There seems to be rising disparity between different economic classes leading to

the expression of housing concerns for the economically weaker sections. Absence of affordable alternatives that results in informal and under equipped type of housing.

In 1991, the city's housing stock comprised of 43.1%, public housing, 23.5%, informal housing in the form of sites/plots, 17.7% slums, and 7.3% traditional housing. The remaining 8.4% consisted of housing in the villages, cooperative housing and housing build by private builders.

Economic, social and population growth translated into spatial development of the city indicates an urban form of Bangalore that is characterised by a radio concentric system structured by ring roads, five major radial roads and five secondary radial roads that converge towards the centre of the city. The major and secondary radial roads that form a ten-pointed star constitute the organization system of the city, and are important as they support both industrial and commercial development. The density calculated for only the residential area in the city is approximately 300 persons /ha, a relatively high density occurring due to the high rate of land utilization in the residential areas and the size of the large vacant public lands in the city.

A survey conducted in 2001 by Bangalore city report highlights the important changes in the structure of housing production. Public housing (CITB, KHB, BDA and BMP) represented 43.1% in 1991 it was almost reduced to half in 2001 (22.8%). However informal housing in the form of sites/plots in the year 2001 totalled 55.9%, while it barely represented one quarter of the housing in 1991. At the same time production by the private builders increased from 0.8% to 5.2%. Thus it can be observed that difficulties encountered during the last decade by public housing bodies/ department to contribute to housing supply. During this decade a large part of demand for housing was supplied by villages in and around the city and by different forms of informal housing. (**refer Annexure IV**).

Dynamics of Bangalore housing market is changing: The ratio of end user demand to investor demand in Bangalore housing market is changing with investors capitalizing on lower prices, higher rental yield and favourable yield and favourable currency. With prices least risen post 2008 peak during its peers, Bangalore housing market does give some scope for capital appreciation. Along with rising demand prices are rising too, leading to capital appreciation for investors who are further fuelling demand thus creating a spiral.

The rising prices are not denting the demand from the end users considering city's demographics and healthy affordability quotient. Higher realisation benefits developers

through higher cash flows and profitability considering inflationary increase in construction cost. Also customer advance will increase which can fund construction cost and hence lower capital blockage. Also with lower capital requirements the developer's capital servicing costs will reduce which will again in turn boost cash flows.

What is the budget implication for housing? The budget probes that a gap underlying ground work has to be done by those at the policy making level only. This is where a great opportunity has been lost as far as housing sector is concerned. In order to encourage development of affordable houses fiscal sops need to be given to developers as otherwise there is no incentive to improve affordable housing stock where margins are considered less now a days with hike in labour and input costs. The affordable housing (Rs.25lakhs) segment is said to range from 15-20% of the total residential supply. Without focussing on single window clearances, elimination of multiple agencies in the approval process and curtailing land prices. Any fiscal sops will have limited impact on the housing sector as the supply level depends on these factors. Few laudable moves by the finance minister for housing sector has been made. The setting up of the urban housing fund by the NHB with an allocation of Rs.200 crores will infuse liquidity for urban housing thereby boosting demand. Moreover additional allocation of Rs.14873 cr. to JNNURM towards public road transport will help improve connectivity levels thereby ease city congestion and improving real estate transaction in the longer term.

Housing Census 2001 date indicates that 92% of the households live in permanent houses, a situation that is better than that of urban Karnataka -77%. The statistic of joint family households is barely higher and has been decreasing since 1971 due to persistence of small houses and overcrowding in households. The data of 2001 indicates that more than one third 37% of the households continue to have only one room housing. About 64.5% of the lower income group and 53% of the middle income group are occupied by the two room houses and only higher income group experiences a more favourable situation with an average of 3.5rooms per house..

Stagnancy of occupancy status: in 1991 there were about 50% houses that were occupied by tenants against 46% by household owners. Among households with only one room accommodation, the tenants are more in number with 57% against 38% of household owners.

Migration to bigger cities will create a demand for 2.3 million housing units in country's seven residential markets by 2017, a survey conducted by Cushman & Wakefield's research

team says. Of this, private developers will construct 1 million units by 2015. Most of the new demand will come from the National Capital Region, Mumbai and Bangalore, says the survey that also covered markets like Chennai, Hyderabad, Pune and Kolkata. NCR is expected to record the highest demand of over 700,000 units followed by Mumbai (650,000 units) and Bangalore (287,000 units). Experts feel that migration of human resource is the key demand-driver in the large property markets of the country.

The anticipated demand is likely to exert an upward pressure on property prices especially in markets like NCR, Mumbai and Bangalore where the demand - supply gap is high. The study finds that the short fall in housing in the top seven cities is estimated to be 130%. Akshay Kulkarni, Executive Director, Cushman & Wakefield, India "The housing demand supply scenario and the resulting gap is likely to reduce in the next five years. However, the upcoming supply needs to be priced judiciously along with appropriate location, infrastructure, connectivity, relevant features and amenities to ensure absorption." Of the total demand in the top 7 cities, the mid-ranged housing segment is expected to drive the maximum demand (45%). Majority of the developers in the top seven cities are concentrating on this segment which would help reduce the supply-demand gap. On the other hand, the affordable segment of the property market which is likely to register approximately 3 times more demand than supply might see the gap increasing during the next five years (2011-15). "it can be understood that majority of the supply will be for mid ranged housing , however, there is a very large latent demand for Lower Income Group (LIG) and Economically Weaker Sections (EWS) housing," A cooperative settlement model may also be adopted with tenure rights being provided through societies. Developing small clusters in a manner that they can be integrated with the overall development of the area. Community based organizations and Non -government organizations should be closely in the resettlement process. It would be mandatory for developers to ensure that a minimum of 15% of FAR or 35% of dwelling units whichever is higher are earmarked for Economically weaker Sections and lower income category.

Choice of Housing: Living in luxury there is no deep in demand for niche villas as globe-trotting Indians are keen to invest in projects that incorporate international standards in housing. This clearly indicate the number of private builders and realtors have flown to a large extent.(Annexure V).Witnessing over 30 villa projects comprising of 600 units in the year 2012. Capital values are up marginally across sub-markets due to increase in sales

volumes and new launches prices above market average. There is a huge gap between benchmark price, actual price and potential price, usually all above market price that is transacted in the open market. Entry level limited in number at around Rs.3.5cr and 4 BHK units with comprehensive range of amenities vary from Rs.5cr-Rs.7cr depending upon the location, developer and specification. Vacancy level of 25% apartment level 5%(as of 4th quarter 2012) Hosur road has the highest stock at 2605 units, followed by Whitefield at 1914 units, Bellary road at 800 units and others at 1232 units. Soaring land price, prohibitive floor space index and input cost have deterred many developers to plunge into villa development. In a city like Bangalore HNI prefer exclusive villa development.

Major projects- Mayberr,Urbana by Ozone, Tech vsita and glenwood by Prestige, Royal sunnybale by Concorde,77east by divyashree, Orchards by brigade, belle green by DLF. Steady demand comes from also proximity to international schools, IT corridor, health care facilities successful entrepreneurs, promoters, highly paid senior corporate executives, corporate houses.

Affordable housing range is from INR30lakhs/per unit to 55lakh/per unit. Mid segment ranged from INR 55lakh per unit to 85lakh /per unit, while higher mid segment ranges from INR 85lakh /per unit to 1.5crore/per unit. Premium segment in the price bracket of 1.5 crore/per unit onwards.

KPMG and Confederation of Real estate developer’s Association have jointly developed definitions for affordable housing for Tier I,II III cities, based on three key parameters- income level, size of the dwelling unit and affordability.

Income categories	Income level	Size of Unit	Affordability
EWS	Less than INR 150,000 per annum	Upto 300sqft	EMI to monthly income – 30-40%
LIG	INR 150,000 – 300,000 per annum	Upto 300sq ft	EMI monthly income – 30-40%
MIG	300,000 to 1 Cr million	600- 1200sq ft	House price is annual income is less than 5 lakhs

Definitions of affordable housing in India as developed by KPMG and CREDAI

Detailed studies by various real estate funds, managements and related research organisations have confirmed this pattern. This pattern, in simple terms, means, 'The real estate prices in the outskirts of the city (whichever city you are in) grow faster than in the inner city or CBD area'. The CBD stands for central business district of the city or metro concerned. The CBD area would consist largely of BBMP areas in Bangalore.

As far as Bangalore is concerned, the outskirts includes Sarjapur, Hoskote, Bidadi, and Devanahalli areas including the new international airport areas, and other areas covering Bangalore as a shell to the CBD area.

Issues: Several issues, major problems and challenges have been identified before housing sector to mention the most noteworthy one like procedures taken for approval, average time taken for clearance, impact on sale value, continuous growing population, availability of land in accordance with city's urban population. Practical difficulties in the allocate efficiency with maximum emphasis given to Special Economic zones. As per the economic survey for 2012-13, tabled in the Parliament there are 34 procedures and the average time taken is 196 days for clearance, which increases the overall sale value by 40%. Bangalore, is one of the fastest growing city in India with a population growth of 3.25 percent per annum and it is expected that the city's population will touch 10 million by 2021.

Who is to be blamed is the allocation department or the realty property market for housing. Should there be a regulator?. Do they create any artificial scarcity of urban land?. Distribution of land must go in accordance with City's urban population as projected. Realistically this does not prevail rather land has been increasingly allocated for SEZs in East and in South east directions. It is plain that housing shortage is wholly artificially created with opaque time consuming approval processes that greatly encourages rent seeking corruption and black money driven the massive policy challenge to boost supply of urban infrastructure and housing the way ahead is to reform the entire real estate sector and proactively being about transparency in the umpteen approvals and clearances required for build spaces. A cabinet nod for the real estate regulator bill, pending in parliament since 2009. The regulator would need to be decentralized but have uniform norms to define concepts like 'carpet area' sweeping away nebulous notions like 'super area'. Clear cut norms for changing land use criteria to purposefully shore up urban housing. Instead of lowly and rigidly interpreted floor area ratios in the city there is a need to step up vital support systems

like drainage and sewage to build more floors vertically, to make the urban centre compact and modern.

Micro apartments a trend builds Japanese style small quarters catch on. Home size shrinks 15x15 apartment that manages to have everything one need, Urban planners experiment with new type of housing to accommodate growing numbers of single professionals, student and elderly. To foster innovation municipalities are waiving zoning regulations to allow construction of smaller dwellings at select sites.

Realtors take to Satchet strategy of flat size because homes sales has decreased, GDP is decreasing, expectations and future prospects are at downbeat. Satchet concept used by FMCG brands, a market driven strategy. General perception that smaller size apartments are needed to suit customer affordability. Developers are looking for sops like lower interest rates, infrastructure status and tax break and easier external commercial borrowing norms. India's is estimated to be short of 18.7million houses and around 90% of this shortage is in the affordable housing segment.

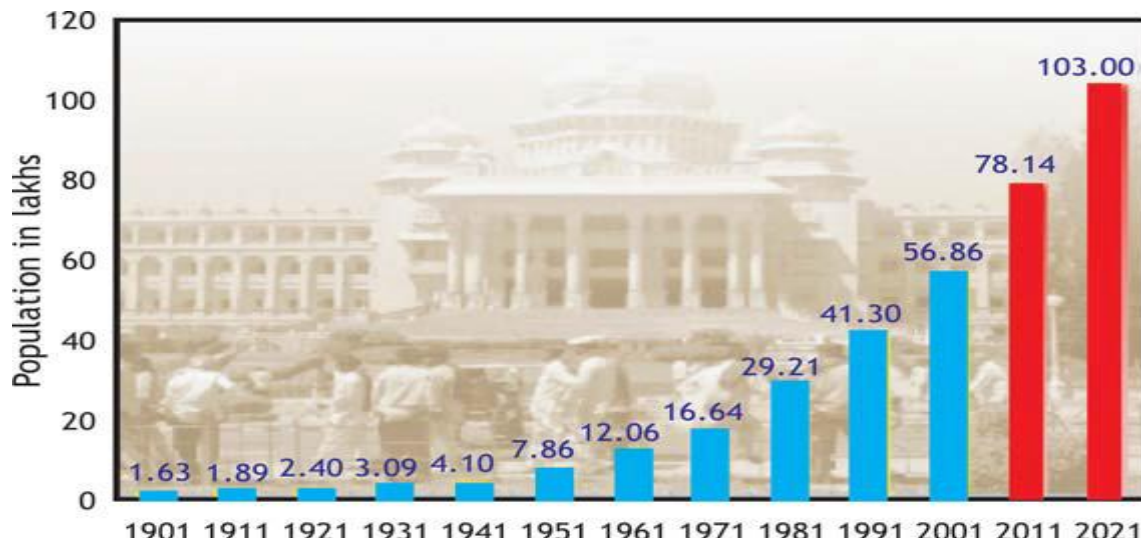
The only formula to rationalize prices is to unleash supply, which will benefit both the economically weaker sections and the middle class. The demand for housing is there but prices are just too high because of short supply and government policies.

Therefore for public housing one two room tenements can be provided only in ground +3 OR +4 stored walk up structures without lift while higher categories of housing can be provided in high rise construction. Since land is scarce FAR was fixed and for urban poor built up around 30 sq.km to 50 sq km with common areas and facilities .Private sector participation and investment is allowed to that extent possible.

. Pedagogical objectives:

- The case identifies the fundamental market forces of demand, supply and price for increase in housing demand in the city
- The case study explores the various stakeholders and their role in affordable housing, especially the government
- The case analyzes the challenges and problems of affordable housing
- The case study helps in understanding the role of private participation in urban housing
- The case study looks at the other background forces like population, migration, and density in the city.

Annexure I



Annexure II

Major Landmarks in the Planned Development of Bangalore City

Year	Developments
1952	Bangalore Development Committee founded
1961	Karnataka Town and Country Planning (KTCP) Act enacted
1963	Outline Development Plan (ODP) submitted to Govt.
1965	KTCP Act enforced
1972	ODB approved and adopted under the KTCP Act 1961
1976	BDA constituted
1984	1 st CDP for 1985 approved
1995	2 nd CDP for 2005 approved
2005	3 rd CDP for 2015 prepared

Source: BDA

Annexure III

Distribution of Migrants to Bangalore Urban Agglomeration

Bangalore UA 1991-2001	Total No	Percentage to total Population	Percentage share in decadal growth	Percentage share to total migrants
Total Population(1991)	5701446	100	-----	-----
Decadal growth	1621940	28.45	100	----
Total Migrants	1256494	22.10	77.70	100
Intra district	290434	5.09	17.91	23.05
Inter district	514352	9.02	31.71	40.82
Inter State	447530	7.85	27.59	35.51
International	4178	0.07	0.31	0.44

Source; City Municipal Corporation 1991-2001

Annexure IV

Types of Migrants and reasons for migration to Bangalore Urban Agglomeration

1991-01	Bangalore UA				
	Total Migrants	Intra district	Inter district	Inter State	International
Total Migrants	1260176	290434	514352	447530	7860
Employment	23.37	3.64	28.92	29.80	23.28
Business	1.30	0.21	1.12	2.21	1.76
Education	3.71	0.28	3.28	6.16	19.55
Family moved	16.14	3.57	18.36	21.63	22.37
Moved after birth	10.37	1.76	13.61	12.31	5.00
Marriage	4.89	1.46	6.22	5.62	2.91
Others	40.22	89.08	28.48	22.27	25.13

Source: City Municipal council

Annexure V

Group wise distribution of Houses in Bangalore city

Income Groups	Number of Houses	Percentages
Economically Weaker Section	2792	38.4
Middle Income Group	1391	19.1
Low Income Group	2498	34.4
High Income Group	588	8.1
Total	7269	100

Source CDPlan 1995 Page 28

Annexure VI High Rented Homes points towards potential market change

Change	2001	2011	Absolute	Percentage
Population Urban	5759987	8719939	2959952	51
Total Urban Households(A)	1254357	2148161	893804	71
Rented Households-1 bhk+(B)	718234	1324184	605950	
Rented Households (C)	675545	1308797	633252	94
Rented Households (D)	344719	720662	375943	109
C/A	54%	61%	71%	13%
D/A	48%	54%	62%	13%

Source: Census 2011, Emkay Research

Annexure VII High Rented Homes

Conversion rate	20%	35%	50%
Potential Demand – Houses	144132	252232	360331
Average House Size (Sqft)	1500	1500	1500
Potential Demand(msf)	216	378	540

Source: Emkay Research

Annexure VIII

S.No.	Name of the company
1	S B G Housing Pvt. Ltd.
2	Banashankari Sugars Pvt. Ltd.
3	Lakshmi Priya Properties Pvt. Ltd.
4	Tanglin Retail Reality Developments Pvt. Ltd.
5	Brigade Estates & Projects Pvt. Ltd.
6	Brigade Properties Pvt. Ltd.
7	Brigade Tetrarch Pvt. Ltd.
8	Tanglin Property Developments (Mumbai) Pvt. Ltd.
9	Magna Warehousing & Distribution Pvt. Ltd.
10	Starworth Infrastructure & Construction Ltd.
11	Prestige Estates Projects Ltd.
12	Prestige Mangalore Retail Ventures Pvt. Ltd.
13	Downhill Holiday Resorts Pvt. Ltd.
14	Prestige Mysore Retail Ventures Pvt. Ltd.
15	Prestige Whitefield Invst. & Developers Pvt. Ltd.
16	Prestige Construction Ventures Pvt. Ltd.
17	Foothills Resorts Pvt. Ltd.
18	Provident Housing Ltd.
19	Puravankara Projects Ltd.
20	Nadira Properties Pvt. Ltd.

21	Gerbera Properties Pvt. Ltd.
22	Godrej Nandhi Hills Project Pvt. Ltd.
23	Nandi Infrastructure Capital Co. Ltd.
24	Sobha Developers (Pune) Pvt. Ltd.
25	Prestige Bidadi Holdings Pvt. Ltd.
26	Prakalpa Properties Pvt. Ltd.
27	Idika Properties Pvt. Ltd.
28	Rajiv Gandhi Rural Housing Corpn. Ltd.
29	Information Technology Park Ltd.
30	Ramanashree Comforts Ltd.
31	Skyline Construction & Housing Pvt. Ltd.
32	K M F Builders & Developers Ltd.
33	Alpine Housing Devp. Corpn. Ltd.
34	Nitesh Estates Ltd.
35	Nitesh Housing Developers Pvt. Ltd.
36	Katwa Construction Co. Ltd.
37	Shreyadita Properties Pvt. Ltd.
38	Nitesh Property Mgmt. Pvt. Ltd.
39	Khoday Properties Pvt. Ltd.
40	Adventz Infracore India Ltd.
41	Krishnapriya Properties Pvt. Ltd.
42	Nitesh Urban Devp. Pvt. Ltd.
43	Pennar Hotels & Resorts Pvt. Ltd.

Reference:

[Mahendra, B and Hari Krishnan K., Institute of town planners, India Journal, April- June 2010, Urban Governance and Master plan of Bangalore City](#)

[Government of Karnataka ,Bangalore Development Authority, Bangalore Master Plan – 2015](#)

<http://www.thehindu.com/todays-paper/tp-features/tp-propertyplus/bangalore-most-active-residential-market/article3993114.ece>

<http://www.joneslanglasalleglobal.com/realestatecompass/real-estate/2012/12/bangalore-real-estate-review-2012-predictions-2013/>

[India brand equity foundation, www.ibef.org.](http://www.ibef.org)

http://www.moneycontrol.com/news/real-estate/bangalore-housing-market-update-rising-demandprices_814722.html

http://property.sulekha.com/affordable-housing-drives-demand-in-bangalore_89569_blog

http://content.magicbricks.com/over-50-developers-to-participate-in-indian-property-show/?utm_source=mb-article-slider&utm_campaign=article-slider-article_link

<http://www.cushwake.com/cwglobal/jsp/newsDetail.jsp?Country=SA&Language=EN&repld=c55000002p>

<http://www.hindu.com/2007/06/27/stories/2007062758370300.htm>

Times Property, The Times of India, Bangalore

Knight Frank India Private Limited

Emkay Global Financial Services limited

Economic Times January, February, March, April 2013

Kpmg.com/in