EVALUATING THE GROWTH POTENTIALS OF REAL ESTATE MARKET IN NOIDA

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Abstract: The real estate market of Delhi National Capital Region (Delhi NCR) has shown a tremendous growth in the past, credit goes to its surrounding areas which act as a major support to the Core city when it comes to infrastructure potentials. This boom in the reality market is experienced by each of the segments, may it be residential, commercial or retail. These surrounding areas generally referred to as suburbs hold massive parcel of lands available for further development, which turns out to be an additional advantage in this extreme crisis of land availability. This helps the prospective investors with the options of more affordable property segments. Noida city and areas attached to it such as Noida Extension and Noida Expressway are one of the hot spot destinations when it comes to real estate investments. This paper critically examines the current situation of reality market in Noida linking to its growth potentials.

Keywords: NCR, Real Estate, Infrastructure Potentials, Land Parcel, Affordable Property

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1. INTRODUCTION

The term "real estate" is defined as land, including the air above it and the earth below it and any buildings or structures on it (Parida 2011). Land plus anything permanently fixed to it, including buildings, sheds and other items attached to the structure. Real estate is the business that sells, rents, and leases the places where we as people live and transact business (Straw 2008). Real estate, in the parlance of trade theory, is the ultimate "non-tradable" durable asset. It is neither exportable nor importable, and essentially has a fixed location with a decentralized market (Edelstein et al. 2010).

Though, when talked in general, real estate simply indicates the residential units in form of apartments, row housing and villas. But, from a broader perspective the real estate whenever referred, if not stated signifies the three segments viz. Residential, Commercial and Retail units. The real estate industry is an important pillar of the national economy. It plays an important role in improving people's living conditions and living standards, boosting economic growth, expanding employment and accelerating the urban construction (Wu and Guo 2011). In a positive sense, however, due to very high multiplier effects resulting from investments in this sector, real estate is often referred to as an "economic locomotive", since real estate investments have a significant influence on the gross domestic product and on the employment rate (Bruer and Nadler 2012).

The Indian Confederation of Real Estate Developer's Association of India (2013), analysed that the real estate sector has a total supply pipeline of close to 3.6 billion sq ft lined up for completion in the year 2013. About 98% of this is concentrated in the residential segment, including organised as well as unorganised space. The spread of organized real estate space in leading cities of India in 2012 is shown in Figure 1.

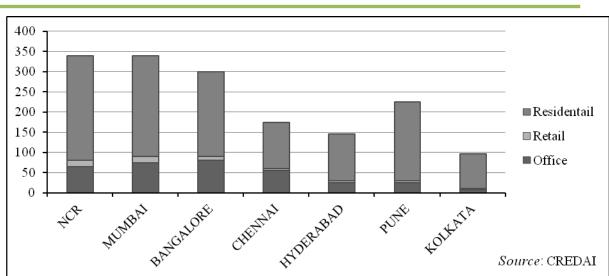


Figure 1: Spread of Organized Real Estate in Leading Cities in India (2012)

With such a massive supply of real estate units, it is very clear that the realty sector is one of the booming industries that will emerge as the major contributor to the national economy in near future. In order to provide better perspective to the reality market, this research has been undertaken

As noted by Sahel (27 Dec 2013), Vice Chairman of Lotus Green - Delhi NCR on an average sees new construction of 1 Lac residential units per annum. Of these, approximately 60 per cent lies in the Noida region. Although this massive development of residential real estate units provides the investors with plenty of options to invest in, but at the same time creates a situation of confusion regarding where exactly should they invest.

From above details, it is very clear that the real estate market in India as well as Delhi NCR is growing at a very fast pace. This growth is observed majorly by the satellite towns of Delhi NCR owing to the huge parcels of land available with them, leading to vast dimensions of further development. Of these satellite towns, the Noida city and its surrounding areas such as Noida Extension (recently renamed as Greater Noida West) and the Noida Expressway are the major beneficiaries attracting maximum number of project launches giving a prominent lead to the Noida's reality market. This research makes a comparative study upon the factors which are responsible for shooting up the reality market in Noida leaving behind the other sub regions.

2. LITERATURE REVIEW

Guidice et al. formulated a decision support system for real estate investment choice. Falkenbach (2009) developed a framework for market selection for international real estate investments. Tsai et al. (2013) analysed the real estate prices with a perspective of spatial correlation with shopping district. Jackson & Orr (2011) proposed the real estate stock selection and attribute preferences. The results reveal that 'fixed' property characteristics (location and obsolescence) are dominant in the decision-making process, over and above 'manageable' tenant and lease characteristics. Narendran (2013) studied the residential real estate industry in India. The study examined the differences in residential property prices across different cities in India. Gill et al. (2012) investigated the Factors that Influence Indian Propensity to Invest in the Real Estate Market. This study examines the factors that positively influence the propensity of Indian investors to invest in the real estate market.

3. THE STUDY AREA

The real estate market of Delhi National Capital Region (Delhi NCR) has shown a significant growth in the past owing to its surrounding areas which act as a major support to the Core city when it comes to infrastructure potentials. The surrounding areas also termed as suburbs having a hold of massive parcel of lands, provides a more affordable options to the prospective investors. This affordability is enjoyed by the developers in terms of easy and cheap availability of land. The Indian Jones Lang LaSalle (2013) studied the spread of each of the three segments of Delhi NCR. The research clearly shows that highest number of residential inventory lies in Gurgaon sub region followed by Noida & Ghaziabad. A major chunk of commercial and retail segments of real estate have came up in suburbs as compared to the core Delhi city.

From the above set of data presented as evidence, it is very clear that the suburbs are the major drivers of the real estate market of NCR.

Noida, is a city in India under the management of the New Okhla Industrial Development Authority (also called NOIDA). It plays the role of a satellite town to the metropolitan city – Delhi.The prominent areas in and around the Noida city, that are either experiencing or expected to see a significant real estate growth in the near future include (a) Noida City (b) Noida Extension (c) Noida Expressway

The above mentioned areas will be taken into consideration to analyse the real estate market of Noida while comparing them with other prominent areas of Delhi NCR.

4. METHODS OF STUDY

The objective of the study is to find out the potentiality of real estate market of Noida in lieu of other sub regions of Delhi NCR. More specifically, we identify and categorize the market potential of real estate business in Delhi NCR focussing upon the significant lead to the Noida's reality market based upon its specific investment opportunities. The investigation procedure involves various steps, which is underlined below.

4.1 Identification of Attributes / Factors

The real estate market of any sub region is influenced by the collective impact of various physical and social factors which prevail in the locality. The various significant factors that influence the real estate market growth of a sub region are collected from various research papers. 'Residential location/Connectivity, Shopping location/Commercial hub and land use factor' comprise the list (Jun, 2011). Location/Connectivity factor is an important aspect of real estate market evaluation and has been used by various other authors in the past (Gayda 1998; Kim et al. 2005; Bravi & Giaccaria 2006). 'Land availability and government policies' also turn out to be the relevant factors influencing the growth (Zhang et al. 2011). Another important factor which impact the real estate market includes 'affordability' and 'returns' (Jackson & Orr, 2011; Falkenbach 2009). Affordability is also used by various other authors (Earnhart 2002; Gayda 1998; Perez et al. 2003; Walker et al. 2002; Wang & Li 2004; Kim et al. 2005; Bravi & Giaccaria 2006). Apart from it, 'existing infrastructure (physical & social), Floor space Index and connectivity' is counted as a significant factor that influences the reality market (Tsai et al., 2013). Ball and Srinibasan (1994) proposed a second order hierarchy structure applying AHP for the house selection decision making. Following the same structure the various factors are arranged and are presented in the form of tree diagram in Figure 2 below:

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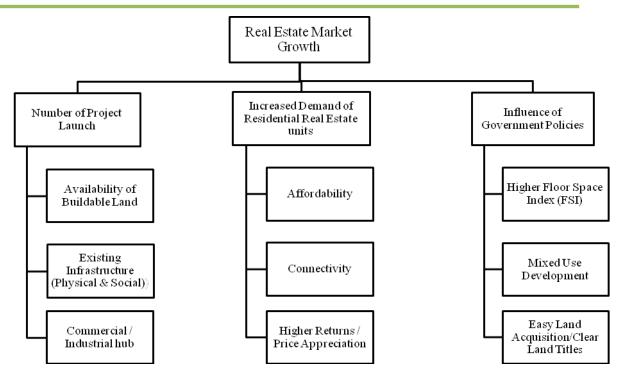


Figure 2: Significant Factors Influencing Real Estate Market Growth of a Sub Region

4.2 Assessment of attributes for the Real Estate Market of Noida

The growth potentials pertaining to the real estate market growth of Noida city and other connected areas were analysed from The Economic Times: Delhi NCR, (Dated - March 2011 to Feb 2014), and presented in a tabular form (Table 1) below:

Table 1: Existing condition of various significant factors that influence the reality market of Noida

Real Estate Growth Factors	Number of Project Launch			Increased demand of Residential Real Estate Units			Influence of Government Policies		
LOCATION	Land Availability	Existing Infrastructure	Industrial Hub	Affordability	Connectivity	Returns/ Price Rise	High FSI	Mixed Use	Land Acquisition
NOIDA	Sector 74,78 , 79 Resale Market on Boom	Finer (physical) Social- Schools, Parks, Hospitals, Religious Places	Commercial hub:Sector-18 Industrially sound	Quite Affordable 2BHK (900 sqft) 40-75 Lacs	DELHI:30-45 Min, Metro link: Sec62, Noida Expressway- 2Km, NH- 24,FNG Road	30-40% Appreciation	2.75- 3.5	YES APPLICABLE	Slight Impact
GREATER NOIDA WEST	Massive land parcel 3,635 Hectares	DMIC, Night Safari Park, Transportation	Plan ned IT & KP Parks,	2BHK (700-1500 sqft) 20-50 Lacs	Metro Extension NH-24,FNG &	30-40% Appreciation	2.75- 3.5	YES APPLICABLE	YES Project Delayed

	70+ Housing	hub,	Industrial	High	Yamuna				
	Project	Mega Rail	Corridor ,	Affordable	Expressway				
		Terminal,	(DMIC)						
		F-1 Circuit							
		Road network-		2BHK(900 sqft)	Metro				
NOIDA	Huge land	20 km	DMIC &	30-50Lacs	Extension,	20-25% YOY	2 75-		Slight
EXPRESSW	along 23.5 Km	126MW Power	GNIDA		,			YES APPLICABLE	_
AY	Expressway	STP-30,000	40 Institutions		Yamuna	Appreciation	3.5		Impact
		kltr/day		Affordability	Expressway				

The major depictions pertaining to real estate market of Noida and its surrounding areas as concluded from the table above includes:

- The main Noida city also has a very limited scope of further development, but the resale market in major areas is emerging.
- Good level of Connectivity for the different areas of Noida with the Delhi city, supported by high affordability drives people to invest into reality market of Noida.
- Basic infrastructure such as primary & secondary schools, several parks and religious places makes the locality a perfect destination to plan your residence.
- Noida Extension has emerged as a destination having maximum number of project launch. With almost 2500 hectares of land under development and more than 70 housing projects being constructed, the area is attracting several investors.

4.3 Assessment of Attributes for Real Estate Market of other sub regions of Delhi NCR

The various other sub regions of Delhi NCR that are also experiencing reality market growth are also analysed against the same attributes. The analysis from The Economic Times: Delhi NCR, (Dated - March 2011 to Feb 2014), is presented in Table 2 below:

Table 2: Existing condition of various significant factors that influence the reality market of other Sub Region of Delhi NCR

Real Estate Growth Factors	Number of Project Launch			Increased demand of Residential Real Estate Units			Influence of Government Policies		
LOCATION DELHI NCR	Land Availability	Existing Infrastructure	Industrial Hub	Affordability	Connectivity	Returns/ Price Rise	High FSI	Mixed Use	Land Acquisition



NORTH DELHI	Significant land at NARELA & ROHINI	Matured level of physical & social infrastructure	Industrial area emerging as residential hub	2BHK (900 sqft) NARELA- 45 Lacs ROHINI- 1 cr	Metro & DTC (schools, offices)	10-20% Appreciation	1.2-2.00 (750- 3750 sqmt)	YES APPLICABLE	NO Issues
SOUTH DELHI	Paucity of land No new project	Finest level of physical & social infrastructure	Nehru Place: Major commercial hub	2000 sqft: 7-8 cr Highly Unaffordable	Metro & DTC (schools, offices)	Depreciation 20-35%	1.2-2.00 (750- 3750 sqmt)	N/A	N/A
Real Estate Growth Factors	Number of Project Launch				demand of F al Estate Un		Influence of Government Policies		
LOCATION DELHI NCR	Land Availability	Existing Infrastructure	Industrial Hub	Affordability	Connectivity	Returns/ Price Rise	High FSI	Mixed Use	Land Acquisition
WEST DELHI	Paucity of land (DWARKA Expressway)	Growing physical & social infrastructure	N/A	2BHK (900 sqft) 65-70 Lacs Low Affordability	(150 mt wide) Dwarka- Gurgaon & IGI	15-20% Appreciation	2.00	N/A	YES (4 Km stretch)
GHAZIABAD	RAJ NAGAR Extension & VASUNDHARA	Decent (physical) Social- GD Goenka, DPS, FORTIS Hospital	Several MNC offices in vicinity/ People travel to DELHI	Highly Affordable 2BHK (900sqft)- 22 - 45 Lacs	3 Km from Metro, AV- ISBT, AV- Railway station, NH- 24/NH- 58/FNG	20-35% Appreciation	1.50	To some extent Applicable	NO Issues
GURGAON	Prominent land parcel in Sector 81-95	Existing is fine Proposal of 5 Hospitals, 3 Colleges & retail	IT, Commercial &Automobile Hub	2BHK (900 sqft) 60-70 Lacs Low Affordability	Dwarka Expressway, NH-8 & IGI,Mono Rail	20-30% Appreciation	1.45- 1.75	N/A	Slight Impact
DARUHEDA & BHIWADI	Massive land parcel in & near BHIWADI 5300 Acres	Quality Infrastructure Existing	Home to 2500 Industries of varying scale	Highly Affordable 2BHK (900sqft)- 22 - 30 Lacs	IGI-55 Km GURGAON- 40Kms NH-8: 5Kms DMIC	10-15% Appreciation	1.45- 1.75	To some extent Applicable	NO Issues

Table 2: Continued..

The major depictions pertaining to real estate market of core Delhi city includes:

- Fair Prospects of further developments exists in North Delhi (i.e. Narela & Rohini) and in some parts of West Delhi (i.e. Dwarka Expressway).
- Though, the existing infrastructure (Physical & Social) remains one of the best, but due to constraints of further development in terms of availability of land the prospects are limited.

The major depictions pertaining to real estate market of Ghaziabad includes:

- Areas like Vaishali, Kaushambi, Indirapuram, and Vasundhara have become a big hit
 amongst end users as these places are in close proximity to Delhi, also holding several
 MNC offices in the vicinity.
- The Anand Vihar Inter-State Bus Terminal (ISBT) and the Anand Vihar Railway Station are within a radius of 1km from these places, also connected to NH-24 & NH-58 linking to neighbouring states.

The major depictions pertaining to real estate market of Gurgaon & Bhiwadi includes:

- In Gurgaon the land owned is 100 per cent in control of landowner, while in Noida & other cities it is lease hold.
- Spread over nearly 5300 acres, Bhiwadi has nearly 2,500 tiny, small, medium and large industries, which is a major driving force for growth of real estate market in Bhiwadi.

5. RESULTS & DISCUSSION

On comparing the growth potentials of Noida and its surrounding areas with the rest of the areas of Delhi NCR, it is very clear that Noida has strong propensity towards real estate market growth. The detailed comparative study is discussed below:

5.1 Comparison in context of: Number of project launch

Considering, number of project launch, Noida is enjoying the maximum benefit out of it. The land availability factor majorly contributes to the reality market of Noida and Gurgaon. This is being realized at Noida extension which is experiencing the maximum number of upcoming projects. Besides, Dwarka expressway scored second position in number of upcoming projects.

5.2 Comparison in context of: Increased demand of Residential Real Estate units

This factor dominantly influences the reality market of Ghaziabad owing to its highly affordable property range. Besides, the good connectivity is also responsible for the real estate market growth in Ghaziabad.

The affordability factor is also highly influencing for the realty market growth of Noida as well. Besides, the higher returns factor (maximum for Noida) is also enhancing the reality market in Noida to great extent.

5.3 Comparison in context of: Influence of Government policies on Real Estate growth

Considering the influence of Government policies on the real estate market growth, the privilege of highest FSI and recent incorporation of mixed use development policy is majorly responsible for the reality market growth in Noida. The land acquisition issues had slightly suppressed the market sentiments, but recently the clearances given to the builders from the judiciary is acting as a helping hand to the drowning market.

6. CONCLUSION

The study very clearly highlights each and every factor which makes Noida and its surrounding areas the top most destinations when it comes to real estate investments. The result clearly suggests that the cumulative influence of all the criterions on the reality market growth is highest for Noida. The sub region also takes a lead from others in the context of 'number of project launch' owing to maximum availability of land and 'influence of Government policies' holding highest FSI and mixed use development. Also the increased demand criterion has a significant influence on the real estate market of Noida providing diverse affordable options coupled by good connectivity as well. Also, properties at Noida boast highest returns as compared to any other location in Delhi NCR. Thus, overall Noida has the best prospects of reality market growth.

So, while making a real estate investment, the properties at Noida should be of order-one priority. Following the queue, Gurgaon can be placed at the order-two in the priority. Being one of the most affordable destinations, Ghaziabad can be placed at order-three. For the reasons of very low prospects of further development, Delhi should be given the last place in the priority order.

6.1 Future Proposals for Noida & Other Sub Regions of Delhi NCR

The preliminary infrastructure development strategy/proposal which should be incorporated in the development schemes of Noida, that will eventually influence the growth of reality market in Noida includes:

- Provide more Commercial & Industrial units
- Improve infra Power cut & Water supply
- Improve Connectivity Railway station & Airport
- Solve Land acquisition issues at priority

In order to achieve uniform spatial growth, the Government should normalize the FSI norms so that each sub region may have equal prospects of developments. This will not only attract more number of real estate developers, but also ensure that all the spokes of the hub Delhi NCR are expanding at a uniform pace, thereby maintaining a balance between growth of different sub regions.

As noted by Arora (Dec 19, 2012), M.D. Supertech Limited - *infrastructure growth should be in conjunction with real estate development*. The study emphasizes upon the significant factors related to real estate investment and subsequent growth potential of Delhi NCR focussing specifically upon Noida. Delhi NCR being prime example of hub and spoke model, this will eventually *lead to balanced and sustainable development* that will result into uniform expansion of the city involving equal growth in all the sub regions.

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