

Real value in a changing world



Market Research and Assessment of Capital Values for Proposed Residential Development Located in Neemrana, Behror and Bhiwadi, Rajasthan

FINAL REPORT

February 2013



CONTROLLED COPY

Market Research and Assessme	Final Report for ent of Capital Values for Proposed Residential Development Located
	in Neemrana, Behror and Bhiwadi
	To VBHC Delhi Value Homes Private Limited
Document Number:	Final Report
Document Status:	Revision 0.0
Date:	February 2013
Document prepared by:	Mr. Gaurav Mehra
Document approved by:	Mr. Manish Kumar
No. of copies circulated:	02
Circulation	
Сору 01 :	VBHC Delhi Value Homes Private Limited
Сору 02 :	Office Copy

Contact Information

For further information please contact:

Mr. Manish Kumar

Local Director - Strategic Consulting Group Jones Lang LaSalle Property Consultants Private Limited 1108-1110, Ashoka Estate Barakhamba Road, Connaught Place New Delhi – 110001, INDIA. Ph: +91 (0) 11 4331 7070 Fax: +91 (0) 11 4331 7071 Mobile: +91 98116 66145 Email: manish.kumar@ap.jll.com





TABLE OF CONTENTS

<u>INTRO</u>	DUCTION	<u>5</u>
1.1	Background	5
1.2	Objective and Scope of Work	
1.3	Report Structure	
1.4	Limitations	
1.5	Disclaimer	
-	VIEW OF NATIONAL CAPITAL REGION	
	Regional Context	
2.1		
2.2 2.3	The Genesis of the NCR	
2.3 2.4	Transportation Links Growth Drivers	
2.4 2.5	Neemrana-Behror & Bhiwadi Region wrt National Capital Region	
NEEMI	RANA BEHROR BHIWADI REGION – A PROFILE	
3.1	Introduction	
3.2	Location and Connectivity	
3.3	Alwar- Profile	
3.4	Demographics and Social Economic Profile	
3.5	SNB Urban Complex	
3.6	Neemrana- Profile	
3.7	Behror – Profile	
3.8	Bhiwadi - Profile	
3.9	Impact of Infrastructure Activities	
RESIDE	ENTIAL REAL ESTATE	<u>31</u>
4.1	Introduction	
4.2	Residential Sector Overview – Neemrana & Behror	
4.3	Residential Sector Overview – Bhiwadi	
<u>SUBJE</u>	CT SITE ANALYSIS – NEEMRANA	
5.1	Introduction	
5.2	Subject Site Location	
5.3	Site Area and Land use	
5.4	Connectivity and Linkages	
5.5	Neighborhood Profile	
5.6	Subject Site SWOT Analyses	
<u>SUBJE</u>	CT SITE ANALYSIS – BEHROR	<u>51</u>
6.1	Subject Site Location	
6.2	Site Area and Land use	
6.3	Connectivity and Linkages	
6.4	Neighborhood Profile	
6.5	Subject Site SWOT Analyses	55
<u>SUBJE</u>	CT SITE ANALYSIS – BHIWADI	5 <u>6</u>
7.1	Introduction	
7.2	Subject Site Location	
7.3	Site Area and Land use	
7.4	Connectivity and Linkages	
7.5	Neighborhood Profile	
7.6	Subject Site SWOT Analyses	60



VBHC

<u>ACHIE</u>	VABLE PRICING	62
8.1	Future Outlook for the Micro Market – Neemrana-Behror	62
8.2	Achievable Capital Value for the Proposed Apartment Development – Neemrana & Behror	63
8.3	Future Outlook for the Micro Market – Bhiwadi	68
8.4	Achievable Capital Value for the Proposed Apartment Development - Bhiwadi	69





Introduction

1.1 BACKGROUND

VBHC Delhi Value Homes Private Limited (hereinafter referred to as 'VBHC') is developing a residential projects on plots measuring an area of about 12.65 acres, 10.50 acres and 22.70 acres located in Neemrana, Behror and Bhiwadi respectively in, Alwar District, Rajasthan, India (hereinafter referred to as the 'Subject Site (s)'. VBHC is developing this residential apartment complex and the projects shall consist of studio, 1-BHK and 2-BHK Apartments.

In this regard, VBHC has commissioned Jones Lang LaSalle Property Consultants India Private Limited (hereinafter referred to as 'Jones Lang LaSalle') to provide an independent, expert assessment of residential capital prices for the marketability of the Projects being developed by VBHC.

1.2 OBJECTIVE AND SCOPE OF WORK

The objective of the market research and capital price assessment is to help Client in determination of capital/ sale price for proposed residential development component to be positioned at subject site. Following is the scope of work covered under this Draft Report:

City Level Assessment

- Brief city overview, infrastructure development initiatives in the city and future growth direction; and
- Macro-market assessment of residential sub-sector focusing apartments under budget and value home segment.

Micro-Market Level Assessment

- Site analysis, SWOT analysis and micro-market delineation (with respect to the Project Site) and analysis;
- Real estate micro-market scan including mapping of core residential real estate developments, focus on apartments and plots under budget and value home segment;
- Provide micro-market research findings for the micro-market of the Project Site covering demand drivers, supply dynamics, absorption, vacancy rates, pricing, etc. (pricing to cover capital values); and
- Suggestions on achievable capital values for proposed apartment typology on the Project Site (s) and any other conclusions/recommendations based on market assessment.

1.3 **REPORT STRUCTURE**

- Introduction: This chapter describes the assignment and project details in brief, scope of work, approach & methodology adopted for the assignment, limitations while carrying out the assignment and disclaimer statements.
- **Profile of the study region:** This chapter presents profile of Shahjahanpur-Neemrana-Behror Region and Bhiwadi region in brief and NCR region highlighting location attributes of the city, regional linkages





5

& connectivity, demographic and economic characteristics, infrastructure development of the city along with a commentary on the general growth trends.

- **Real Estate Macro-Market Review:** This chapter presents overview of Neemrana-Behror and Bhiwadi real estate market highlighting the prevalent pricing and absorption trends of residential sub-sector focusing plotted, villa and apartments under budget and value home segment.
- **Project Site Analysis:** This chapter presents a description of the Project Site and its neighborhood in terms of location, linkages, salient features, etc., site surroundings and the site SWOT.
- Achievable Pricing: This chapter summarizes the outcome of the findings of the site analysis, macro-& micro-market assessment and suggestive achievable capital prices for the proposed residential apartment typology at the Project Site (s).

1.4 LIMITATIONS

Following are the limitations to this assignment:

- The interpretation of real estate key trends is based on market survey and interactions with limited key players in real estate market, viz. developers, brokers and investors. Hence, they are reflective of situations prevalent at the time of assessment.
- All facts & figures, findings, conclusions of the macro- and micro-market assessment are captured from key players in the real estate market as indicated above. Hence, they are indicative of situations prevalent at the time of assessment.

1.5 DISCLAIMER

This Report has been authored by Jones Lang LaSalle acting on the instructions of VBHC. Jones Lang LaSalle was instructed by VBHC to provide an independent, expert assessment of residential capital prices for the marketability of the Projects being developed at Neemrana, Behror and Bhiwadi by VBHC. This Report has been formulated by Jones Lang LaSalle independent of any inputs (other than information specifically sought for) from VBHC and VBHC has not in any manner influenced the findings of this Report.

Notwithstanding the foregoing, this Report should be treated as additional information and not be taken as a substitute for comprehensive due diligence to be exercised by a prospective purchaser including visiting the project site and evaluating the suitability of the Project to their specific needs, their ability to meet the financial commitment either through purchase or through loan servicing and the availability of third party financing. It is specifically noted that while the Report contains certain views regarding the possible marketability of the Project in the future, prospective purchasers are encouraged to evaluate the Project based on their personal requirements rather than from the perspective of future real estate price appreciation. This Report does not constitute any commitment whatsoever from VBHC and shall not give rise to any claims whatsoever from any prospective purchaser regarding the veracity or otherwise of this Report. This Report is provided for information only. This Report shall not constitute formal advice rendered directly to the prospective purchaser.



Overview of National Capital Region

2

2.1 REGIONAL CONTEXT

Delhi as National Capital Territory (NCT) and metropolis city has a distinct and unique character. It is a growing and expanding magnet for people from all across the country and also a hub for the north India region. Development of a metropolis like Delhi, therefore, cannot be limited within its boundaries. It inevitably influences development in the immediate surrounding areas and in turn, gets influenced by them. Delhi has witnessed rapid growth and urbanization in the past few years. As a result, the physical potential for further urbanization within the NCT is reducing although there is a virtual urban continuum between Delhi and the surrounding areas, which lie in the states of Uttar Pradesh, Harvana and Rajasthan.

With the imperatives of growth and development, the concerns for development of Delhi have become complex, which has to be viewed both as a challenge in terms of the pressures of regular and floating inmigration, as well as an opportunity in terms of planning and development in a regional context.



Figure 2.1: Location of Delhi & its influence region

Delhi is growing at a rapid pace because of increasing migration. The unprecedented growth of population especially during the postindependence years and the consequent haphazard development had been putting severe pressure on the infrastructure of NCT Delhi. Therefore, it was suggested through various planning exercises beginning from 1956. that serious consideration should be given for a planned decentralization to outer areas and even outside the Delhi Region. Hence areas from adjoining states were included to form the National Capital Region.





VBHO



Figure 2.2: Genesis of the NCR: Population in-migration

2.2 THE GENESIS OF THE NCR

The genesis of the National Capital Region lies in the recommendation of the first Master Plan for Delhi notified in 1961 wherein, a broad area consisting of Union Territory of Delhi and a few ring towns around it was conceived for development of a metropolitan region to reduce the population pressure on Delhi. The plan envisaged deflecting some of the population into the ring towns so that the population of Delhi can be kept at a manageable limit in the neighborhood of 46 Lacs for urban Delhi and about 50 lakhs for the union Territory of Delhi. In pursuance of the basic policy statement, MPD 62, while finalizing the land use for Delhi, also determined the land requirements for the future growth of the ring towns – Ghaziabad, Loni, Faridabad-Ballabhgarh, Gurgaon, Bahadurgarh and Narela, to provide for not only their natural growth, but also to accommodate the expected 4 Lacs population to each of the ring towns in 1981. The plan envisaged comprises an area of 33,578 square kilometers (includes the remaining five Tehsils of Alwar, covering the states of Haryana, Rajasthan, Uttar Pradesh and the National Capital Territory of Delhi. The State-wise area covered under National Capital Region is as under:

The area of the NCR is as follows-NCT Delhi: 1,483 sq Km

- Haryana: 13,413 sq Km
- Uttar Pradesh: 10,853 sq Km
- Rajasthan: 7,829 sq Km







Figure 2.3: Delineation of the NCR Region – Location of the Central NCR (DMA) towns

Central National Capital Region (earlier Delhi Metropolitan Area)

The Central NCR (earlier the Delhi Metropolitan Region) as defined in the Regional Plan – 2021, comprises of the notified / controlled development areas of the neighboring towns of Ghaziabad – Loni, NOIDA, Greater NOIDA, Gurgaon, Faridabad, Bahadurgarh and Kundli, and the extension of the ridge in Haryana, having an area of about 2000 sq. Kms. It has been suggested that the opportunities presented by the Central NCR should be maximized to enable it to compete effectively with the NCT of Delhi, offering comparable employment, economic activities, comprehensive transport system, housing, social infrastructure and quality of life and environment.

Highway Corridor Zone

The Highway Corridors Zone has been conceived in view of the development that is taking place along the National Highways in a haphazard manner without any specific policy. The NCR Plan has proposed promotion of planned and regulated development along the National Highways. However, while planning for these Zones, due care has to be taken to ensure that the activities being permitted are segregated from highway traffic through proper green belts, and regulated and controlled access to the Highways. The identified Highway Corridor Zones will also have to be notified by the respective State Governments with appropriate regulations for their development.

Priority Towns

The regional Plan envisages restricting the growth of Delhi by dispersing activities to areas outside it, allowing only a moderate growth of the Central NCR (earlier DMA) which surrounds Delhi and inducing the development of the rest of the region by accelerating the growth of the following priority towns and counter



9



magnets (depending on the population and potential for growth and investments) in the sub regions of Haryana, Rajasthan and Uttar Pradesh.

Priority Towns	
Haryana	Panipat, Rohtak, Palwal, Rewari and Dharuhera
Rajasthan	Bhiwadi and Alwar (Neemrana and Behror part of this region)
Uttar Pradesh	Meerut, Hapur, Bulandshahar and Khurja

Counter Magnet Centers	
Madhya Pradesh	Gwalior
Punjab	Patiala
Haryana	Hissar
Rajasthan	Kota
Uttar Pradesh	Bareilly

Due to increasing prices in all real estate segments in the national capital region and increased connectivity due to various transport initiatives developers, end user and investors have been off late shifting their focus towards counter magnet areas and priority towns.

A radial pattern of growth has been observed over the years with Delhi as the nucleus spreading to adjoining states of Haryana, Uttar Pradesh and Rajasthan. First stage of development encompassed locations within NCR towns and now surrounding cities have become investment destinations.

With a high pace of growth in property prices, the market dynamics are absorbing the tier II and tier III cities that are the attractions for both the buyers and investors. Buyers are focusing on more affordable spaces in alternate cities with proximity to Delhi. At the same time with sudden surge in property prices in the city, investors fear saturation and corresponding market corrections. Thus, they prefer to invest in cities adjoining Delhi, which are expected as the next growth hubs.

State	Central NCR (Earlier Delhi Metropolitan Area)	Priority town	Sub-Regional Growth Centre
Uttar Pradesh	Ghaziabad-Loni, Noida and Greater Noida	Hapur, Meerut, Bulandshahar, Khurja	Greater NOIDA, Modi- Nagar, Ganaur
Rajasthan	-	Alwar, Bhiwadi	-
Haryana	Gurgaon, Faridabad, Kundli, Bahadurgarh	Panipat, Rewari, Palwal, Dharuhera, Rohtak	Sonepat, Bawal, Manesar

Table 2.1: Hierarchy of identified growth areas of NCR

Source: NCR – Regional Plan 2021

2.3 TRANSPORTATION LINKS

Roadways: Keeping pace with the growth in population and the expansion of the NCR limits, connectivity to the other parts of the country is predominantly through an extensive road network. The road network in NCR spans a total of 28,508 kilometers. NCR also has the distinction of having five National Highways (NH)





passing through its territory; these are NH-1, NH-2, NH-8, NH-10 and NH-24. NCR has attracted large private investment for the development of transport infrastructure. The existing important road projects include the 5.80 kilometer, eight-lane toll bridge that connects NCT to Noida, and the 30.0 kilometer eight-lane expressway on NH-8 connecting NCT and Gurgaon. These road developments have reduced the travel time to the satellite towns of Gurgaon and Noida, and have paved the way for these cities to emerge as popular business districts and residential locations.

The road network within New Delhi is well planned and on a par with that of modern metropolitan cities in other parts of the world. However, in the suburban areas of West Delhi and North Delhi, roads are congested and do not allow easy access to the commercial and business centers. The road network in the NCR continues to be overburdened with its growing population. The Central government has announced a few new projects, which are expected to reduce the load on the existing network. Going forward, the emphasis of widening the existing National Highways that connect Delhi to other Indian cities as well as building of dedicated expressways and freight corridors around Delhi will help reduce the vehicular traffic congestions currently existing in most of the key roads. As NCR continues to grow, the traffic density in a 75 to 80 kilometer radius from the city center is also expected to increase in the next five years.

Airport: The Delhi International Airport is the second-largest airport in India, both in terms of passenger and cargo traffic. It is strategically located midway between the CBD area of Delhi and the fastest growing satellite city Gurgaon and is the only commercial airport with domestic and international services, catering to the air travel requirements for the residents of NCR. In February 2006, management of the airport was passed over to a joint venture, known as Delhi International Airport Limited (DIAL), led by GMR Group, which has envisaged a master plan and is responsible for the ongoing expansion and modernization of the Airport. The Airport Master Plan envisages the Airport redevelopment in five phases, in line with the projected growth of the Indian aviation industry. The first phase was recently completed in July 2010, in time for the Commonwealth Games. The commissioning of a new passenger terminal (T3) will bring the improved airport's handling capacity to 37 million passengers per annum (mppa) up from the 24 million passengers that the airport handled in 2009. Over the next 15 years and once all five phases of development are completed, the Delhi Airport is expected to increase the passenger handling capacity to a total of 100 mppa (estimated by 2026).

2.4 GROWTH DRIVERS

Delhi had, in particular, been facing the pressure of its population in recent years with power and water shortages, inadequate parking space in most colonies, and badly maintained roads.

With corporate moving out of inner-city areas owing to lack of space and the deterioration in infrastructure facilities, residential relocation too followed. For people who worked in organizations that have shifted their base to the suburbs, it made more sense to shift closer to their workplace which in turn triggered migration to suburban areas and propelled residential property prices there. In more recent times, inner-city neighborhoods have gained from several infrastructure initiatives like flyovers coming up in many parts of Delhi; Metro Rail project making steady progress among others. Hence the spill over growth from Delhi benefited cities like Gurgaon, Faridabad, Noida, Greater Noida and Ghaziabad. Subsequently, the dynamic growth of the cities along major arterial corridors such as **Bhiwadi**, Dharuhera, Sonepat, Panipat, Karnal, **Neemrana-Behror**, Saharanpur, Mathura, Dehradun and Rohtak is also envisaged in times to come.





2.5 NEEMRANA-BEHROR & BHIWADI REGION WRT NATIONAL CAPITAL REGION

With the growth of NCR, other towns adjoining the NCR are also witnessing growth activities by active involvement of government initiatives and private real estate development. Areas along NH-8, such as Gurgaon and Jaipur have witnessed tremendous growth due to easy accessibility from the capital city. Other areas along the same corridor such as Manesar, Daruhera and Bhiwadi have witnessed high real estate development activities.

Neemrana-Behror along NH-8 is also expected to witness growth activities in terms of real estate development and industrial growth due to its strategic location. Neemrana-Behror is located along NH-8 and falls in close proximity to the national capital region and is a part of Alwar district which falls in the state of Rajasthan. The region is experiencing growth due to development of industrial zone and Neemrana Heritage hotel, which is one of the popular week end destination of Delhi NCR.



Figure 2.4: Location of Neemrana-Behror-Bhiwadi Vis a Vis the capital city





Neemrana Behror Bhiwadi Region – A Profile

3.1 INTRODUCTION

Rajasthan's strategic location as the corridor between the wealthy north and the prosperous west enables it to provide convenient access to the two largest consumer markets in India. The state's key areas of strength include mineral based industries, textiles, tourism, gems and jewellery. Rajasthan enjoys a distinct advantage in these sectors. It is also a leading producer of cement and metals such as copper, zinc and lead and the largest producer of marble and other stones in the country.

Tourism plays a prominent role in the state's economy. Rajasthan is known for the grandeur of its forts and palaces throughout the world. A mix of such forts and palaces with its architecture, sand dunes, heritage and culture draws numerous international and domestic travelers to the state and provides employment to the local population. Rajasthan attracted approx. 28.50 million tourists during 2010-2011 which is the fourth highest among Indian states. It is fourth also in Domestic tourist visitors. Endowed with natural beauty and a great history, tourism is a flourishing industry in Rajasthan. The palaces of Jaipur and Aimer-Pushkar, the lakes of Udaipur, the desert forts of Jodhpur, Taragarh Fort (Star Fort) in Bundi, and Bikaner and Jaisalmer rank among the most preferred destinations in India for many tourists both Indian and foreign.



Figure 3.1: Location map of Rajasthan

3.2 LOCATION AND CONNECTIVITY

Rajasthan is the largest state in the Republic of India and has an area of 342,239 sq km. It is bound on the west and northwest by Pakistan, on the north and northeast by the states of Punjab, Haryana and Uttar Pradesh, on the east and southeast by Uttar Pradesh and Madhya Pradesh, and on the southwest by Gujarat. Rajasthan is connected by many national highways. Most important being NH 8, which is India's first 6–8 lane highway. Rajasthan also has an inter-city surface transport system both in terms of railways and bus network. All chief cities are connected by air, rail and road.





The Shahjahanpur-Neemrana-Behror (SNB) Urban Complex in Rajasthan Sub-Region of the National Capital Region (NCR) is envisaged by the Government of Rajasthan for establishing a world-class city with public-private partnership keeping following benefits in mind.

- a. Advantage of its location in NCR and with the view to attract the economic and investment opportunities for the developers of Rajashatn, Delhi and Haryana and at the same time to give benefits to the developers of the state.
- b. To execute an International level development in response to fast changing regional and subregional global economic competitiveness through creation of environmental friendly – green field development, state of art infrastructure and a composite one location development for private investment in modern day specialized fields and competitive economic activities.
- c. To fulfill the development strategies envisaged for the development in NCR Regional Plan 2021 i.e. development of a regional centre close to Delhi in each sub-regions of NCR.

By Air: There are four main airports at Rajasthan- Jaipur airport, Udaipur airport, Jodhpur airport and Kota airport. These airports connect Rajasthan with the major cities of India . In addition, a greenfield airport has been approved for SNB region having proposed location at Neemrana.

By Rail: Rajasthan is connected with the main cities of India by rail. Jaipur, Kota, Bikaner, Ajmer, Udaipur and Jodhpur are the principal railway stations in Rajasthan. Kota City is the only Electrified Section served by three Rajdhani Expresses and trains to all cities of India. Proposal for development of regional Rapid Rail Transit System (RRTS) linkage between Delhi, Manesar and Neemrana.

By Road: Rajasthan is well connected to the main cities of the country including Delhi, Ahmedabad and Indore by State and National Highways and served by Rajasthan State Road Transport Corporation (RSRTC) and Private operators.



Figure 3.2: Connectivity of Rajasthan with the neighboring areas



VBHO

Table 3- 1 Key Characteristics of Rajast	han
Key Characteristics of Rajasthan	
Capital	Jaipur
Area (sq km)	342,239
Population (2011 census, Million)	68.62
Literacy Rate (%)	67.06%
Major Cities	Jaipur, Jodhpur, Udaipur, Kota, Ajmer, Beawar, Bikaner Bharatpur, Alwar, Dholpur, Churu, Bhilwara, Sri Ganganagar, Pali, Makrana, Bundi, Chittorgarh, Didwana, Sujangarh, Nagaur, Sikar, Hanumangarh, Pratapgarh
National Highways	Delhi-Ahmedabad, Agra-Bikaner, Jaipur-Bhopal, Bhatinda-Kandla and Pali-Ambala
Airport	Jaipur, Udaipur, Jhodhpur and Kota
Traditional Industries	Mineral based industries, Textiles, Tourism, Gem & Jewellery, Marble & Granite and Agro based.
Emerging Industries	Oil & Gas, It & ITeS and Electricity Generation & Distribution
Sources Conque of India 2011 and ILL Descen	

Table 2. 1 Key Characteristics of Dejecthen

Source: Census of India, 2011 and JLL Research, 4Q 2012

3.3 ALWAR- PROFILE

Located in the north eastern part of Rajasthan and bordering the state of Haryana on the north, Alwar is a small district which has seen rapid industrial development in the last decade. Strategically located between the state capital of Jaipur and the neighboring state of Haryana, Alwar has many historical sites, some of which have today been developed into tourist centers. Alwar district is spread over an area of 8,380 sq m and comprises of 12 sub divisions (Tehsils) which collectively include an estimate 2,200 villages.

Alwar is a city and administrative headquarters of Alwar District in the state of Rajasthan, India. It is located around 160 km south of Delhi, and about 150 km north of Jaipur, the capital of Rajasthan.









....

Table 3- 2 Key Characteristics o	f Alwar
	Key Characteristics of Alwar
Population-District Urban Rural	36.71 Lakhs (2011 census) 6.54 Lakhs 30.17 Lakhs
Location (District)	North-east of Rajasthan (2704'-2804'N; 7607'-77013'E) Eastern side of Aravalli range (27034 N; 76036 E)
Area	8,380 sq kms (district)
Connectivity	Linked with Delhi by SH-25 via Kishangarh and Bhiwadi Connected to Mathura by SH-14 which further connects it to Bharatpur and Agra Located on the main railway route between Ahmedabad and Delhi Nearest Airport: Delhi IGI Airport at approx. 163 kms away
Administrative Set-up	The district has 12 sub-divisions, 12 tehsils and 14 Panchayat Samitis
Economic Base	Industrial base having 287 large and medium scale industries set up by RIICO, famous for its cottage industry
Important Industries	Ashok Leyland, Eicher Tractor, Havells India, Dabur India

Source: Census of India, 2011 and JLL Research, 4Q 2012

3.4 DEMOGRAPHICS AND SOCIAL ECONOMIC PROFILE

Decadal Growth rate (2001 – 2011)	22.75% (district) 31.00% (city)
Population Density	438 P/sq. km (district)
Literacy Rate	71.68% (district) 86.15% (city)
Sex Ratio	894 (district) 889 (city)
Source: Census of India 2011	

Alwar, an agriculturally productive area initially had agro based industries With its inclusion in NCR, the industrial base got diversified into textile, chemicals, engineering and minerals industries

In 1960's RIICO set up the first industrial unit in Alwar

3.5 SNB URBAN COMPLEX

The Shahjahanpur-Neemrana-Behror (SNB) urban complex lies in the north-western part of Rajasthan subregion of NCR bifurcated by NH - 8 in the north-south length of approximately 33 kms and 18 kms in width. Notified SNB urban complex comprises of 137¹ villages with population of approx. 2, 26,673 persons as per census 2001. The SNB urban complex has been identified as one of the regional centers in the Regional Plan for NCR for the target year 2021 (RP-2021). The RP-2021 has proposed to develop the said urban complex as a center for advanced industrial and other economic activities and envisaged to have a

¹ Master Plan Shahjahanpur-Neemrana-Behror Urban Complex – 2041& M/s LEA Associates South Asia (LASA) Pvt. Ltd., FORMULATION OF DEVELOPMENT STRATEGY AND ACTION PLAN OF A NEW TOWN – GLOBAL CITY ON NH-8 IN RAJASTHAN SUB-REGION





concentration of higher order service functions, which are expected to exert an increasingly dynamic influence on attraction of investment and creation of conducive work place relationship.

The Shahjahanpur-Neemrana-Behror (SNB) Urban Complex (including Kushkheda-Bhiwadi-Neemrana Investment Region (KBNIR) population as part of Global City) is planned as an approximately 1.82 million people complex by the year 2041. The whole complex is proposed to be built in four phases and shall constitute of ten cluster cities besides residential based on their major use pattern. This population is proposed to be accommodated in the total Shahjahanpur-Neemrana-Behror Complex Area. Following table presents decadal population growth trends and projected population of the SNB region including the Global City.

Table 3- 31 optilation trend of OND Region meldaling Clobal Off		
Year	Population (in lacs)	% Rate of Growth
1971	1.19	-
1981	1.49	25.21
1991	1.86	24.83
2001	2.32	24.73
2011	3.00*	29.31
2041	18.20*	
Courses Droff A	lastar Dlan SND Urban Complay	0041

	Table 3- 3 Po	pulation trend of SNB	Region	including	Global City
--	---------------	-----------------------	--------	-----------	--------------------

Source: Draft Master Plan SNB Urban Complex – 2041 *Projected Population

As per SNB Master Plan 2041, projected population for proposed Global City shall be 1.38 million out of the total population of 1.82 million. Projected population for rest of the region, except KBNIR, shall be 0.44 million which is projected at annual compounded growth rates of 2.30% (2001-2011), 2.35% (2011-21), 2.24% (2021-31) and 2.5% (2031-41). Following table presents the proposed population for SNB region till year 2041.

Table 3- 4 Population trend of SNB Region including Global City

13.80
1.10
3.30
18.20

Source: Draft Master Plan SNB Urban Complex - 2041









3.6 NEEMRANA- PROFILE

Neemrana is an important industrial township on NH-8 located between Jaipur and Delhi. It is a Panchayat Samiti Headquarter in Behror tehsil. Neemrana is emerging as new tourist, Industrial, residential, commercial and institutional township of Rajasthan. Strategically located in Rajasthan near Delhi NCR, Neemrana is abuzz with multi-dimensional activities these days. This Rajasthani tourist & industrial settlement is fast catching the fancy of people from both Delhi and Jaipur.

Rajasthan Govt., recognizing rich potential of the region, has also launched a slew of investor-friendly policies, pulling in industries from all sectors. In a 2004 NCR development committee report of the ministry of urban development, Neemrana has been cited as one of the three towns to have the potential to be developed as a city, other towns being Bahadurgarh in Haryana and Sikandarabad in UP.

Currently being developed under three phases, Neemrana has some of the most reputed names in the Indian industry. In phase I, spread over 645 acres, units such as Ginni International, Haryana Sheet & Glass, Sanganeria Spinning Mills, Parle Biscuits, Rochees Breweries, Seasame Foods, Obes International, Ojas Sugars, Liberty Whitewares, Indian Infrastructure Equipment and Terry Plus India are in operation. In phase II, spread over 315 acres, industries like Hero Honda Motors, Arrow International, Arihant Flour Mills, Crew Boss Products, Havells India and International Techno-Tex grace the industrial Scene.

An export promotion zone (EPIP) has also been set up by the Rajasthan State Industrial Development & Investment Corporation (RIICO) over nearly 211 acres of land. According to RIICO officials, industries are queuing up for setting up base in Neemrana. It is the part of Shahjahanpur-Neemrana-Behror Complex of Regional Centre outside Central National Capital Region (CNCR, earlier Delhi Metropolitan Area) as per the





Regional Plan 2031. National Highways are the pathways of growing economy. Neemrana falls in proposed Delhi-Mumbai Freight investment corridor (DMIC – Rajasthan) with a \$90 billion world class infrastructure project running parallel to the Dedicated Freight Corridor (DFC) covering six states with Jaipur as the major nodal point. With the 2021 NCR Regional Plan focusing for the development of Satellite towns having locational advantages of Dahruheda, Bhiwadi, Alwar and the township of Neemrana together with these towns is witnessing very fast development. Neemrana enjoys the benefit of being equi-distant both from Delhi and Jaipur and thus transformed into a hot cake destination, away from the chaos of NCR. Following table presents existing industrial scenario and presence of prominent industrial units in SNB region.

Name of Industrial	Area (acres)	Year of		Major Industries
Area		establishment	Catalyzed (INR in crores)	
Behror	320.34	1981	220	M/s Green Ply
Shahjahanpur	230.09	1982	280	M/s SPM Auto M/s Videocon
Onanjananpu	200.00	1302	200	Industries
				M/s Vanasthali Textile
Neemrana Phase 1	644.75	1992	1,100	M/s Ginni
				International
				M/s HNG Glass Ltd
				M/s Liberty White Ware
				M/s Parle
				M/s Rochees
				Breweries
Keshwana	490.38	1994	281	M/s Otsuka Chemical
				In dia Ltd
				M/s Amrit
				Environment
				M/s Krsihana Paper Mill
				M/s Dewan Modern
				Breweries Ltd
				M/s Genus Overseas
				Ltd
Sotnala	151.91	2000	130	M/s A.D. Textiles
				M/s R.S. Hygiene
				M/s Jagatjeet
EPIP Neemrana	210.51	2006	90	Industries Pvt Ltd M/s Garima Overseas
	210.01	2000	50	M/s Zenith Rubber
Neemrana Phase 2	314.58	2007	80	M/s Havells India
				M/s Okaya Batteries
				M/s Hero Motocorp
				(erstwile Hero Honda
	4 400 00	0007	2.000	Motors)
NIC (M) Neemrana,	1,166.63	2007	3,962	M/s Nissin Brake
Japanese Zone				India M/s Mitsui Chemical
				M/s Teikoku Piston
L	l	1	l	

Table 3- 5 Industrial Areas at a Glance – SNB Region





Name of Industrial Area	Area (acres)	Year of establishment	Investment Catalyzed (INR in crores)	Major Industries
				Ring – TPR M/s Takata M/s Mitsubishi Chemical M/s Daikin India M/s Daikin India M/s Nippon Steel M/s Toyota Kirloskar M/s Nidec India Pvt Ltd M/s Tokai Rubber Auto Parts
Total	3,529.19		6,143	
Neemrana – 4 (Ghilot)	1,961.55	2011		New proposed industrail area

Source: Department of Industries, Govt of Rajasthan, 2011

Neemrana has gained recognition as an important **industrial town** and is well known for the **Japanese Zone** set up by RICCO to promote the first exclusive Japanese Investment Zone at Neemrana. Several companies like Nissin Brakes India Pvt Ltd, Mitsui Prime Advanced Composites India Pvt Ltd, Toyoda Gosei Pvt Ltd, TPR Auto parts Manufacturing India Pvt Ltd, Daikin Air-conditioning India Pvt Ltd and Imasen Electric Industrial Co Ltd are already present.

Further, a **Global City** is slated for development in Shahjahanpur-Neemrana-Behror on 40,000 acres of land and will house one million people. The components of the Global City would include cluster cities like – the Cyber City, Medicity, Knowledge City, Entertainment City, SEZ City, World Trade City, Bio-diversity Park, a Dry Port City and an airport facility. All the cluster cities would be self-contained with residential and commercial spaces. Apart from the Global City, RIICO is also putting up an Export Promotion Industrial Park (EPIP) spread over 210 acres to attract industries. The Rajasthan Government has also allotted 1,100 acres of land to RIICO for setting up of a large industrial estate which would also have a residential colony with educational, medical and recreational facilities. The industrial estates are drawing industry majors to set up their manufacturing facilities here. Liberty White Ware is setting up a sanitary ware plant in Neemrana while Hero Honda, Pallavi Copper Pipes and AMD Metplast are also setting up their own units. The units of Parle, Ginni, Prena Syntex, and Rochee Breweries are already operational.

The real estate market in Neemrana is likely to get impetus by the entry of these large national and international industries. At present, interms of commercial developments and retail footprint, Neemrana has limited to small individual shops only. The National Highway No.8 today serves as the primary road that connects the town to NCR on the North and Jaipur on the south. Location of Neemrana on this important highway and the completion of the Kundli – Manesar – Palwal freight expressway will see an increase in vehicular traffic through this town in the next four to five years.









Table 3- 6 Key Characteristics of Neemrana

Key Characteristics of Neemrana			
Population (2001 census)	1,43,389		
Location	Village Belni, Tehsil Behror, District Alwar Located along NH-8		
Connectivity	Linked with Delhi, Gurgaon, Manesar and Jaipur by NH-8 Nearest railway station: Bawal (Haryana) Nearest Airport: Delhi IGI Airport at approx. 119 kms away		
Administrative Set-up	Neemrana Panchayat Samiti	in Behror Tehsil	
Economic Base	<u>Neemrana Phase II</u> EPIP Neemrana Neemrana III-New Industrial	644.75 acres, estd. 1992 314.58 acres, estd. 2005 210.51 acres, estd. 2003	
Important Industries	Ginni International, Liberty White wares, Parle Biscuits, Sesame Foods, Hero Honda Motors, Havells India etc.		

Source Jones Lang LaSalle Property Consultants (India) Pvt Ltd Research 4Q 2012





3.7 BEHROR – PROFILE

Behror is the only town in the SNB Urban Complex area. The town had a static growth pattern before 1961. During the last 2 decades, the growth in population has been steady mainly due to recent economic developments in the area. The construction of NH-8 and SH-14 has really fuelled the development in this town. The establishment of administrative and commercial offices, college, and hospital has given further impetus to the growth of the town. Thus after 1971 the town has recorded very fast growth rate, especially during 1981-1991 when it touched all time high of 68.21%. During 1991-2001 decade it grew at the rate of 40.76%. The following table shows the population growth trends of Behror from 1961 to 2001.

Year	Population (in lacs)	% Rate of Growth
1961	5,462	22.32
1971	6,868	25.74
1981	9,653	40.05
1991	16,238	68.21
2001	22,856	40.76
2011	34,000*	48.75

Source: Draft Master Plan SNB Urban Complex – 2041, *Projected Population 2011

3.8 BHIWADI - PROFILE

Bhiwadi, a growing industrial town of Alwar District in Rajasthan, is located bordering the state of Haryana. This upcoming suburb and a major industrial zone of National Capital Region (NCR) is located in the outskirts of Gurgaon. This town which is a Regional Centre /Priority Town of the National Capital Region comprises of industrial centers of Bhiwadi, Khushkhera, Chopanki and Sarekhurd.







VBHO

LOCATION

Bhiwadi industrial area, standing at the eastern edge of the state of Rajasthan was set up in 1975 in order to

act as an important industrial base for Delhi and Gurgaon. Present urbanized area of Bhiwadi comprises of the abadi area of three revenue villages - Bhiwadi, Nangalia and Ghatal. Geographically. Bhiwadi is situated in the eastern quadrant of the state at 28° 12' north latitude and 76° 52' east longitudes at an altitude of 268.70 meters (881.34 ft) above mean sea level. The town is of almost plain topography. The other industrial zones in vicinity include Bawal, Dharuhera and IMT Manesar. Its locational advantage is attracting industrialists not only from Delhi but also from Punjab and other parts of India.

LINKAGE AND CONNECTIVITY

Bhiwadi lies towards the south of Harvana and falls under National Capital Region (NCR). This industrial town located at the edge of the states of Harvana and Rajasthan, is well connected to various regional centers through Delhi-Jaipur National Highway (NH-8) and other linking roads. Bhiwadi is located at a distance of approx. 70 kms from CBD of Delhi and approx. 40 kms from Gurgaon.



Figure 3.5: Location of Bhiwadi

Roads

The National Highway-8 connecting Mumbai and Delhi touches Dharuhera, the nearest point on NH-8 from Bhiwadi, is at a distance of approx. 6 kms. State Highway-28 running through Bhiwadi, Sohna and Palwal in Haryana passes through the heart of the town. Besides, the Kundli- Manesar- Palwal (KMP) Expressway, shall result in improvement in connectivity of Bhiwadi since it would form an outer ring road connecting Gurgaon to Delhi, Kundli and Faridabad.

Approx. Distance (in kms.) of Bhiwadi from neighboring cities						_
	Gurgaon	Delhi	Alwar	Faridabad	Jaipur	
Bhiwadi	40	70	91	60	200	-

.. .

Railways

Bhiwadi, however, lacks direct railway connectivity at present. The nearest railway station is at Rewari which is approximately 25 kms from Bhiwadi town. The Rohtak-Rewari-Bhiwadi-Khurja Broad Gauge Railway Track is under proposal. This shall further boost Bhiwadi's connectivity with other parts of the National Capital Region.

Air

Bhiwadi lies at a distance of 65 kms from the Indira Gandhi International Airport, New Delhi. Hence Bhiwadi is easily accessible from major cities of the country through airways.





The development and prosperity of Bhiwadi in the NCR region traditionally is on the account of its location in proximity to Delhi, the international airport and Gurgaon and also due to the setting up of large scale industries in the Bhiwadi by RIICO. Moreover, the presence of large developers, pro-active government policies (eg. availability of free hold land, IT policy, encouraging private investment in infrastructure etc), has made Bhiwadi an attractive industrial and residential destination.





DEMOGRAPHIC PROFILE

As of 2011 India census, Bhiwadi had a population of 104,883 compared to only 33,877 in 2001. This is more than three-fold increase. The reason is that though Bhiwadi started as an industrial area, it has become a large residential town in the last few years. Population is continuously growing in proposed Master Plan area with a high rate. Greater Bhiwadi comprises of 94 villages and Bhiwadi Census Town. Bhiwadi has played a significant role in the growth of Greater Bhiwadi Complex. Bhiwadi was a village till 1981 and attained the status of Class-IV Census Town in 1991. Further in 2001, population of Bhiwadi increased to 33,877 to become a Class-III town. With the conclusion of recently held Municipal elections,





Bhiwadi became a Municipal Town with an elected Municipal Board. An overview of the population growth trends in Greater Bhiwadi Complex is shown in following table:

Year	Population	Decadal Growth Rate (in %)		
1961	1250	-		
1971	1624	29.92		
1981	2602	60.22		
1991	15285	487.43		
2001	33877	121.64		
2011	104,833	•		

Table 3- 8 Population trends of Bhiwadi Town

Table 3- 9 Demographic Profile of Bhiwadi town

Parameters	2001	2011
Total Population	33,877	104,833
Literacy Rate (%)	66.74	68%
Sex Ratio	589	755
Work Force Participation Rate (%)	46.93	NA

Source: Census 2011 and Greater Bhiwadi Master Plan 2031

Source: Census 2011 and Greater Bhiwadi Master Plan 2031

Greater Bhiwadi Master Plan 2031 has estimated total population of approx. 15 lakhs by year 2031. Due to induced nature of development the trend based projection methods are not expected to give true picture. Therefore induced development based on industrial activities has been made basis for future population estimation. However, comparative analysis of projected population using different methods² reveals that linear graphical method puts the figure comparatively on higher side close to labor force participation method based on assumed local dynamics and future development perspectives.

Year	Simple Arithmetic Method	Geometric Increase	Linear -Graphical Method	Labour-force Participation Method
1971	46,807	46,807	46,807	46,807
1981	59,272	59,272	59,272	59,272
1991	88,881	88,881	88,881	88,881
2001	151,844	151,844	151,844	151,844
2011	235,358	259,371	293,563	648,000
2021	402,387	443,044	632,429	809,406
2031	652,929	756,783	1,502,221	1,549,115

Table 3- 10 Population Projections for Greater Bhiwadi Area

Source: Greater Bhiwadi Master Plan 2031

OCCUPATIONAL STRUCTURE

The proposed occupational structure has been worked out around the industrial employment expected to be generated in induced industrial development in Greater Bhiwadi Complex. Employment in other major economic activities will be ancillary to manufacturing industries. Though demographic trend of Greater Bhiwadi Complex suggest a very high (52.4) workforce participation rate (WFPR) in 2001 which is even higher than the district average of 48.7. This distortion may be attributed to the fact that industrial workers living in this area are single without their family due to lack of housing and related social facilities. Hence, extrapolation of this distorted figure may not give a true picture both in terms of WFPR as well as composition of occupational structure. Therefore, based on induced development proposed, estimated WFPR and occupational structure by 2031 has been presented in following table.

² Greater Bhiwadi Master Plan 2031



Occupation	Total workers	Percentage
Agriculture and allied	35,785	7
Manufacturing industry	168,699	33
Trade and commerce	92,017	18
Transportation	5,112	10
Construction workers	35,785	7
Other services	127,802	25
Total	511,208	100

Table 3- 11 Proposed Occupational Structure 2031

Source: Greater Bhiwadi Master Plan 2031

LAND USE DISTRIBUTION

Urbanizable Area 2031

Size of the Urbanizable area has been estimated based on envisaged induced development and consequent land requirement to accommodate estimated population by 2031. Estimated population for 2031 is 15 lakhs. Thus to accommodate 15 lakh population land required for various uses and size of Urbanizable area for 2031 has been presented in following table.

Occupation	Area (Ha)	Percent
Residential	4,900	22.56
Mixed use	1,650	7.6
Commercial	590	2.7
Industrial	5,400	24.9
Public & semi-public	850	3.9
Utilities	300	1.4
Recreational	980	4.5
Transportation	2,900	13.3
Special uses (corporate park, TEG, PF, NCZ, TOD)	2,000	9.2
Water bodies	350	1.6
Abadi areas	1,800	8.3
Total	21,720	100.00

Table 3- 12 Land Proposed Land-use 2031

Source: Greater Bhiwadi Master Plan 2031

Urbanizable area required is estimated to be 21,720 ha. Large part of the area will be required to be under industrial (5,400 ha), residential (4,900 ha) and recreational (980 ha) uses. About 6% of the total notified area has been kept as peripheral control belt and 9% as ecological conservation zone. Further rest of the facilities has been provided as per the norms for an industrial township and worked out after studying UDPFI Guidelines, the Master Plans of Delhi, Noida and Greater Noida. All the land required for future development has been taken on southern direction only because inter-state boundary restricts development on three sides - north, east and west.









Source: Greater Bhiwadi Master Plan 2031, Town Planning Department

ECONOMIC PROFILE

The Rajasthan Industrial Investment Corporation (RIICO) has developed 15 industrial areas in Alwar district which support over 300 large and medium scale manufacturing units. Apart from the industrial areas established by RIICO, several private developers are coming up with SEZs in Bhiwadi Industrial Belt. Omaxe Limited has announced its plans to set up an Export Processing Zone and a multi-products SEZ project in Alwar district. Also up for approval are SEZs in the vicinity by Adani Exports, Kajaria Housing and Infrastructure and SRM Infrastructure.

A number of SEZs are coming up in and around Bhiwadi, which will add to the employment prospects of residents further. Reliance's mega SEZ will be at a motorable distance of 20-25 minutes. Two SEZs from Uppal group - one a 263-acre multi-service SEZ and another, a single-product 62-acre SEZ on NH 8 will be easily accessible from here. A 1,125-acre SEZ is being developed at Khushkhera, 12 km from Bhiwadi on the Alwar Bypass Road by RIICO. DLF is coming up with their multi product SEZ of 5049 acres along the same road. The Honda Siel cars plant that is being built over an area of 750 acres would be acting as a boon for the economy of Bhiwadi as it would create employment for many people and would also contribute greater revenue to the economy of the region.

Industrial Base

The industrial area of Bhiwadi has been grouped into 4 distinct units:

- Bhiwadi Industrial area (2,000 acres)
- Khushkhera Industrial area (977 acres)
- Chopanki Industrial area (802 acres)
- Sarekhurd Industrial area (94 acres)





The Khushkhera Industrial area is of total 900 acres of which 750 acres has been developed by RIICO while rest 150 acres is under Integrated Infrastructure Development Park (IID) which has been initiated by the Government of India in collaboration with RIICO. This industrial area has over 800 industrial units with 583 small scale, 170 medium scale and 45 large scale industries. The major industries in these units that are under the management of RIICO are listed below:

Industries in Bhiwadi	Industries in Khushkhera and Tapukara
Ajanta Soya Ltd	Kundan Edible Oil Ltd
Aksh Optifiber Ltd	Rathi Bars
Amtek India Ltd	Paras Fab International
Balkrishan India Ltd	Paramount Wires
Climate Systems Ltd	Shree Cement Limited
Crab Tree Aqua Tech Ltd	Lafarge Boral India (P) Ltd
Gillette India Ltd	Honda Siel Cars Ltd
Mahaveer Alumunium Ltd	
Orient Syntex	
Rayban Optics Ltd	
Relaxo Footwear Ltd	
Sakata Ink (I) Ltd	
Federal Mogul Automotive Products (I)Pvt Ltd	
Hi-Tech Gears Ltd	
Lakhani Shoe Co. (I) Pvt Ltd	
Source: RIICO	

Table 3- 13 Industries under RIICO in Bhiwadi

3.9 IMPACT OF INFRASTRUCTURE ACTIVITIES

There are few new infrastructure initiatives being undertaken by the local development bodies in Neemrana and Behror region. However number of infrastructure initiatives have been undertaken by state government and respective development authorities of the region. These are in the form of improvement in road networks (national highway widening activities, development of new roads etc.), development of new industrial parks / estates, and development of other infrastructure in the region. These initiatives will have a definite impact on the growth of the Neemrana city, enable enlargement of the real estate activity geographically and improve the overall connectivity between various micro markets.

Widening of National Highway:

Expresshighway connecting Delhi and Gurgaon is an 8-lane expressway that has considerably improved travel times from Delhi to Gurgaon. Widenening of National Highway No. 8 from Gurgaon to Jaipur to six lane is under construction stage at present, which is expected to be complete by 2Q 2013. However expansion plan has missed various completion deadlines over the last 12 months. Currently, there has been only 70% progress in the expansion work, which was earlier scheduled to be completed by October 2012. However, once expansion exercise is completed, this is likely to result in further influx of industrial and real estate development in the region, owing to its better connectivity with Delhi and Jaipur.

Expressways in NCR Delhi:

A US\$ 1.15 billion expressway around the NCR will be constructed within the next 3 years. It is divided into two parts - the Western Peripheral Expressway (WPE) or Kundli Manesar Palwal (KMP) Expressway and the Eastern Peripheral Expressway (EPE). While the Haryana State Industrial Development Corporation would construct the Western peripheral expressway, the National Highway Authority of India NHAI would





construct the Eastern peripheral expressway. These expressways doesnot form a direct link to Neemrana from the NCR town, however with the development of both these expressway, the city is expected to witness industrial growth due to easy connectivity.

Other Industrial Development

Manesar is stated as an established industrial zone and various proposed SEZs around the region will give further push to industrialisation and real estate growth of the area. The proposed SEZ along the Kundli-Manesar- Palwal (KMP) Expressway close to Manesar will prove to be a major trigger for domestic and global investment into the subject site region, turning it into a corporate and industrial showpiece. Also, Ansal API is promoting a private integrated industrial township in the region. The proposed Industrial Estates would act as another economic generator in the development of the region as the industrial units to be set up in the industrial estate would provide huge direct and indirect employment. With the development of industrial estates and SEZ in the subject catchment area, the subject region is also expected to witness growth.

Airport Improvements

Delhi airport has been developed as one of the most modern national and international airport of India. With the improved infrastructure, passenger and tourism inflow in the country is expected to boost the economic growth of the historical city in general (Neemrana being one of the them) and India in particular. A greenfield airport for SNB region has already been approved. The proposed airport is located just off the State Highways SH-14 and SH-52 in villages Sodawas and Kokawas respectively.

Industrial Infrastructure and Freight Corridor:

Government of India has announced the establishment of Dedicated Freight Corridor between Delhi and Mumbai, covering an overall length of 1,483 km and passing through the States of U.P, NCR of Delhi, Haryana, Rajasthan, Gujarat and Maharashtra, with end terminals at Dadri in the National Capital Region of Delhi and Jawaharlal Nehru Port near Mumbai. The Delhi- Mumbai leg of the Golden Quadrilateral National Highway also runs almost parallel to the Freight Corridor. A band of 150 km (Influence region) has been chosen on both the sides of the Freight corridor to be developed as the Delhi-Mumbai Industrial Corridor. The vision for DMIC is to create strong economic base in this band with globally competitive environment and state-of-the-art infrastructure to activate local commerce, enhance foreign investments and attain sustainable development. In addition to the influence region, DMIC would also include development of requisite feeder rail/road connectivity to hinterland/markets and select ports along the western coast.







Source: Jones Lang LaSalle





Residential Real Estate

4.1 INTRODUCTION

Neemrana and Behror corridor is an emerging region in the state of Rajasthan, with greater significance due to its location on the Delhi – Jaipur National Highway (NH 8), and development of various industrial esates in the region by state government. Since most of Rajasthan state has been promoted as a historic destination, owing to its location and proximity to Delhi, Neemrana has only been able to project itself as a transit stop for those travelling by road between Delhi and Jaipur. Currently, there is only one heritage hotel in Neemrana and many budget restaurants along the NH-8. Neemrana Fort has been developed as a heritage hotel and it witnesses good absorption rate during the peak season (September-March). In terms of high end residential development. Neemrana lacks any kind of such development due to the presence of middle class clientale. However, number of mid segment residential projects have been launched in last 3-4 years which are at various stages of development. The industrial growth witnessed by the region has laid strong footing for residential sector too. The announcement of the Global City, DMIC corridor, and other industrial and infrastructural developments in SNB region resulted in real estate developers rushing to Neemrana with number of residential projects.

The potential work force in the proposed global city and other industrial areas in SNB region is further likely to fuel demand for residnetial segment. As indicated in the previous chapter, It is expected that the Global City will be a knowledge-led society and will have higher rate of workforce participation (approximately 40%) and average size of families will be smaller as compared to current average trends of 4 to 5 persons per family³. In addition, population living in unorganized areas of SNB region is likley to relocate to proposed planned residential developments for better livability conditions (with increase in disposable incomes). As per estimates⁴, global city is likely to generate employment to the tune of 416,480 till the plan period 2011-2041 comprising of basic, service and employment in villages. This employment generation shall be apart from work force likely to be generated from other institutional and industrial estates proposed in the region. Hence it can be stated that proposed industrail, instutuional and commercial developments in the region are likely to spur the demand for residential asset class.

This chapter will give an overview of the prominent residential real estate developments in Neemrana and Behror region and prospect of this region for residential developments. Each of the residential development has been explained in brief along with the typology, size, pricing and occupancy trend. The residential real estate scenario has been overviewed with focus to that of the proposed development at the study region.

³ M/s LEA Associates South Asia (LASA) Pvt. Ltd., FORMULATION OF DEVELOPMENT STRATEGY AND ACTION PLAN OF A NEW TOWN – GLOBAL CITY ON NH-8 IN RAJASTHAN SUB-REGION ⁴ SNB Master Plan 2041 & M/s LEA Associates South Asia (LASA) Pvt. Ltd., FORMULATION OF DEVELOPMENT STRATEGY AND ACTION PLAN OF A NEW TOWN - GLOBAL CITY ON NH-8 IN RAJASTHAN SUB-REGION





4.2 RESIDENTIAL SECTOR OVERVIEW – NEEMRANA & BEHROR

Neemrana and Behror over the years have developed primarily as industrial hubs where small, medium and large scale industries have flourished because of the proximity to Delhi and Jaipur and being on route of Delhi–Jaipur Highway (NH8). Being a tourist attraction spot due to presence of Neemrana Fort, these towns have marked their special place in the region. This region has now emerged as residential option for people who work in industrial belt of Shahjahanpur to Kotputli. Currently it takes around 90 minutes to commute between Delhi and this region using the roadways. Its connectivity with surrounding settlements has improved with expansion of NH-8.

From a demand perspective for residential projects launched in Neemrana and Behror area, both investors and end-users have shown preference for residential units. It has been observed that some demand has been generated by people residing in Jaipur, Delhi and Gurgaon considering this as retreat homes investments and ever increasing prices of similar developments in Gurgaon and Jaipur. Following map indicates prevailing capital prices for group housings developments catering to middle and upper middle strata in various cities located along NH-8.





However, it should be noted that subject site region (s) is not an established residential market and is gaining momentum in attracting investors and end-users. As per our market analysis, number of group housing and township projects has been launched in last 2-3 years. In addition most of these projects have witnessed absorption rate of approx. 40%-70% depending upon size and scale of development. Typically these projects are catering to LIG and MIG income segment and positioning them as mid segment housing. Residential developments in this region started during 2007-08 with the launch of Hill View and Ashiana Green comprised of group housing projects. These projects were launched at capital price of INR 1,500 – INR 1,700 per sq ft, currently these projects are commanding capital price between INR 3,500 – INR 4,000





per sq ft. However in the last 2-3 years number of township projects have been launched in the region, typically having land area of more than 100 acres. Real estate footprint of the subject site region is marked with presence of developers of national and regional repute, prominent among them area Eldeco, Anant Raj Builders, Ashaina Homes, VB Builders, Anurag Homes, OKD Group, Ashadeep Group among others.

As per our assessment and market survey, group housing and low rise units are predominant typologies offered by various developers. Current sale price of under-construction and launched group housing projects varies between INR 2,350 to INR 2,900 per sq ft depending upon stage of development and absorption levels. Typical sizes offered are studio apartments (420 - 450 sq ft), 1BHK (500-600 sq ft) and 2BHK (950 – 1,200 sq ft). As far as Neemrana is concerned, it has been observed that prime focus of the developers have been on group housing and studio apartment. Though few villa developments has also been observed in this micro-market promoted by Ashadeep Group by the name of 'The **Green Villas'**. This project was launched as part of 55 acre township in year 2010. Villas on plot sizes 133 sq yd – 262 sq yd are offered at sale price of INR 45 – 65 lacs depending upon size, location and built-up area (1,558 sq ft – 1,970). This development typology has witnessed healthy absorption levels of approx. 80% since its launch. Currently plots in this development are commanding sale price (secondary sales) of approx. 18,000 per sq yd with absorption of approx. 100% since its launch.

Premium township development '**County Garden**' has been launched in 2011 by OKD Group. Developer is offering plots of sizes ranging between 120 – 400 sq yd at capital price of INR 8,150 per sq yd. This development typology has observed absorption rate of approx. 40%.

Very limited real estate activity has been observed in Behror as compared to Neemrana. Couple of township projects launched by regional players has been observed. Grand Sapphire and Omega City are offering plots of sizes 120 – 500 sq yd at sale price of 4,500 – 5,000 per sq yd and 2,750 – 3,000 per sq yd respectively. Both the developments has observed absorption rate of approx. 20%-40%. Grand Sapphire is also offering 1BHK and 2BHK apartments (8 acres) at sale price of INR 2,100 per sq ft.

In addition to the sale price various other charges like car parking, Interest Free Maintenance Security (IFMS), monthly maintenance charge, club membership, power back-up, Preferential Location Charges (PLC), among others are also charged. However, it may be noted that charges indicated above vary from builder to builder. Indicative rates for above-mentioned charges are detailed as follows:

Other charges	Rate	Unit
PLC	3% - 10%	Percent (%)
IFMS	20 – 30	Per sq ft
Open car parking	50,000	INR
Stilt covered car parking	1,00,000	INR
Power back-up	18,000 – 20,000	INR per KW
Monthly maintenance charge	1.4 – 1.75	Per sq ft
Club membership	20,000 - 35,000	INR
Service Tax	12.36%	Percent (%)

The inventory of various existing and proposed residential developments indicating land area, typologies, sale price, absorption, launch year etc. in Neemrana and Behror region is enumerated in the following table.





Table 4.1: Major Resid Project	Developer	Site Area	Typologies and Area (sq ft)	Launch Date	Absorption (%)	Quoted Prices (INR/ sq ft)
Neemrana						
Hill View	V B Builders	10 Acres	2 BHK:1,250 3 BHK:1,550	2007	100%	3,500
Ashiana Green Hill	Ashiana Housing Limited	11 acres	2 BHK:1,125 2 BHK Executive Floors:1,150 3 BHK: Executive Floors: 1,550 sq ft Duplex villas: 1,620 sq ft	2007	100%	4,000 (apartments)
Anurag Homes	Anurag Enterprises	NA	2 BHK:1,048 – 1250 3 BHK:1,387 – 1,506	Oct 2012	30% of phase 1 comprising of 80 units, total of 160 units	2,250 - 2,475
Eden Park	Eldeco	33 acres	Phase 1: Villas, Low rise, High rise Phase 2: Low rise 2BHK:1.030 – 1,180 High rise 2 BHK: 925 -1,055	2010 Oct 2012	Phase 1 comprising of 22 acres is completely sold out 10% 15%	26-38 lacs (low rise) 2,600 – 2,900 (apartments)
Green Acres	Ashadeep Group	50 acres	Villa (The Green): 133 – 262 sq yds Low Rise (Gulmohar): 3 BHK: 1,350 - 1,860 High Rise (The Palms): 2 BHK: 1,287 High Rise (Lavender) 2 BHK: 1,060	Dec 2010 Dec 2010 Dec 2010 Aug 2012	80% 100% 70% 30%	45 – 65 lacs NA 2,330 – 2,550 2,350 – 2,450
Neemrana Central	North East Buildcon (P) Ltd	3	Mix of retail and Studio apartments: 417 - 625	2011	70%	2,595
Aashray	Anant Raj Group	12	1BHK: 427	2010	90%	2,050

Table 4.1: Major Residential development in the subject site micro market



Project	Developer	Site Area	Typologies and Area (sq ft)	Launch Date	Absorption (%)	Quoted Prices (INR/ sq ft)
Vedic Village	Vedic reality	250	3BHK & 4BHK Villas built over land area of 2,500 sq mt :	2010	NA	NA
Behror						
Grand Sapphire	Grand Sapphire Infratech Pvt Ltd	133	Plots: 135 – 500 sq yd High Rise: 1BHK: 646 2BHK: 1,071	NA	Phase 1: 40%	INR 4,500 - 5,000/ sq yd 2,100/ sq ft

Source Jones Lang LaSalle Property Consultants (India) Pvt Ltd Research 4Q 2012

Besides the above-mentioned planned developments introduced by private players in Behror town and Neemrana Nagar Panchayat area, existing residential areas in these settlements pre-dominantly comprise of unorganized units. Largely exisiting residential areas are haphazard and unplanned in nature. These units consists of old and dilapidated structures as part of exisiting town and village abadi areas. Majority of these houses are built using vernacular building materials which does not accord structural stability. Moreover, these areas lack adequate provision of physical infrastructure in terms of roads, water supply, sewerage, storm water drains, among others. In addition, worker housing is provided by few medium and large scale industries within their respective industrial units. Though this industrial housing is limited in number but forms part of current housing stock of the region. Senior executives and managers) likely to be part of proposed industrial areas (SNB region) are likely to reside in proposed/ up-coming residential developments in SNB region. It is anticipated that there shall be likely shift of exisiting population residing in Behror town and Neemrana Nagar Panchayat area to proposed residential developments in the region. Hence it can be construed that healthy demand/ absorption levels can be anticipated for proposed residential developments of the region. It may be noted that this demand levels shall coincide with the proposed infrastructure initiatives proposed for the region. Any delay in the proposed infrastructure initiatives are likely to impact overall demand for residential units in the region.



Assessment of Capital Values for Proposed Residential Development Location: Neemrana, Behror and Bhiwadi, Rajasthan





Apartment Typology:

As seen from the chart given, majority of the projects comprises of 2 BHK units, which forms almost 65% of the total inventory followed by 1 BHK units (29%). It may be noted that there is overlapping of typology in studio apartments and 1BHK units since few projects (like Neemrana Central and Aashray Homes) are offering studio apartments in similar sizes to 1 BHK units being offered in other developments as indicated in table 4.2 above. Though these projects are mainly targeting mid and lower income, few developers have also launched spacious 3 BHK units as well forming mere 6.64% of the total inventory in micro market of subject sites (s).





VBHC
The chart given below indicates the y-o-y cumulative stock of residential units being launched in the market since second half of 2007. With the successful launch of Ashiana Green Hill and Hill view in year 2007 the region was identified as one of the affordable housing destination along this stretch. To tap this opportunity various developers of national and regional repute have launched their respective projects in 2010. Presently there is total inventory of approx. 1,806 apartment units in various categories with absorption rates ranging between 30%-100%. Projects like Green Hill and Hill view launched in year 2007 have observed absorption of 100%. Aashray Homes by Anant Raj Group has positioned itself in affordable housing segment. The project offers studio apartments of sizes 427 sq ft commanding capital price of INR 2,050 sq ft which is lowest as compared to existing developments offering similar development typology in SNB region. Hence this project have witnessed healthy absorption rate of approx. 90% since its launch in year 2010. As seen in the chart below, year 2008 and 2009 have not witnessed supply of units in any of the typologies which is reflection of overall market sentiment post economic recession. However, year 2010 has witnessed number of apartment projects in various development typologies like 1 BHK. 2 BHK and 3 BHK respectively.



Price Trends

The chart given below indicates the capital value range movement of the residential units on per sq ft of SBUA basis. As seen from the chart, the period between 2008 and 2010 saw negligible movement in sale prices. This was the period of economic recession and recovery which was indicative of prevalent market sentiment. However with launch of new projects in late 2010, various exiting projects witnessed appreciation in capital values. Projects in 2007 were launched at capital price of INR 1,600 – INR 1,700 per sq ft. these projects are now commanding capital rates of approx. 4,000 per sq ft (located near Neemrana Fort). Since most of the developers are either local developer or have ventured into this region for the first time, the competitive pricing prevails and hovers around INR 2,350 – INR 2,900 per sq ft of SBUA depending upon location, size of development, amenities and services, among others. Like almost all geographies, the residential market in the region also observes significantly discounted Capital values at the time of project launch which increases as the project progresses. This is the reason for the lower end of the capital value range has remained at close to INR 2,350 per sq ft SBUA. As of date, the residential units are available in the market starting from INR 2,350 per sq ft of SBUA to INR 2,900 per sq ft of SBUA.







4.3 RESIDENTIAL SECTOR OVERVIEW – BHIWADI

Bhiwadi, one of the priority towns of NCR, was initially known for its industrial development. However, over the last two years the real estate sector in Bhiwadi has experienced immense growth. The locational advantage of Bhiwadi of being in close proximity to NCR, rapid industrial development in Bhiwadi under the initiative of RIICO, the improved traffic and transportation network are the major factors that have led to the development of the real estate sector in the town. The major developments have been observed in the residential sector with integrated townships, group housings, plotted developments and villas being introduced by several private developers. Some developers are even coming up with retail developments in the form of organized retail or malls.

The setting up of varied industries, both large and medium scale along with proposed SEZs has created huge demand for these residential real estate developments which has in turn generated demand for the retail real estate sector even. This demand for residential and retail developments is expected to increase more with the introduction of many more industries in the Bhiwadi Industrial belt. Thus it can be stated that the profile of economic activities has a direct influence on real estate sector developments/projects and demand supply situation.

Recently, the supply of the real estate development has been increasing at a high rate as compared to the demand from the end users perspective and also along with the global slowdown; the real estate market has witnessed slow growth in its activities. It has been observed that most of the reputed developers are focusing on completion of their launched and under construction projects rather than launching new projects or planning about future expansion.

This section will give an overview of the major components of real estate viz. retail and residential sector in Bhiwadi, which are the only sectors that have witnessed much development. Each of these sectors has been explained in brief along with the ongoing rental/ capital values and significant new supplies. The real estate scenario of Bhiwadi has been overviewed with focus to that of the study region.

INVENTORY OF RESIDENTIAL PROJECTS

Rapid development and growth of Bhiwadi as an industrial town and lack of adequate housing options, led to an acute housing shortage in the town in the last decade. It was then when limited development initiatives were taken by both Government and private agencies. Comparatively low land prices, increasing housing demand and good connectivity with Gurgaon and other parts of NCR have attracted attention of various reputed real estate developers to initiate their residential projects in and around Bhiwadi.



VBH

Government's role in Residential Sector

<u>Rajasthan Housing Board (RHB)</u>: It developed a colony housing 950 residential units at Nangalia village. Out of this 530 units comprised of EWS and LIG, 283 for MIG and remaining 137 units for HIG category. For providing housing facilities to registered applicants additional land is under acquisition by Rajasthan Housing Board.

<u>Urban Improvement Trust (UIT)</u>: UIT has set up the Bhagat Singh residential scheme on 96 acres of land in Saidpur Village. Other residential schemes undertaken by UIT are Jawahar Nagar, Patel Nagar and Vasundhara Nagar.

Samtal India Limited, a private concern has also constructed 60 residential units for its employees. Besides this RIICO has constructed 70 units, R.S.E.B. has constructed 20 units, P & T has constructed 15 units and ESI has done 8 units for their staff.

Private Sector's role in Residential Sector

The development of Bhiwadi as one of the most important industrial towns of NCR has resulted in its prosperity in real estate sector too. Moreover, the status of being a Priority Town of NCR has also accorded higher status to the town resulting in its rapid industrial and real estate development over the last couple of years.

Apart from the residential units developed by RHB, UIT and other government organizations, most of the private sector developments started coming up along the Bhiwadi– Alwar road. Ashiana Housing Limited was the first private developer to venture into Bhiwadi real estate market in late 1998. The reasons for private developers to invest in Bhiwadi are its proximity to Gurgaon and it being perceived as an extension of Manesar. Moreover, Bhiwadi enjoys a great locational advantage since it is a part of the state of Rajasthan and at the same time lies in on the border of Haryana and thereby is in close proximity to the developed parts of Haryana (Gurgaon and Manesar). However, in Haryana the land prices are exorbitantly high and the procedure of procuring license from the government agencies are quite elaborate and time consuming. Thereby, it can be observed that in Bhiwadi, most of the residential projects are coming up along the Bhiwadi-Alwar Bypass road that falls in the state of Rajasthan.

Existing Projects

Ashiana Housing Limited, who was the first developer to recognize the potentials of Bhiwadi in 1992, came up with group housing projects like Ashiana Gulmohar and Ashiana Gardens. The main factor that attracted this developer to come up with residential group housing projects in Bhiwadi was the high rental rates existing in the town as a result of absence of adequate housing stock. The demand for housing options was high among the people who were engaged in the varied industries that were being set up by RIICO in Bhiwadi region. Since Ashiana Gulmohar and Ashiana Gardens were occupied as soon as they were launched due to high residential demand, the developer came up with other residential projects like Ashiana Villas, Ashiana Greens, Ashiana Bageecha, Ashiana Rangoli and Ashiana Utsav (exclusively for senior citizens). Recently, the developer is coming up with another group housing development named Ashiana Aangan.

Projects	Developer	Flats/plots/villas	Area	Launch Date	Occupancy	Resale Rate (INR/sq ft)
Ashiana Villas		3,4 BHK Duplex Villas	2,552 sq ft	2005	100%	NA
Ashiana Bageecha	Ashiana Housing Limited	Simplex Villas (2/3/4 BHK) and Duplex Villas (2/3/4 BHK)	1,250 sq ft 1,350 sq ft	1996	100%	3,100 – 3,200
Ashiana Gardens (low rise, G+1)		2,3 BHK and 3BHK Floors	1,250 & 1,500 sq ft	2003	100%	3,700 – 3,900

Table 4.2: Existing Apartments in Bhiwadi





Assessment of Capital Values for Proposed Residential Development Location: Neemrana, Behror and Bhiwadi, Rajasthan

Ashiana Gulmohar Park (G+3)	2, 3 BHK and 4BHK Bungalows	1,050 - 1,900	1998	100%	4,500 - 4,800
Ashiana Greens (G+2)	Flats : 2BHK 3 BHK	1,065 - 1,400	NA	100%	3,200 – 3,400
Ashiana Rangoli	2,3 BHK	1,050 – 1,350	2006	100%	NA
Ashiana Utsav	1, 2, 3 BHK flats	1480,1420, 1160,1140, 1135 & 845	NA	100%	2,350 - 2,700

Source: Jones Lang LaSalle Research, 4Q 2012

Upcoming Projects

Following the success of the residential projects launched by Ashiana Housing Limited and rapid industrialization of the overall Bhiwadi region (including Khushkhera, Chopanki and Sarekhurd) reputed private developers got attracted to venture into the Bhiwadi residential real estate market. Most of the private developers launched group housing projects in the town depending on the target clientele which are mainly people engaged in the industries in this region. Gradually these developers also started coming up with plots and villa developments based on the increasing and varied category of demand of the end-users as well as investors.

The residential projects already launched in this region are by reputed private developers like MVL Limited, Omaxe, BDI Group, Mittal Developers, Terra Group, Genesis Developers, Piyush Group, Trehan Home Developers Pvt Ltd, Kajaria Group and Avalon Group, among others. The projects by these developers comprise mainly of group housing, plots and villas. Initially back in mid-2006 and early 2007 when these developments were launched, the developers focused both on affordable and luxury category developments. However, with the recent real estate market slowdown, the developers who were coming up with large scale projects have shown a preference to launch their projects in phases. Thereby it has been observed that the developers are mainly emphasizing on timely completion and delivery of their ongoing projects and have delayed the projects that were due for launch in recent times.

Most of the upcoming residential developments in Bhiwadi have come up along the Bhiwadi - Alwar Road due to its excellent connectivity to NH-8 on one hand and Alwar on the other. Moreover, this road also acts as a connecting route between industries in Bhiwadi and those in Khushkhera, Chopanki and Sarekhurd thereby resulting in heavy traffic movement. This has also rendered excellent visibility to the upcoming residential projects located along this road and resulted in generating higher demand for the same among both end-users and investors. In present times, apart from end-users, much of the residential stock lies with the investors too since Bhiwadi-Alwar road have been perceived as one of the upcoming real estate destinations of Bhiwadi as well as NCR.



Table 4.3: Pr	rominent Group	Housing and	Township Develo	pments alor	<mark>g Bhiwadi-Alwar R</mark> e					
Projects	Developer	Site Area	Typology	Units	Apartment Area (Sq. ft)	Launch Date	Launch Rate (INR/ Sq. ft)	Absorption	Status	Current Base Price (INR/sq ft)
Ashiana Aangan	Ashiana Housing Limited	22 acres	2 BHK 3 BHK	1300	1,200 1,690	April 2007	1,790	100%	Completed	3,500 - 4,500
BDI Sunshine City	BDI Group (Berry Developers & Infrastructure Pvt. Ltd.) in association with Bhaskar Group	19 acres	Phase I: 2BHK 3 BHK Phase II: 2 BHK 3BHK	920	1,200 1,490 1,185 1,460	Phase I: Jan 2006 Phase II: Jan 2007	Phase I: 1,250, Phase II: 1,800	Phase I:100% Phase II: 100%	Completed	2,550 - 2,750
Cosmos Greens	Mittal Developers	(integrated township of 41 acres)	1 BHK 2 BHK 3 BHK	560	700 1,235 1,450	Nov 2006	1,275 1,340 1,450	100%	Completed	2,500 - 2,800
Piyush EUTOPIA	Piyush Group	12 acres (part of an Integrated Township of approx 53 acres)	2 BHK (affordable housing)	1200	950	Oct 2007	1,390	85%	NA	
Hill View Garden	Trehan Home Developers Pvt. Ltd	approx 20 acres	2 BHK (G+6, S+7) 3 BHK (G+6, S+6)	Total 1650 Phase I: 825	1111 1389	8 th October, 2006	1240	Phase I: Approx 90%	400 units in June 2008 800 units in 2009	2,150 – 2,350
Avalon Gardens	Avalon Group	5.5 acres	Studio 2 BHK 3 BHK	450	750 1250 1600	15 th Aug, 2007	1450	100%	4 Q 2009	2,750 – 2,900
Avalon Residency	Avalon Group	10 acres	2 BHK 3 BHK	360	850 1150	June 2009	NA	95%	4Q 2011	2,563 - 2,878
Avalon Royal Park	Avalon Group	16.5 acres	2 BHK 3 BHK	1,110	1,250 1,625	July 2012	2,325	80%	4 Q 2015	2,575
Avalon Regal Court	Avalon Group	20 acres	2 BHK 2 BHK+ Study 3 BHK	1,420	1,150 1,225 1,500	NA	NA	70%	4Q 2014	2,270 - 2,620





Assessment of Capital Values for Proposed Residential Development Location: Neemrana, Behror and Bhiwadi, Rajasthan

Projects	Developer	Site Area	Typology	Units	Apartment Area (Sq. ft)	Launch Date	Launch Rate (INR/ Sq. ft)	Absorption	Status	Current Base Price (INR/sq ft)
Avalon Rangoli	Avalon Group	9 acres	2 BHK 3 BHK	850	1,000 1,300	NA	NA	90%	1 Q 2014	2,380 – 2,850
The Essentia	A joint venture of Star Realcon & Raison Engineers and Builders	9 acres	2 BHK 3BHK	240	830-1,000 1,215-1,300	NA	NA	50%	4Q 2015	2,370 – 3,100
MVL Coral	MVL Ltd	12.70 acres	2BHK 3BHK	854	1,350-1,580 1,650-2,350	June 2010	NA	100%	Ready to move-in	2,650-3,200
MVL IndiHomes	MVL Ltd	NA	2ВНК	690 units (phase 1) total of 2,200 units	834	June 2011	NA	90%	1Q 2014	1,900-2,300
MVL Palms	MVL Ltd	12.5 acres	2BHK	NA	1,242 1,565	Oct 2012	Same as BSP	NA	NA	2,333-2,368
Genesis Flora	Genesis Infratech Pvt. Ltd	1.87 acres	2BHK 3BHK	240	936-1,085 1,255	Sep 2012	Same as BSP	80%	2Q 2015	2,290-2,585
Terra Elegance	Terra Group	5 acres	2BHK 3BHK 4BHK	450	1,150 1,415 1,950	July 2012	Same as BSP	50%	4Q 2015	2,200 – 2,550
Terra Castle	Terra Group	9.75 acres	1BHK 2BHK 3BHK	600 (phase 1) total of 1,000 units	630 975 1,250	Oct 2012	Same as BSP	60%	4Q 2015	1,925 – 2,445
Terra City	Terra Group	70 acres	Plot Floors Duplex Villa Simplex Villa	NA	575-1,100 1,350-1,750 990-1,350	March 2012	5,000/ sq yd	100% 60% 40% 45%	4Q 2015	12,000/ sq yd 1,920-2,300/ sq ft 2,570-2,800/ sq ft 2,950-3,180





Assessment of Capital Values for Proposed Residential Development Location: Neemrana, Behror and Bhiwadi, Rajasthan

Projects	Developer	Site Area	Typology	Units	Apartment Area (Sq. ft)	Launch Date	Launch Rate (INR/ Sq. ft)	Absorption	Status	Current Base Price (INR/sq ft)
Nimai Greens	Nimai Developers Pvt. Ltd	9.0 acres	2BHK 3BHK	NA	1,234-1,370 1,620-1,850	NA	NA	NA	NA	2,525-2,725
Krish City – Executive Floors			Executive Floors (G+2)	550	750 – 1,360	June 2010	1,250 – 1,400	Only 3-4 units left	Ready to move-in	2,500 - 3,000
Krish City – Multi-storey apartments	Krish Infrastructure Pvt. Ltd.	65 acres	2BHK 3BHK	500	800-815 1,010	June 2011	2,000 - 2,400	65%	4Q 2015	2,400 – 2,775
Krish City – Low rise apartments			1BHK 2BHK 3BHK	1,200	485 790-860 975	June 2011	1,950 – 2,450	85%	4Q 2015	2,450 – 2,800
Piyush City	Piyush Group	53 acres	Villas and Plots	Villas-40 Plots- 397	Villas-2,552 sq ft Plots-225 sq yd	Oct 2007	Villas- 1550/sq ft Plots- 4590/sq yd	Villas-100% Plots-100%	Possession of plots given	NA 12,000-14,000/ sq yd
Omaxe City Bhiwadi I	Omaxe	N.A.	Villas Floors (G+3) Plots	N.A	100 sq yd (770 sq ft) 170 sq yd (1300 sq ft) 1,500-1,600 sq ft 170-225 sq yd	3Q 2007	N.A.	100%	Part Possession of plots given, floors and villas to be delivered by 3Q 2013	28-30 lacs 54-55 lacs 32 lacs 18,000/ sq yd
Omaxe City Bhiwadi II	Omaxe	N.A.	Duplex Villa Floor	N.A	700 sq ft 730 sq ft	Dec 2008	NA	90% 90%	3Q 2013	33-34 lacs 15-16 lacs
	Long LoSollo Poor		Plots		100-300 sq yd			100%		16,000/ sq yd

Source: Jones Lang LaSalle Research, 4Q 2012





Apartment Typology:

As seen from the chart given, majority of the projects comprises of 2 BHK units, which forms almost 68.27% of the total inventory of approx. 15,000 units followed by 3 BHK units (23.72%). Currently 1BHK units comprises of approx. 7.70% of the total inventory. It may be noted that group housing projects launched in the initial phases in Bhiwadi majorly comprised of 1BHK and 2BHK units. However, witnessing the tremendous response to the respective projects, almost all developers also included 3BHK projects. During the last 2-3 years, majority of the units were launched in these categories only. Moreover it is quite evident from the chart that supply of 4BHK units is almost negligible in Bhiwadi which is reflective of developer, investor and end-user preferences. Hence it may be concluded that Bhiwadi residential real estate market typically caters to mid segment housing as far as unit sizes are concerned.



Price Trends

The residential group housing projects detailed in table above indicates that projects located before toll plaza command premium over the projects located after the toll plaza. The chart given below indicates the capital value range movement of the residential units located before toll plaza on per sq ft of SBUA basis. As seen from the chart, the period capital price has risen steadily between 2008 and 2010. This was the period of economic recession and



recovery which was indicative of prevalent market sentiment. However with launch of new projects in mid-2010, various exiting projects witnessed appreciation in capital values. Projects in 2007 were launched at capital price of INR 1,690 – INR 1,750 per sq ft. These projects are now commanding capital rates of approx. 3,000 – 3,200 per sq ft depending upon location, specifications, development mix, among others. However, projects launched by Ashiana Housing during 2002 and 2007 are commanding capital price of INR 3,500 – INR 4,500 per sq ft depending upon location, size of development, amenities and services, among others. Like almost all geographies, the residential market in the region also observes significantly discounted Capital values at the time of project launch which increases as the project progresses.



VBH



A lone group housing project as part of Piyush City (Eutopia) was launched in year 2007. This project offered 2BHK units spread over an area of approx. 12 acres at capital price of INR 1,390 per sq ft. Currently this project is commanding capital price of INR 2,300 – INR 2,450 per sq ft depending upon floor and size. However, most of developers who had their respective projects before toll plaza, ventured into this area during late 2009 and early 2010, once land bank were exploited before toll plaza. Prominent group housing projects after toll plaza includes Avalon Regal Court, Avalon Rangoli, Genesis Flora, Krish City, Terra Homes, Terra City, Avalon Homes, among others. Current capital prices in this corridor for various group housing projects ranges between INR 2,300 – INR 2,600 per sq ft.





Subject Site Analysis – Neemrana

5

5.1 INTRODUCTION

The subject site has been studied keeping in mind its connectivity with important destinations like Airport, Railway Station, Bus Stand, CBD and other important city nodes. Immediate surroundings have been studied with respect to their characteristics and influence on the subject site. This is mainly done by considering the type of development and its influence on the subject site. This section presents the site description, location, context, and the catchment profile of the site, and finally strengths, weaknesses, opportunities, and threats of the subject site.

5.2 SUBJECT SITE LOCATION

The subject site is located on the NH-8 at a distance of 112 km, South West of the Delhi International Airport and 3 km short of main Neemrana Japanese Industrial Area. Located 200 mts off the main road NH-8, the site currently is vacant agricultural land falling in Highway Control Area as per proposed land-use map of Shahjahanpur-Neemrana-Behror Urban Complex – 2041 and has the presence of a few hutments of local residents. As indicated by client, currenly subject site is fragmented land parcel admesuring approx. 5.83 acres and 6.82 acres respectively. Site falls in revenue limits of village Kolila Sanga and is has access from 20 ft wide village road. Client envisages to position affordable group housing and residential plotted asset classes encompassing mix of studio, 1BHK and 2BHK apartments and plots.



Figure 5.1: Location of Subject site in Neemrana





Table 5.1: Subject Site Attributes

Attribute	Description
Plot Area (As indicated by the client)	12.65 Acres (approximately) comprising of fragmented land parcels admeasuring approx. 5.83 acres and 6.82 acres respectively, proposed for residential development
Status of the site	Agricultural and clear landscape Land Parcel
Shape	Irregular
Major access roads	Current access road- Revenue Road from Village via NH-8 (At a distance of 200 mt from NH-8) Proposed access road – NA
Access road width	Current: 20 ft wide village road Proposed: NA
Frontage	Village Road. However the proposed development is likely to be visible from NH-8
Other Characteristics	Currently subject site falls in Highway Control Area as per proposed land-use map of Shahjahanpur-Neemrana-Behror Urban Complex – 2041.
Neighborhood Characteristics	On the three sides of the site, it is covered by agricultural land parcels and on one side by majestic Aravalli range

SOURCE: CLIENT AND JONES LANG LASALLE PROPERTY CONSULTANTS (INDIA) PVT LTD RESEARCH 4Q 2012

5.3 SITE AREA AND LAND USE

The subject site admeasures approx. 12.65 acres (51,195 sq.m approx.) comprising of fragmented land parcels admeasuring approx. 5.83 acres and 6.82 acres respectively, which is cultivable land parcel. The subject site is surrounded on three sides by farm and agricultural lands and the hills on one side. The proposed land use, as indicated by client of the subject site is mixed use to be developed as affordable residential development comprising of group housing and residential plotted development. However, as indicated above, subject site falls in Highway Control Area as per proposed land-use map of Shahjahanpur-Neemrana-Behror Urban Complex – 2041.

Figure 5.2: Current picture of Subject Site









5.4 CONNECTIVITY AND LINKAGES

National Highway No.8 serves as primary access to SNB and subject site region that connects Delhi to Jaipur. This primary road has been partly developed as an expressway and up gradation work continues to be carried out to convert the 230 km stretch between the two cities into a six lane expressway. However, stretch covering subject property has been completed which accords smooth access to the subject site (s). Due to the location of the subject site, and limited urban and infrastructure development the site is only accessible by a 20 ft wide village road however enjoys excellent visibility from NH-8. This accessibility will improve once the site development work is undertaken by the various development authorities.

Nearest railway station to subject site is Bawal railway station in Haryana (approx. 30 Km) and is easily accessible from the roadways (which is main mode of transport along this stretch). Indira Gandhi Airport Terminal (Domestic and International Station) is located at a distance of approx. 112 Km from the subject site.

Landmark	Approx. Distance
Connaught Place, New Delhi	125 kms
Jaipur	138 Kms
Gurgaon	90 Kms
Bawal Railway Station (Haryana)	30 Kms
Ajarka Railway station (Rajasthan)	29 Kms
IGI Airport, New Delhi	112 kms
Behror	12 Kms

Table 5.2: Distances of the subject site region from the major landmarks

SOURCE JONES LANG LASALLE PROPERTY CONSULTANTS (INDIA) PVT LTD RESEARCH 4Q 2012

5.5 NEIGHBORHOOD PROFILE

Neemrana, a small town being developed as a industrial town has witnessed very less organised real estate development in terms of residential, retail and commercial development. At present, the major exisiting development initiatives in the town are School of Aeronautics, upcoming organised Neemrana Industrial zone phase-III also known as Japanese Zone (Majrakath, which is partly operational) and other industries located in the city. Ashiana Greenhill, Hillview Apartments, Green Acres are some of the organised





residential developments in Neemrana aprat from the plotted and villa development, which are the prominent typology of development in the city.



Figure 5.3: Neighborhood Profile of Subject Site

5.6 SUBJECT SITE SWOT ANALYSES

Strengths

- The subject site is strategically located in proximity to National Highway 8 (approximately 200 mt) which is recognised as a large potential corridor for real estate development.
- Existence of industrial workforce in the vicinity provides ready clientele
- The subject site enjoys good visibility from National Highway and a frontage on proposed sector roads.
- Freehold property with clear title and no disputes, civil or criminal, as indicated by the Client.

Weakness

 At present the village road approaching the subject site is 20 ft wide revenue road road and hence doesn't accord optimal image and accesibility to the subject site. However, it is proposed to be 30 meter wide sector road (as indicated by Client) and with the development of the proposed project at the site, the connectivity to the site is expected to get improved.

Opportunities

• Emergence of Neemrana as residential option in the recent past is also likely to accord advantage to position envisaged residential development at subject site





- Proximity of Neemrana specifically to cities in NCR and its location enroute to Jaipur provides a huge opportunity for a proposed development.
- Relatively lower land cost in this corridor strengthens the feasibility to launch a project at affordable rates, and in recent past it has been observed that residential projects with affordable rates have higher absorption rate.

Threats

• Oversupply of residential units is likely to pose greater challenge in marketiability of the project. However, attractive sale price as compared to competing developments is likely to provide edge in realizing healthy obsorption levels





Subject Site Analysis – Behror

6

6.1 SUBJECT SITE LOCATION

The subject site is located on the NH-8 at a distance of 124 km, South West of the Delhi International Airport and 3 km and 12 km from RTDC Behror Midway and main Neemrana Japanese Industrial Area respectively. Subject site enjoys excellent frontage and access from NH-8 service lane, the site currently is vacant agricultural land falling in Highway Control Area as per proposed land-use map of Shahjahanpur-Neemrana-Behror Urban Complex – 2041 and has the presence of a few hutments of local residents. As indicated by client, currenly subject site is admeasures approx. 10.50 acres. Site falls in revenue limits of village Sherpur and Khedki and has access from NH-8 service lane. Client envisages to position affordable group housing and residential plotted asset classes encompassing mix of studio, 1BHK and 2BHK apartments and plots.



Figure 6.1: Location of Subject site



Table 6.1: Subject Site Attributes

Attribute	Description
Plot Area (As indicated by the client)	10.50 Acres (approximately), proposed for residential development
Status of the site	Agricultural and clear landscape Land Parcel
Shape	Irregular
Major access roads	Current access road- NH-8 service road Proposed access road – NA
Access road width	Current: 60 ft wide NH-8 service road Proposed: NA
Frontage	NH-8 Service Road and enjoys excellent visibility from NH-8.
Other Characteristics	Currently subject site falls in Highway Control Area as per proposed land-use map of Shahjahanpur-Neemrana-Behror Urban Complex – 2041.
Neighborhood Characteristics	On the three sides of the site, it is covered by agricultural land parcels and on one side abuts NH-8

SOURCE: CLIENT AND JONES LANG LASALLE PROPERTY CONSULTANTS (INDIA) PVT LTD RESEARCH 4Q 2012

6.2 SITE AREA AND LAND USE

The subject site admeasures approx. 10.50 acres (42,494 sq.m approx.), which is cultivable land parcel. The subject site is surrounded on three sides by farm and agricultural lands and the NH-8 on one side. The proposed land use, as indicated by client of the subject site is mixed use to be developed as affordable residential development comprising of group housing and residential plotted development. However, as indicated above, subject site falls in Highway Control Area as per proposed land-use map of Shahjahanpur-Neemrana-Behror Urban Complex – 2041.



Figure 6.2: Current picture of Subject Site

Western aspect of subject site

Main approach road to subject site







6.3 CONNECTIVITY AND LINKAGES

Primary access to Behror is via the National Highway No.8 that connects Delhi to Jaipur. This primary road has been partly developed as an expressway and up gradation work continues to be carried out to convert the 230 km between the two cities into a six lane expressway. However, stretch covering subject property has been completed. Subject site has direct access from NH-8 and enjoys excellent visibility and frontage on NH-8. Nearest railway station to subject site is Bawal railway station in Haryana (approx. 42 Km) and is easily accessible from the roadways (which is main mode of transport along this stretch). Indira Gandhi Airport Terminal (Domestic and International Station) is located at a distance of approx. 124 Km from the subject site.

Table 6.2: Distances of the subject site region from the major landmarks

Landmark	Approx. Distance
Connaught Place, New Delhi	137 kms
Jaipur	126 Kms
Gurgaon	98 Kms
Bawal Railway Station (Haryana)	42 Kms





Ajarka Railway station (Rajasthan)	20 Kms
IGI Airport, New Delhi	124 kms
Neemrana	12 Kms
	0.0010

SOURCE JONES LANG LASALLE PROPERTY CONSULTANTS (INDIA) PVT LTD RESEARCH 4Q 2012

6.4 NEIGHBORHOOD PROFILE

Behror, a small town being developed as a industrial town has witnessed very less organised real estate development in terms of residential, retail and commercial development. At present, the major exisiting industrial units present are cement production plants, pharmaceutical companies and plywood companies like G. S. Pharmbutor Pvt. Ltd, Green Ply Industries, RETER, among others. RTDC Midway Restaurant, Behror serves as a popular stop for travelers from Jaipur to Delhi on National Highway-8 is in close proximity to subject site. Omega city spread over 120 acres is the major planned residential development of the town.

Figure 6.3: Neighborhood Profile of Subject Site







6.5 SUBJECT SITE SWOT ANALYSES

Strengths

- The subject site is strategically located on National Highway 8 which is recognised as a large potential corridor for real estate development.
- The subject site enjoys excellent visibility from National Highway 8 and a frontage on proposed sector roads.
- Freehold property with clear title and no disputes, civil or criminal, as indicated by the Client.

Weakness

• There is no inherent weakness associated with subject site

Opportunities

- Emergence of Neemrana-Behror as residential option in the recent past is also likely to accord advantage to position envisaged residential development at subject site
- Proximity of Neemrana-Behror specifically to cities in NCR and its location enroute to Jaipur provides a huge opportunity for a proposed development.
- Relatively lower land cost in this corridor strengthens the feasibility to launch a project at affordable rates, and in recent past it has been observed that residential projects with affordable rates have higher absorption rate.

Threats

 Oversupply of residential units in entire region is likely to pose greater challenge in marketiability of the project. However, attractive sale price as compared to competing developments is likely to provide edge in realizing healthy obsorption levels





Subject Site Analysis – Bhiwadi

7.1 INTRODUCTION

Immediate surroundings have been studied with respect to their characteristics and influence on the subject site. This has mainly been done by considering the type of development and its influence on the subject site. The Bhiwadi-Alwar road has been studied in detail for the purpose of establishing the catchment population and its characteristics. This section presents the site description, location, site connectivity, the catchment profile of the site, the real estate trends in the subject site region and finally the strengths, weaknesses, opportunities, and threats of the subject site.

7.2 SUBJECT SITE LOCATION

The subject site enjoys a strategic location along the 200 ft wide Bhiwadi-Alwar Road at an approximate

distance of 16 kms from the National Highway 8. The site lies on the left of the road which connects it to Alwar on one end and main Bhiwadi town on the other. This Bhiwadi-Alwar road acts as a major artery for the regional traffic passing through Bhiwadi towards cities like Alwar. Gurgaon and Delhi among others. The site is located in the southern guadrant of Bhiwadi city and has been targeted by real estate developers for launching projects in residential and retail sectors.



Figure 7.1: Regional Context of Subject Site

The subject site region is marked by the presence of several upcoming residential and retail developments introduced by local and regional developers. The subject site corridor i.e. the Bhiwadi-Alwar road has



VBHO

witnessed the emergence of several real estate developments over the last 4-5 years and has been perceived as one of the upcoming destinations in NCR.

Table 7.1: Subject Site Attributes						
Attribute	Description					
Plot Area (As indicated by the client)	22.70 Acres (approximately), proposed for residential development					
Status of the site	Agricultural and clear landscape Land Parcel					
Shape	Irregular					
Major access roads	Current access road- Bhiwadi Alwar Road					
Access road width	Current: 200 ft wide Bhiwadi-Alwar Road					
Frontage	Bhiwadi-Alwar Road and enjoys excellent visibility from Bhiwadi- Alwar					
Other Characteristics	Currently subject site falls in high density residential zone as per Bhiwadi-Tapookara-Khushkhera Complex Land Use Plan -2031					
Neighborhood Characteristics	Designated Residential and Commercial zones					

SOURCE: CLIENT AND JONES LANG LASALLE PROPERTY CONSULTANTS (INDIA) PVT LTD RESEARCH 4Q 2012



Figure 7.2: Subject Site layout Plan



7.3 SITE AREA AND LAND USE

The subject site admeasures approx. 22.70 acres (91,867 sg.m approx.), which is cultivable land parcel. The subject site is surrounded by up-coming residential projects like Avalon Rangoli and Genesis Flora on its northern and eastern aspects respectively. 200 ft wide Bhiwadi-Alwar road abuts western and southern aspect of subject site. The proposed land use, as indicated by client is residential to be developed as affordable residential development comprising of group housing and residential plotted development. As indicated above, subject site falls in high density residential zone as per Bhiwadi-Tapookara-Khushkhera Complex Land Use Plan -2031.



Figure 7.3: Current picture of Subject Site







7.4 CONNECTIVITY AND LINKAGES

Subject site is very well connected through 200 ft wide Bhiwadi-Alwar Road, which leads to Alwar on one side and NH-8 on the other. The road also connects the site to Bhiwadi-Sohna road which passes through the heart of the Bhiwadi city. Thus, the site is part of an excellent inter-city and intra city road network. The excellent linkages of the site connect it to cities like Gurgaon, Delhi, Jaipur and Alwar. The subject site is located at a distance of approx. 16 Km and 10 kms from NH-8 and centre of Bhiwadi city.

Landmark	Approx. Distance
Connaught Place, New Delhi	82 kms
Jaipur	210 Kms
Gurgaon	55 Kms
Dharuhera	16 Kms
NH-8 Junction	26 Kms
Bhiwadi-Sohna Road crossing	11 kms
Bhiwadi town	12 Kms
Honda Siel Plant	2.5 kms
SOURCE JONES LANS LASAUE DROBERTY CONSUL	TANTO (INDIA) DUT LTD DEOFADOU 40 201

Table 7.2: Distances of the subject site region from the major landmarks

SOURCE JONES LANG LASALLE PROPERTY CONSULTANTS (INDIA) PVT LTD RESEARCH 4Q 2012

7.5 NEIGHBORHOOD PROFILE

The subject site neighborhood is in its developing stage as most of the residential and retail real estate projects along Bhiwadi-Alwar road are in various stages of construction which are likely to get operational in next 2-3 years. In the next couple of years the subject site neighborhood is perceived to emerge as one of the preferred residential destination of Bhiwadi. Infrastructure facilities are in their developing stages. The industrial areas of Bhiwadi, Khushkhera and Chopanki lie in close proximity to the subject site. Since the subject site lies under designated residential land use zone, the upcoming development at the subject site enjoys requisite infrastructure provided by relevant authorities.









*Map not to scale

7.6 SUBJECT SITE SWOT ANALYSES

The site is located along Bhiwadi-Alwar road which is witnessing several developments in residential sector. Though, these real estate projects are in their developing stage with the growth of city following a longitudinal pattern towards Alwar along Bhiwadi-Alwar road, this quadrant of the city or the subject site corridor (Bhiwadi-Alwar road) is becoming the growth corridor of the city.

Strengths

- The subject site enjoys a locational advantage of being located along the 200 ft wide Bhiwadi-Alwar Road, the growth corridor of the city, and in very close proximity to the upcoming organized residential and retail mall developments along this corridor
- The site enjoys good inter-city and intra-city connectivity which makes it easily accessible and well connected.



- The site enjoys excellent accessibility through the Bhiwadi-Alwar road which connects it to different parts of the region and further connects it to Alwar on south-east and NH 8 on the west
- It enjoys good frontage along its approach/access road (Bhiwadi-Alwar road) which provides excellent visibility to the property within its micro market.
- Upcoming residential developments by reputed regional and local developers in the immediate catchment of the subject site define a good catchment population for the upcoming development on the site.
- Existing and upcoming industries by RIICO and other large scale industrial units like that of Shree Cement, Nahar Group of Industries, Honda Siel are expected to generate high demand for residential and retail developments along the site corridor.

Weakness

• There is no inherent weakness associated with subject site

Opportunities

- Since the subject site is located along Bhiwadi-Alwar road which is to be upgraded to 6-lane mega highway corridor, the site is likely to attract catchments from adjoining towns due to its better connectivity with other neighboring areas
- Areas in and around the subject site are in its developing phase which may act as an added advantage for the upcoming residential development on the site in terms of good infrastructure facilities
- Growing population base of the city clubbed with floating population working in industries of Bhiwadi are likely to enhance demand for residential real estate in the subject site corridor.
- The existing and upcoming residential and retail developments in the vicinity of the site are likely to act as a catalyst for development on the subject site.
- Paucity of land in other parts of Bhiwadi town due to presence of industries is likely to enhance the demand for the upcoming residential development on the site.

Threats

- A number of upcoming residential (group housing and integrated township) developments along subject site corridor (Bhiwadi-Alwar road) is likely to accord major competition for any upcoming residential development on the subject site.
- High level of upcoming supply in the vicinity may have an impact on the supply level of the residential development at the site. However, this may be offset by intelligent and competitive marketing and pricing strategy, and evolving a competitive USP for the project.
- Proposed development mix at subject property is unlikely to have the first-mover advantage which has been taken by other upcoming residential developments offering possession of apartments in the vicinity of the site.
- It has been observed that speculative investments form a major proportion of absorbed stock in private residential developments.



Achievable Pricing

8.1 FUTURE OUTLOOK FOR THE MICRO MARKET – NEEMRANA-BEHROR

The region which is one of the established industrial destinations is successfully repositioning itself as an affordable housing destination within the region. Neemrana and Behror have seen major investment in affordable housing sector in the recent past. As of today, though the region is not an established residential micro - market but we foresee looking at the growth of affordable housing projects, the residential development in the subject region would grow in similar lines to the Manesar-Bhiwadi micro market.

The success of various projects promoted by national and regional developers (Ashaina Green Hill and Hill View), the first projects in the affordable space has not been an aberration as subsequent projects launched in the region too have seen such success in recent past. It is observed that majority of the projects in the subject site (s) neighborhood see significant absorption rates immediately after the launch, mainly because the prices are low at this stage and the absorption gets stabilized once the project reaches construction stage. It is anticipated that as the project approaches completion, absorption jumps again and this allows the developer to increase the prices at will. Hence it is recommend that keeping the sales prices at launch at competitive levels, increasing the prices linked to construction and holding few residential units (say 15-20%) till the completion of project, which can be sold by developer at premium. As many projects in the neighborhood are under construction and are moving at very slow pace, the subject property development can achieve relatively good sale prices if a sustained and brisk pace of constructions is maintained.

Market trend indicates that over the next 3-4 years this region will see major changes in socio-economic profile. With rising unaffordable levels of residential units in surrounding cities and implementation of various infrastructure developments (Global city), expansion and setting-up of various industrial units, the region will see increased demand of residential projects. Announcement of DMIC corridor has immense impact on overall real estate scenario of the region and is likely to have considerable ripple effect on the pricing of residential units. In addition conducive investment and political scenario is likely to have positive impact on overall investment scenario. Since these entire infrastructure initiatives are likely to be implemented in primary catchment of subject site (s), hence, it is anticipated that subject site region is likely to emerge as preferred residential destination of the region and will witness comparatively faster growth.

The commercial, retail and other entertainment developments in the region are negligible as of today; hence the projects which are offering shopping arena or amenities such as clubhouses are more popular among the buyers. The rising demand for such developments from the future residents may trigger the organized retail development in the region.





8.2 ACHIEVABLE CAPITAL VALUE FOR THE PROPOSED APARTMENT DEVELOPMENT – NEEMRANA & BEHROR

Proposed residential apartment units on the Project Site (s) have been evaluated with respect to the detailed market assessment carried out within the micro-market pertaining to similar developments. Prevalent price range for conventional as well as affordable housing segment has been considered for determining the 'average benchmark price' for the proposed residential apartment development on the Project Site (s).

The 'average benchmark price' determined above is considered for potential price adjustments for various attributes like location, accessibility, developers' profile, size of the development, product offering, present project status, site attributes, etc. among others, to determine 'achievable pricing' for the proposed residential apartment development on the Project Site (s). The price adjustments have been carried out in terms of premium and/or discount on attributes of the Project Site with respect to the competing projects in the micro-market. The table below presents various premium and discount factors considered in the assessment and rationale for the same.

Attributes / Parameters	Rationale
Location	Location in terms of how the Project Site is positioned in the macro & micro level with respect to its neighboring developments, its socio-economic profile of the catchments, its connectivity, economic drivers and proximity to the major landmark developments, etc.
Accessibility	Accessibility in terms of how the Project Site is accessible from major commuting corridors of the city, travel time, ease of traffic etc.
Size of Development	Any large development has the potential to have more amenities, better community size, and better quality of environment. Such sizeable development, can command a premium on the sale price for various facilities provided within the gated community.
Availability of Unit Options	Availability of the units on primary sales from the developer
Support Facilities /Amenities	The support facilities and amenities of each project have been studied and compared with the proposed project to understand where the proposed development stands vis-à-vis the other projects in the market.
Developer Profile	The track record of the developer/ promoter, quality of construction and delivery capability
Development Mix and Project Status	The project cycle of launch, under construction or completed reflects on the incremental stages of capital value of the project and premium associated with establishment of a product in the market. Development Mix especially for integrated developments with social infrastructure effects the average capital value of a project.
Proximity to Physical / Social Infrastructure	Good physical and social infrastructure is a necessary requirement for a comfortable living. The degree of variance depends on typology of facilities.





Attribute ranking	Subject Property	Eldeco Eden Park	D/P	Lavender Green Acres	D/P	Anurag Homes	D/P
Location & proximity to city center	Located along village revenue road at a distance of approx. 3 kms from Neemrana and Japanese Zone	In close proximity to Neemrana town and Japanese Zone	-5%	In close proximity to Neemrana town and Japanese Zone	-5%	In close proximity to Neemrana town and Japanese Zone	-5%
Size of land (acres)	12.65	33.00	0%	50.00	0%	NA	0%
Type of residential development	Mix of Group Housing and plotted development	mix of plotted, group housing, low rise residential development	0%	Integrated residential development	-5%	Relatively smaller group housing development	5%
Visibility and Frontage	Frontage on village road, however enjoys good visibility from NH-8	30 mt wide internal access road	5%	30 mt wide internal access road	5%	30 mt wide internal access road	5%
Accessibility	Present access road to the subject property is from 20 ft village road. However as indicated by client, subject property shall enjoy access from proposed 30 mt wide road	Currently enjoys access from 30 mt wide access road	0%	Currently enjoys access from 30 mt wide access road	0%	Currently enjoys access from 30 mt wide access road	0%
Site development	NA	construction activity underway	-5%	physical infrastructure laid, construction at advanced stage	-10%	construction activity underway	-5%
Base Sale Price (INR per sq ft)		2,770		2,450		2,350	
Total Adjustment			-5%		-15%		0%
Total Adjusted Unit Rate (INR/ sq ft)		2,632		2,083		2,350	
Weighting of Comps		40%		40%		20%	
Weighted Ave of Comps	2,356	INR/ sq ft					
BSP Adopted (INR/sq ft)	2,356	INR/ sq ft					





As detailed in the previous chapter, there are 10 projects under mid segment housing in Neemrana-Behror region. Though the supply is significant the absorption has been at considerably healthy levels. Newly launched projects in the subject site (s) neighborhood are usually sold in the range of INR 2,350-2,900 per sq ft on super built-up area (SBUA).

Building specifications and amenities play a vital role in marketing residential products. The decision making of the end-users largely depend on superior building specifications, comparable to the buildings of Grade A developers in the cities like Gurgaon and Jaipur and level of civic amenities provided within the residential development. Typically, buyers attribute price premium for differentiators has been given to the proposed project because of the facilities and amenities that are likely to be proposed in the project when compared to the amenities existing in the competing projects within the micro-market.

Neemrana Project Site Pricing (Apartments)

Accordingly, Jones Lang LaSalle recommends pricing between of INR 2,350 – 2,400 per sq. ft. (applied over the saleable/super built-up area) for the proposed residential development on the Project Site. This recommended pricing is for a residential apartment product which is proposed on the Project Site. It may be noted that the above recommended pricing is as on the date of assessment (February 2013) and the indicated price is only the base price for the unit saleable area of the apartment. Other charges like parking, club membership, deposits payable to civic authorities, etc. are chargeable over and above the base price.

In the case of year wise price increase, micro market has an average CAGR of 8-10% per annum in residential apartment projects. Considering the factors like regions average appreciation, Neemrana micro market average price appreciation, proposed Global City, improved / proposed urban infrastructure projects towards the micro-market and future outlook, a CAGR of 10% is considered for future projection. The details pertaining to the same are mentioned in the table below:

Year	Projected Capital Price (INR/ sq ft)	Suggested Annual Increase (%)	Price Increase over Previous Year (INR/ sq ft)
2013	2,356		
2014	2,591	10%	236
2015	2,850	10%	259
2016	3,135	10%	285

Neemrana:

Based on the assumptions, trends observed as mentioned above and price adjustments, we are of the opinion that the sale price for the proposed residential apartment project on the Project Site at Neemrana should be between

INR 2,350 – 2,400 per sq. ft

(Applied over the saleable / super built-up area).

Sale price of plotted developments in vicinity of subject property are between INR 18,000 – INR 20,000 per sq yd depending upon scale of development, location, amenities, among others. In this context, if client intends to position plotted development at subject property, we recommend sale of INR 15,000 per sq yd.





Behror Project Site Pricing (Apartments)

Accordingly, Jones Lang LaSalle recommends pricing between of INR 1,950 – 2,050 per sq. ft. (applied over the saleable/super built-up area) for the proposed residential development on the Project Site. This recommended pricing is for a residential apartment product which is proposed on the Project Site. It may be noted that the above recommended pricing is as on the date of assessment (November 2012) and the indicated price is only the base price for the unit saleable area of the apartment. Other charges like parking, club membership, deposits payable to civic authorities, etc. are chargeable over and above the base price.

In the case of year wise price increase, micro market has an average CAGR of 8-10% per annum in residential apartment projects. Considering the factors like regions average appreciation, Behror micro market average price appreciation, improved / proposed urban infrastructure projects towards the micro-market and future outlook, a CAGR of 10% is considered for future projection. The details pertaining to the same are mentioned in the table below:

Year	Projected Capital Price (INR/ sq ft)	Suggested Annual Increase (%)	Price Increase over Previous Year (INR/ sq ft)
2012	1,950		
2013	2,145	10%	195
2014	2,360	10%	215
2015	2,595	10%	236

Behror:

Based on the assumptions, trends observed as mentioned above and price adjustments, we are of the opinion that the sale price for the proposed residential apartment project on the Project Site at Neemrana should be between

INR 1,950 – 2,050 per sq. ft

(Applied over the saleable / super built-up area).





Table 8.2: Achievable Ca	pital Value for Proposed	Development at Behror
	pital value for i roposet	bevelopment at bemor

Attribute ranking	Subject Property	Grand Sapphire	D/P	Lavender Green Acres	D/P
Location & proximity to city center	Located approx. 1 kms from RTDC Behror Midway towards Jaipur	Located approx. 6 kms from Behror town towards Jaipur	10%	In close proximity to Neemrana town and Japanese Zone	-20%
Size of land (acres)	10.5	133.00	-10%	50.00	-5%
Type of residential development	Mix of Group Housing and plotted development	Township development	0%	Integrated residential development	0%
Visibility and Frontage	From NH-8	From NH-8	0%	30 mt wide internal access road	5%
Accessibility	Present access road to the subject property is from 60 ft wide NH-8 service road	Currently enjoys access from 60 ft wide NH-8 service road	0%	Currently enjoys access from 30 mt wide access road	0%
Site development	NA	NA	0%	physical infrastructure laid, construction at advanced stage	-10%
Base Sale Price (INR per sq ft)		2,100		2,450	
Total Adjustment			0%		-30%
Total Adjusted Unit Rate (INR/ sq ft)		2,100		1,715	
Weighting of Comps		70%		30%	
Weighted Ave of Comps	1,985	INR/ sq ft			
BSP Adopted (INR/sq ft)	1,985	INR/ sq ft			





8.3 FUTURE OUTLOOK FOR THE MICRO MARKET – BHIWADI

Bhiwadi is leveraging on its locational advantage. Industrialists from Delhi and also from Punjab and other parts of India have set up base here. The major attraction of this area is Tapukara industrial area which is located on the Bhiwadi-Alwar road. The road has the status of a national highway, called NH-71B. Rajasthan Housing Board has been active in the industrial town. The location is settled with basic amenities such as piped water supply, schools, transportation, hospitals, telecom networks, banks etc. The influx of industries and commercial real estate into Bhiwadi has driven the growth of residential property in the city. Bhiwadi is turning into a promising real estate destination at a rapid pace. The town has seen resurgence on the real estate front, with modernized townships, residential complexes, IT hubs and corporate houses coming up at a feverish pace.

This development took off, especially after the promotion of the region as an industrial hub, with the Rajasthan State Industrial Development & Investment Corporation Limited (RIICO) aggressively pushing for rapid development and major investments into the town. Over the last couple of years, this town has been slowly emerging as the next industrial hub surpassing other towns of the NCR. Today it is home to numerous global industries including in the automobile, pharmaceutical, cable, electrical appliance, garment, beverage sector.

Keeping this in mind, developers like Ashiana, BDI, Avalon, Genesis, Kajaria, MVL, Krish Vatika, Nimai Developers, Omaxe, Trehan Home Developers, etc, have come up with several housing projects here.

Bhiwadi is a typical Tier II city and promises value for money to the investors and the buyers alike. With innumerable options for the middle class, the newly constructed apartments here are generating a lot of buzz. The town is adequately equipped to handle the humongous demand for affordable housing coming from the work force employed in the various industries here.

For developers and small investors in real estate, it has already become a destination of choice. The region which is one of the established industrial destinations has successfully repositioned itself as an affordable housing destination within the region. Bhiwadi has seen major investment in affordable housing sector in the recent past. As of today, the region is an established residential micro - market especially in affordable housing segment.

Ashiana Housing identified this place nearly a decade ago for residential projects. The initial success propelled its journey here and, today, Ashiana has launched and handed over seven group-housing projects, namely Greens, Bageecha, Gulmohar Park, Gardens, Villas, Rangoli and one senior-living housing society, Utsav.

It is observed that majority of the projects in the subject site neighborhood see significant absorption rates immediately after the launch, mainly because the prices are low at this stage and the absorption gets stabilized once the project reaches construction stage. It is anticipated that as the project approaches completion, absorption jumps again and this allows the developer to increase the prices at will. Hence it is recommend that keeping the sales prices at launch at competitive levels, increasing the prices linked to construction and holding few residential units (say 15-20%) till the completion of project, which can be sold by developer at premium. As many projects in the neighborhood are under construction, the subject property development can achieve relatively good sale prices if a sustained and brisk pace of constructions is maintained.

Market trend indicates that over the next 3-4 years this region will see major changes in socio-economic profile. With rising unaffordable levels of residential units in surrounding cities and implementation of various infrastructure developments (DMIC, KBNIR), expansion and setting-up of various industrial units, the region will see increased demand of residential projects. Announcement of DMIC corridor has immense impact on overall real estate scenario of the region and is likely to have considerable ripple effect on the pricing of residential units. In addition conducive investment and political scenario is likely to have positive impact on overall investment scenario. Since these entire infrastructure initiatives are likely to be implemented in





primary and secondary catchment of subject site, hence, it is anticipated that subject site region is likely to witness healthy absorption levels in short to medium term.

8.4 ACHIEVABLE CAPITAL VALUE FOR THE PROPOSED APARTMENT DEVELOPMENT - BHIWADI

Proposed residential apartment units on the Project Site have been evaluated with respect to the detailed market assessment carried out within the micro-market pertaining to similar developments. Prevalent price range for conventional as well as affordable housing segment has been considered for determining the 'average benchmark price' for the proposed residential apartment development on the Project Site.

The 'average benchmark price' determined above is considered for potential price adjustments for various attributes like location, accessibility, developers' profile, size of the development, product offering, present project status, site attributes, etc. among others, to determine 'achievable pricing' for the proposed residential apartment development on the Project Site. The price adjustments have been carried out in terms of premium and/or discount on attributes of the Project Site with respect to the competing projects in the micro-market.

As detailed in the previous chapter, there are approx. 25 projects under various stages of development apart from 10 projects already operational. Though the supply is significant, the absorption has been at considerably healthy levels. Newly launched projects in the subject site neighborhood are usually sold in the range of INR 2,300-2,600 per sq ft on super built-up area (SBUA).

Building specifications and amenities play a vital role in marketing residential products. The decision making of the end-users largely depend on superior building specifications, comparable to the buildings of Grade A developers in areas like Gurgaon and Manesar and level of civic amenities provided within the residential development. Typically, buyers attribute price premium for differentiators has been given to the proposed project because of the facilities and amenities that are likely to be proposed in the project when compared to the amenities existing in the competing projects within the micro-market.





Attribute ranking	Subject Property	Avalon Rangoli	D/P	Genesis Flora	D/P
Location & proximity to city center	Located along 200 ft wide Bhiwadi- Alwar Highway after toll plaza	Same as subject property	0%	Same as subject property	0%
Size of land (acres)	22.7	9.00	0%	1.87	0%
Type of residential development	Mix of Group Housing and plotted development. Offers wider product mix and provision of better facilities and amenities as compared to smaller developments	Group Housing	5%	Group Housing	10%
Visibility and Frontage	From 200 ft wide Bhiwadi-Alwar Highway	From 200 ft wide Bhiwadi-Alwar Highway	0%	From 200 ft wide Bhiwadi-Alwar Highway	0%
Accessibility	Present access road to the subject property is 200 ft wide Bhiwadi-Alwar Highway	Currently enjoys access from 200 ft wide Bhiwadi-Alwar Highway	0%	Currently enjoys access from 200 ft wide Bhiwadi-Alwar Highway	0%
Site development	NA	Construction at advanced stages, likely possession in 1Q 2014	-10%	Foundation work started, however size of project is very small	0%
Base Sale Price (INR per sq ft)		2,615		2,450	
Total Adjustment			-5%		10%
Total Adjusted Unit Rate (INR/ sq ft)		2,484		2,695	
Weighting of Comps		70%		30%	
Weighted Ave of Comps	2,547	INR/ sq ft			
BSP Adopted (INR/sq ft)	2,547	INR/ sq ft			

Table 8.3: Achievable Capital Value for Proposed Group Housing Development at Bhiwadi





Bhiwadi Project Site Pricing (Apartments)

Accordingly, Jones Lang LaSalle recommends pricing between of INR 2,500 – 2,550 per sq. ft. (applied over the saleable/super built-up area) for the proposed residential development on the Project Site. This recommended pricing is for a residential apartment product which is proposed on the Project Site. It may be noted that the above recommended pricing is as on the date of assessment (December 2012) and the indicated price is only the base price for the unit saleable area of the apartment. Other charges like parking, club membership, deposits payable to civic authorities, etc. are chargeable over and above the base price.

In the case of year wise price increase, micro market has an average CAGR of 10-13% per annum in residential apartment projects. Considering the factors like large supply of units, Bhiwadi micro market average price appreciation, proposed urban infrastructure projects towards the micro-market and future outlook, a CAGR of 10% is considered for future projection. The details pertaining to the same are mentioned in the table below:

Year	Projected Capital Price (INR/ sq ft)	Suggested Annual Increase (%)	Price Increase over Previous Year (INR/ sq_ft)
2012	2,450		
2013	2,695	10%	245
2014	2,965	10%	270
2015	3,261	10%	296

Bhiwadi:

Based on the assumptions, trends observed as mentioned above and price adjustments, we are of the opinion that the sale price for the proposed residential apartment project on the Project Site at Bhiwadi should be between

INR 2,500 – 2,550 per sq. ft

(Applied over the saleable / super built-up area).



