

### Article Info

Received: 25 Jan 2017 | Revised Submission: 20 Feb 2017 | Accepted: 28 Feb 2017 | Available Online: 15 Jun 2017

## Real Estate Investment Trends in Unauthorised Colonies: A Case Study of Sangam Vihar, New Delhi

Christopher Paul\*

### ABSTRACT

*In recent years, Delhi has had an explosive growth in terms of economic development and population growth. Major contributor being In-Migration of poorer sections of society coming to Delhi for better employment opportunities. Hence there is a growing shortage of housing in the city. The apex body DDA, has not been able to provide planned and legal housing options for the people, especially the poorer section. This study is an investigation to unravel the Real estate market in the colonies wherein such sections of society has opted to build their houses, however it being in an illegal manner.*

*The study is based on the parameters of investment, such as, Size of investment, plot sizes, Liquidity of buying and selling period, Lock-in period for the investment, the FAR built-up in these colonies. Other parameters include Net Annual income (rental) Type of accommodation available for rent, duration of stay of the tenants, size of investment- post purchase. The Average rate of return based on the lock-in period and the size of investment.*

*These parameters along with the advantages have pronounced these UACs as a very good investment option among small and medium investors, besides being a good housing option.*

**Keywords:** Unauthorized; Real Estate; Investment Trends; Housing; Return.

### 1.0 Introduction

In Delhi, DDA is the main supplier of house. Till now DDA is able to provide only 40% of the total housing demand. To make matters worse big private owners are not allowed to participate in the Housing Supply Mechanism of Delhi, resulting in their choosing the other routes like Unauthorised Colonies.

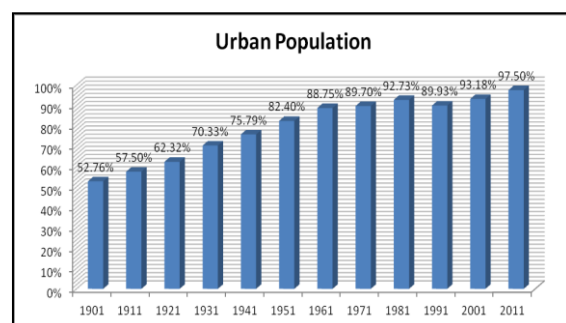
While beginning at a small scale initially, it is now happening on a large scale in these areas. An unauthorized colony is no longer treated as a need-based market; rather it is currently a big investment market.

There is a huge influx of capital in unauthorised colonies in Delhi and its neighbouring regions. The purpose of this study is to answer questions such as, what makes them invest, knowing the risks involved. The objective of this study is to understand the holistic picture of the investment options and trends in the UACs of Delhi.

### 2.0 City Profile: Delhi

Major change and expansion of Urban Delhi started in the second decade of Twentieth Century when Britishers planned New Delhi, the Capital of India. At the beginning of 21st century, more than 93 per cent of the population of Delhi was in urban areas as compared to 53 percent in 1901. With 16.75 million populations in 2011

**Fig 1: Showing Urban Population Growth in Delhi**

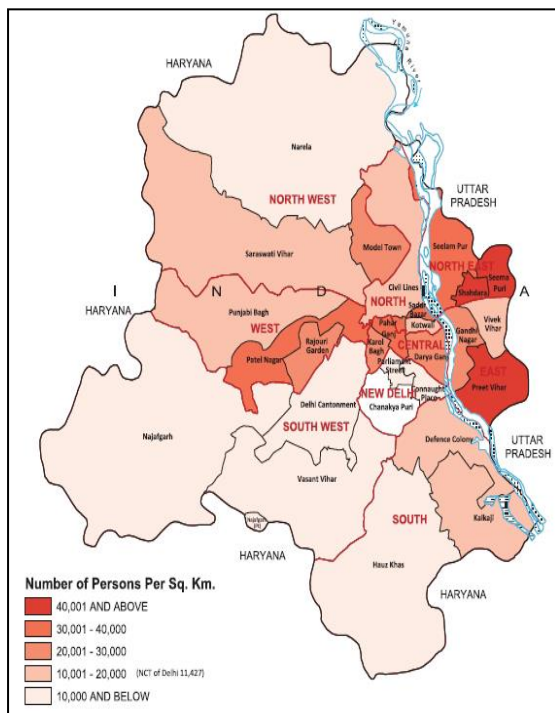


\*School of Architecture, Delhi Technical Campus (GGSIP University), Greater Noida (U.P.), India  
(E-mail: ar.christopher.paul@gmail.com)

The Urban Density in Delhi grew from 7,225 pp km in 1961 to 14,667 pp km in 2011. The map below shows the population density of Delhi.

As evident, the Trans-Yamuna Area is highly dense, and the southern half of Delhi shows relatively lower density. Also the North West portion has a lower density.

**Image 1: Showing Population Density in Delhi**



The NCT of Delhi is governed by 3 major ULBs, MCD, NDMC, and Delhi Cantonment Board. Out of which MCD holds the maximum area. There are two basic types of settlements in Delhi, Planned and Unplanned.

Among the Planned, there are categorized under private and public.

The Unplanned however are categorized as Unauthorized colonies, Rural Villages, JJ Clusters, Regularized / Unauthorized Colonies, Urban Villages, Notified JJ Clusters, and JJ resettlement Colonies.

As clearly seen in the table 1, the housing provided by the planning agencies is horribly short, compared to the requirement of the city's population.

One of the major contributors of housing has been Unauthorised colonies.

Which is able to cater to the lower income categories of the population of Delhi.

**Table 1: The Trend of Housing Subsystem in Delhi**

	1961	1971	1981	1986	1991	2001
Old City	60000	60000	60000	60000	60000	60000
Urban Village	55000	63500	6000	89000	98000	116000
Rehab. Colonies	64827	64827	64827	64827	64827	64827
Govt. Employees Housing	31562	51598	72119	32558	92998	113878
DDA's Plotted Dev.			116000	65000	78000	104000
Cooperative Hsg.				11452	13742	18322
Private Housing	32591	58945	152507	122836	154326	217306
Slum Rehousing	4957	9480	15511	16717	17922	20335
UACs	36300	78872	75960	248504	305049	418139
Squatter Settlements	42815	81036	70000	113186	156372	242744
Resettlement Colonies		34925	197684	214108	230533	263883
DDA Group Hsg.		5605	65867	112569	170944	287634
Coop. Group Hsg.			1000	16514	32069	63181
Total Hsg Stock	328052	508788	897475	1167271	1474782	1990249
Total Housing Need	531722	813140	1244081	1498820	1802338	2494919
Shortage	203670	304352	346606	331549	327556	504670

Clearly evident from the data given in table 2, there has been a steep rise in the number of UACs. Owing to the fact that the planned development has not been able to cater to the growing demand.

**Table 2: Colonies Variation with Time**

Period	Number	Cum. Number	Area (ha)	Population (lacs)
Before 1962	110	110	500	2.21
1962-67	101	211	1160	4.5
1967-74	260	471	2550	7.25
1974-77	136	607	3400	8.5
1977-93	1017	1624	5333.4	26.6

## 2.1 Major findings

- Apartment Building Activity is growing rapidly.
- Builders have started going for G+4.
- Proximity to work centers like Nehru Place and Okhla Industrial area is the prime reason for target group buying plots here.
- Profit making is the only motive for Builders thus goes for complete violation of Bye Laws.
- No noticeable stress on infrastructure as yet.
- Streets getting congested due to increased parking & traffic.
- Apartment activity in this colony caters large group of income as flats are available for Rs 2.5-12 L.
- No parking facilities, hence on-street parking causes hindrance.
- Small room sizes and shafts. Some flats, no ventilation as shafts are absent.

## 2.2 UACs: Conglomeration of Sangam Vihar

It can be said as one of the largest unauthorised colonies of Asia. The Cost of land is very less compared to other places around it, or in planned areas nearby.

As shown in figure 2, the Land use distribution of Sangam Vihar, Delhi. Major chunk of the land is used for residential use than commercial use.

## 3.0 Ownership Status

Maximum numbers of residents are rented tenants compared to owner resident.

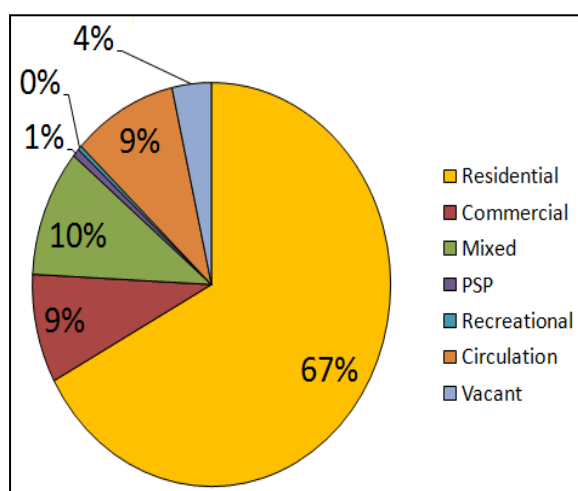
## 3.1 Housing supply system in unauthorized colonies:

Four types: owner as a builder, developer as a builder, collaborative development between land's owner and builder and rental housing system.

## 3.2 Black Money in real estate market

The use of unaccounted money in the real estate market in urban India has emerged as a major problem in recent years. While its dimension is not known accurately, the growing influence of black money in many transactions of real estate is commonly accepted. The fungibility of undetected money between the capital market and real estate has further fuelled the scope for the greater use of black money and the push to land and property prices in the course of liberalisation.

**Fig 2: Showing Land Use Distribution in Sangam Vihar**



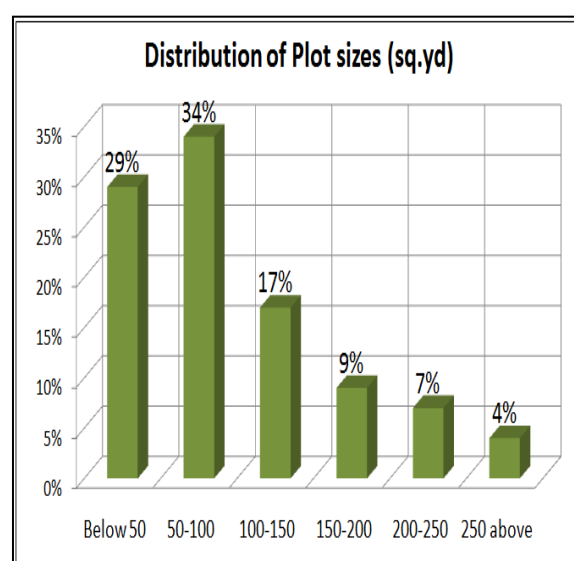
**Table 3: Percentage of Built Up Area**

Built Up	86.66%
Vacant	13.34%

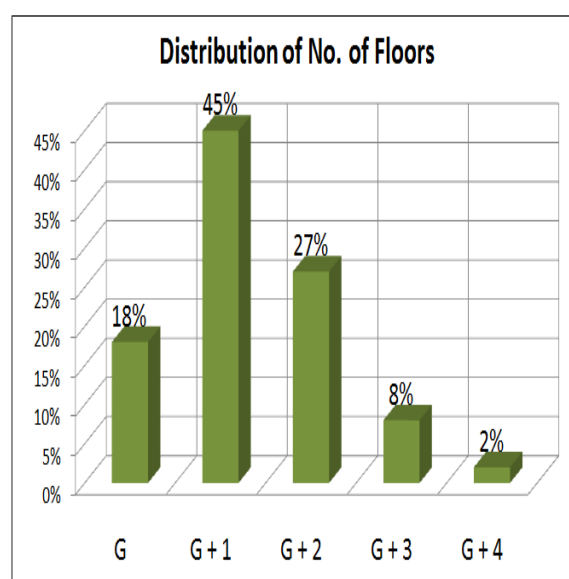
**Table 4: Ground Coverage of Built-Up Plots**

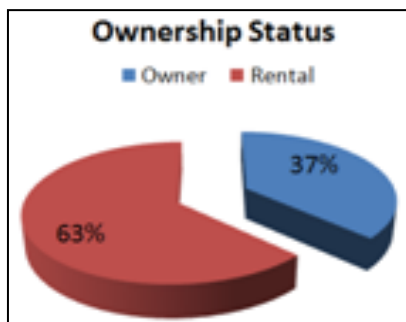
Less than 50%	8%
50-75%	35%
Above 75%	57%

**Fig 3: Distribution of Plots**



**Fig 4: Distribution of Floors in Sangam Vihar**



**Fig 5: Ownership Status**

#### 4.0 Evaluating Financial Instruments: Real Estate

##### 4.1 Pros of investing in Real Estate

- Your investment is in something tangible that is very important psychologically.
- It is difficult to be defrauded in Real Estate compared to other financial instruments such as Mutual fund etc.
- Using leverage (debt) in real estate can be structured far more safely than using debt to buy stocks by trading on margin.
- Real estate investments have traditionally been a terrific inflation hedge to protect against a loss in purchasing power of the dollar.

##### 4.2 Cons of investing in Real Estate

- Compared to Mutual Fund, real estate takes a lot of hands-on work . It requires occasional meetings and oversight.
- Real estate can cost you money every month if the property is unoccupied.
- As you learned, the actual value of real estate hardly ever increases in inflation-adjusted terms.
- Real estate is one of the least liquid investments you can make, since a property can take months or even years to sell.

##### 4.3 Types of Investors:

- Income Investors: They seek maximum amount of income through their investment.
- Growth & Income Investors: They seek current income along with growth overtime.
- Growth Investors: They do not seek current income, their primary objective is capital appreciation.
- Trading / Speculation Investors: They seek maximum return through a broad range of investment strategies, which generally involve a

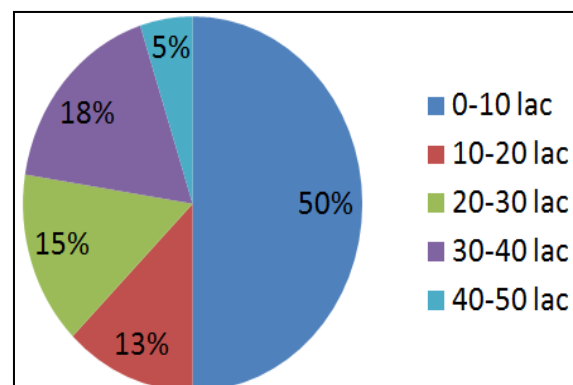
high level of risk, including the potential for significant loss of principal.

#### 5.0 Inferences

A total of 46 colonies form the conglomeration of colonies in Sangam Vihar, New Delhi. This study was done with sample survey strength of more than 300 samples, taken from various Land owners, Past-Land owners, Property dealers, Tenants, shop owners, residents, and non-residents. From present case studies, done on the set Investment trend parameters, indicate the following inferences.

##### 5.1 Size of investment

Most of the investments done are in the range of 0-10 Lacs. This indicates the low entry cost of the market. Due to the low rates of the plots available, size of the investment can remain low. And in turn give a low entry cost, for the investor in this market.

**Fig 6: Size of Inest Mant**

##### 5.2 Plot size

The plots that are available in the market are of the size of range between 51 to 100 sq yds. Indicating, the fact that the investors are basically residents who tend to become investors once their residential issue is sorted out. Further they develop to start earning rental income.

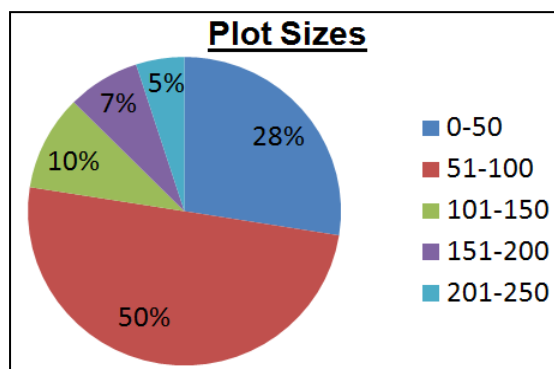
##### 5.3 Liquidity (buying period)

The liquidity in market is good, with a buying period of 1 to 6 months.

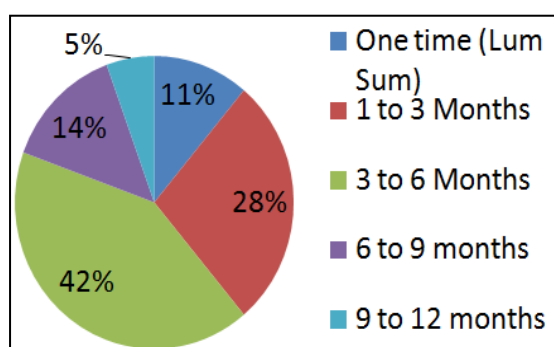
##### 5.3 Liquidity (buying period)

The liquidity in market is good, with a buying period of 1 to 6 months.

**Fig7: Distribution of Plot Size**



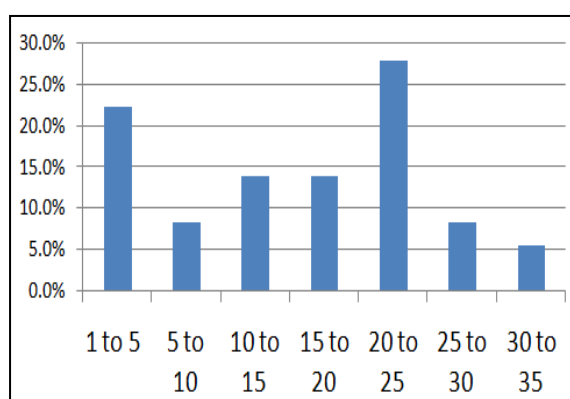
**Fig 8: Liquidity Distribution with Time**



#### 5.4 Gestation period

The lock-in period is very long. The maximum respondents have had a lock-in period of 20-25 years. Slow developments of such colonies have led to a large lock-in period.

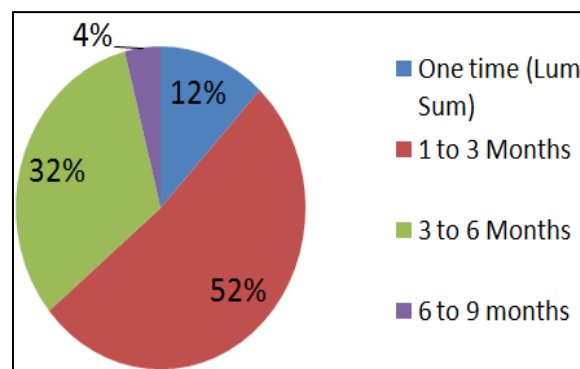
**Fig 9: Distribution of Gestation Period**



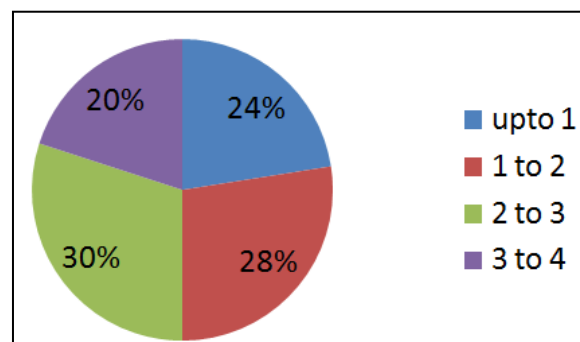
#### 5.5 Liquidity (selling period)

The majority of the respondents have had a selling period of 1 to 3 months. Indicating high liquidity in the market

**Fig 10: Selling Period**



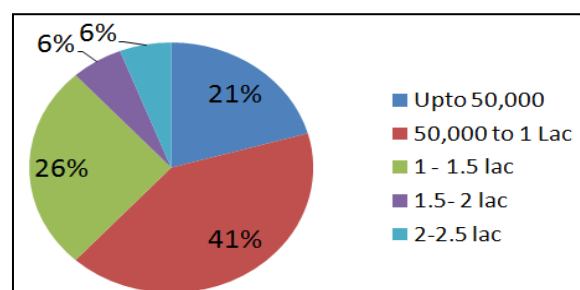
**Fig 11: Built Up (FAR)**



#### 5.6 Built up (FAR)

FAR consumption in these colonies is tending towards the higher range of 2 to 4. Some building have attained FAR higher than 4. Indicative of no building regulations followed. Besides, full ground coverage and no-setbacks.

**Fig 11: Net Annual Income**



#### 5.7 Net annual income

The maximum respondents agreed to have rental income in the tune of 0 to 1, 00,000. The rental income is a prominent source of income for the residents-Owners of Sangam Vihar. Low income is due to the low paying capacity of the tenants.

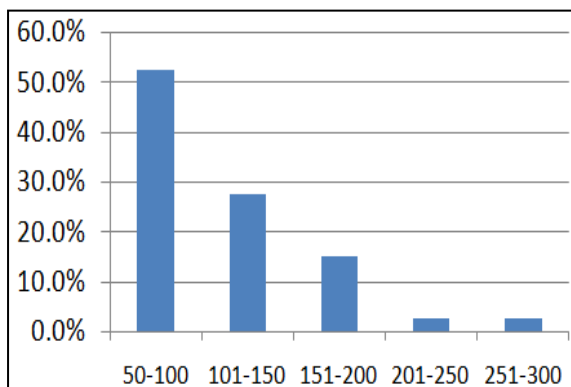
### 5.8 Type of accommodation

The room sizes available vary from 50 sq.ft to more than 300 sq.ft.

Most of the rooms available for rent do not have a toilet, but have a shared toilet for more than 1 room.

Maximum available size is in the range of 50-100 sq.ft.

**Fig 12: Room Size**

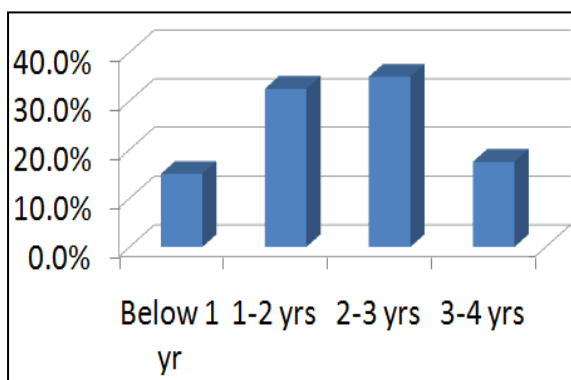


### 5.9 Duration of stay for tenants

The Tenants' stay in a particular accommodation is between 1 to 3 years maximum. This is indicative of the easy eviction of tenants.

Thus, no issue of property being taken over by tenants, landlords can evict the tenant as and when they want. This is higher security of Investment.

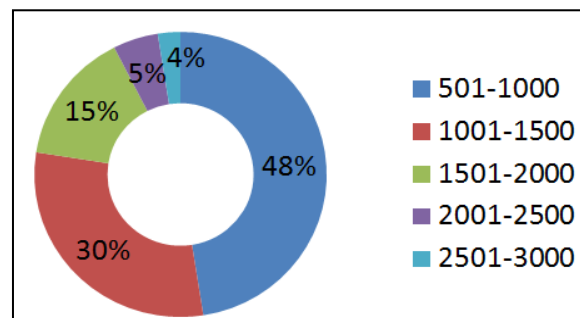
**Fig 13: Stay of room/flats by tenants**



### 5.10 Rental income per month per tenant

Most of the tenants are poor workers; hence the maximum number of rent comes in the range of 500 – 1500 Rs per month per tenant.

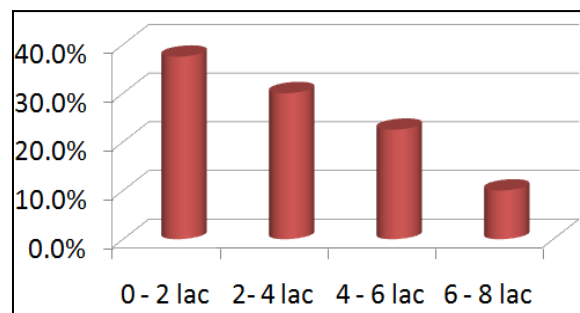
**Fig 14: Rental Income**



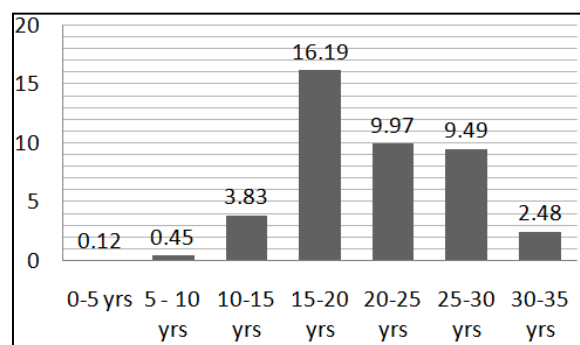
### 5.11 Size of Investment (Post Purchase)

Owners/Investors do not invest heavily after initial purchase. Indicative of cheap construction cost, and also that many houses have come up as incremental housing. Most of the investment is below 4 lacs.

**Fig 15: Size of Investment**



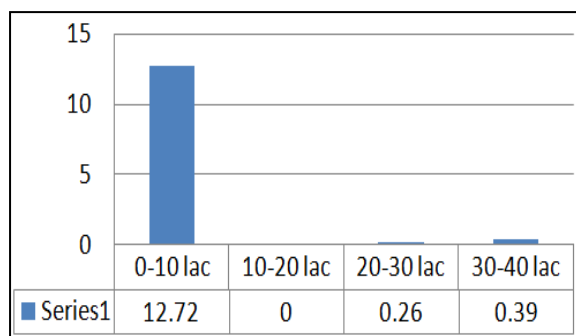
**Fig 16: Gestation Period**



### 5.12 Average rate of return

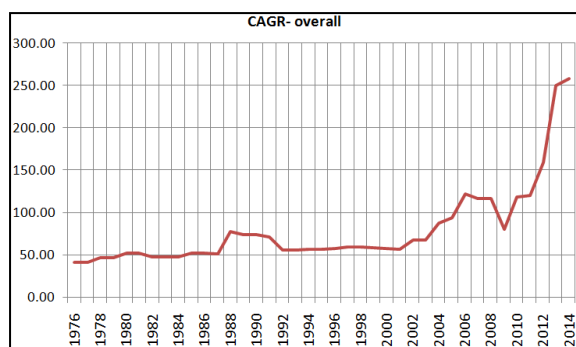
The best rate of return has come in the range of 15-20 years of gestation period. Due to low level of initial investment, and slow development it is but obvious to have such a long gestation period to realize a sizeable profit.



**Fig 17: Size of Investment**

### 5.13 Average rate of return (%)

Most of the investment has been in the lower range of 0-10 lacs, hence it has been the most profitable as well.

**Fig 18: Annual Growth Rate**

### 5.14 Compound annual growth rate

Average year-on-year growth rate of investment over a number of years is as shown in figure 18. While investments usually do not grow at a constant rate, the compound annual return smoothes out returns by assuming constant growth. This makes accounting for the investment tidier.

The above figure shows a comparative trend of Compound Annual Growth Rate. The graph shows a steady increase from 1976 to 1986. After which, we can see a sudden spike in the CAGR. This increase boiled down after 1992. The next spike comes after the year 2000. CAGR increased from 50-60% to almost 110-140%.

These hikes could be image of the policies introduced by the Government, at various points in time. Here we can observe the dip around 1992-1993, when the Govt. introduced the Policy of Regularisation-1993. The Second dip is coincidental with the Gazette Notification for regularization of

unauthorized Colonies, 24th March 2008. Incidentally, this is the same year when the Real Estate Market slowed down in India, and other parts of the world. Till last 5 years, the CAGR shows commendable increase from 120% to more than 250%.

## 6.0 Conclusions

The Unauthorized colonies provide for ample opportunity in terms of investment. Many of the advantages have been highlighted in the study.

### 6.1 Housing option in Delhi

Unauthorised colonies in recent years have become the backbone for residential and housing option for the people in Delhi and surrounding areas. The inefficient and slow development and disposal of housing by the public sector agencies such as DDA, has resulted in the growth and development of illegal and quasi-legal settlements all over Delhi.

### 6.2 Real Estate market

The Real Estate market in such colonies is disintegrated and no source of information is available for any investor outside these colonies. Due to the large size of these colonies, and the population residing in these colonies, it is a very good source of providing housing for the people. It not only caters to the Low income and EWS categories of owners, it also provides for ultra cheap rental options for the poor daily wage workers and others.

### 6.3 Investment option

The semi-legal status of land and the poor infrastructure available accounts for the low land rates in such colonies.

This gives an opportunity for the small & medium investors to invest in these colonies, with a low to very low size of investment. The returns on these investments are also good. An easy and cheap entry into the market, with an option of incremental housing, with readily available tenants, allow for a good investment option.

### 6.4 Build as per need

The option of building and constructing as per one's need and availability of resources, gives an investor a good opportunity to invest, build as per his/her need and capacity, without the hassle of getting building plan sanctioned, or any other prior approval from any competitive authority.

### Acknowledgment

The author thanks Dr. PSN Rao, Dr. Neelima Risbud, Dr. PS Uttarwar, Sh. Chandu Bhutia and Ar. Sachin Thukral for their expert and timely guidance. Also, the author extends his gratitude towards Mr. George Paul and Mrs. Nirmala Paul for their support towards field survey and execution of the study.

### References

- [1.] A Agarwal. Impact of unauthorized Regularized colonies on Planned Development, Department of Urban Planning, SPA, New Delhi.
- [2.] S Banerjee. Monitoring the urban development-Case study Bhopal; Thesis report; Department of Urban Planning, SPA, New Delhi.
- [3.] KP Bajpai. Mixed land use and Planned Extension of Bhopal; Thesis report; Department of Urban Planning, SPA, New Delhi,1994
- [4.] CBanshree. Unauthorized colonies in Delhi cause, consequences, policy guidelines. Thesis report, New Delhi, School of Planning and Architecture, 1978.
- [5.] J Anthony. Pattern and Processes of Illegal Land Subdivision, Department of Housing, SPA, New Delhi.
- [6.] M Khatwani. Implications of regularization of unauthorized colonies, case study: East Delhi, Thesis report; Department Of Housing, SPA, New Delhi,2001
- [7.] R Khan. Fringe Area Development, Bhopal; Thesis report; Department of Urban Planning, SPA, New Delhi
- [8.] VP Malviya. Settlement Development Strategy for State Capital Madhya Pradesh; Thesis report; Department of Urban Planning, SPA, New Delhi,1997
- [9.] S Mehderatta. An Approach to redevelopment of Old Residential Area, Bhopal: Thesis report; Department of Urban Planning, SPA, New Delhi.1992
- [10.] Nagai Rajesh, Role of Urban local Bodies in Planning Development with Respect to 74th Constitutional Amendment ,Bhopal; Thesis report; Department of Urban Planning, SPA, New Delhi,1998
- [11.] PC Pradhan. Unauthorized housing development, Thesis Report, New Delhi, School Of Planning and Architecture, 1982.
- [12.] R Shrivastava. Unauthorized housing processes in Indore, Thesis report, New Delhi. School of Planning and Architecture, 1991.
- [13.] S Tiwari. Urban development within fringe development of a metropolis- case study Nagpur, Thesis report, Department of urban Planning, VRCE Nagpur
- [14.] SVK Kumar. Illegal land Sub-Division for housing- case study Vijay Wada.
- [15.] MAC Zakaria. Cross National Comparison of Strategies to Deal with Unauthorised colonies in selected Asian cities; Department of Urban Planning;SPA; N.Delhi 1988
- [16.] S Thukral. Implications of Real Estate Development in Unauthorized Colonies in Delhi, Thesis Report; SPA-D, 2005
- [17.] S Mukherjee. Unauthorized colonies of Delhi, Thesis report, MIT, 1988.
- [18.] KPS Verma. Unauthorized Residential Development, Physical Planning Issues and Policy Implications, ITPI, New Delhi.
- [19.] SC Gupta. Encroachment, Slums, unauthorized Growth and Construction: Legal and administrative aspects;HSM1 Research report; June 2000
- [20.] B Chatterji. Indian Human Settlements Program; HSM1. Research report
- [21.] JH Ansari. Unauthorized Development :Issues and Strategies-Delhi, ITPI Journal; New Delhi; June 1992, 10(4), 1992, 150



- [22.] DD Mathur. Encroachments on Public Lands ;ITPI Journal; New Delhi; 10(4), 1992, 150
- [23.] R Kapoor Rama. Unauthorized construction in Delhi - A people's Point of View; ITPI Journal; New Delhi; June 1992, 10(4), 150
- [24.] SC Gupta. Unauthorized Development in Delhi: Zoning Regulations and building Byelaws Violation; ITPI Journal; New Delhi; June 10 (4), 1992, 150
- [25.] Singhal Marnta. Sharma Ashutosh, Sharma Anupama; Unauthorised Colonization Regulation And Buiding Bye-laws Violation; 53 National Town and Country Planners Congress, Indore, ITPI
- [26.] P Kulshreshthav, M Singhal, A Sharma. Legal Maneuvering: Unauthorized Colonization In Indore; 53 National Town and Country Planners Congress, Indore, ITPI
- [27.] NS Pal. Problems of unauthorized colonies in Delhi and Strategy for Planning; Thesis report, ITPT, 1981