

# The Contemporary Suburban Growth of Haryana Cities

Ajay Kaushik, Associate Professor, State University of Performing and Visual Arts, Rohtak,  
ajayphd2014@gmail.com, ajay0703@rediffmail.com

**Abstract:** Last couple of decades, after the liberalisation of economy, the urbanization in Indian cities has taken place at a very large scale. India has witnessed the challenging urbanization. India is trying hard to meet the shortfall in the demand of housing and infrastructure for such an unprecedented growth. It seems that we are not future ready, at interpreted through quality and quantity shortfalls. Haryana is one of the fast growing states in India. With the vision of providing housing to all, as per national housing policy – 2007, the state of Haryana adopted policy to have housing development implemented on a wider platform. This has resulted in the tremendous rise of private residential development across all cities. This development has been unequal in terms of quantitative and qualitative aspects of development. The cities comprising National Capital Region have benefitted more than the cities and areas that are far flung. The kind of ribbon and selected growth has taken place in patches. This has mixed consequences or impact on environment. The positive results are not to be worried about but the negative impacts on the environment is definitely an issue that we should to stress our minds on. The recent development has taken place on the pockets that ensures quick marketability and high profitability. Developers have chosen land parcels, obviously on major roads and highways that are cheap. Despite the fact that the development takes place according to land use as per approved city development plans yet the resultant is a fragmented and segregated development of land that was once having a unified character of green field. The paper intends to bring out and focus on the negative impacts on land of such fragmented development on the city and environment. The land as a natural resource is subjected to such an/a (ab)use that there is an immediate need to look into the policy that has resulted in fragmented development which is not socially sustainable besides having adverse impact on some or the other aspects of the environment.

**Keywords** — *Haryana, Urbanisation, Urban Development, Fragmentation, Segregation, Environmental Impact,*

## I. INTRODUCTION

### 1.1 URBANIZATION TODAY

“Urbanization” can be generally referred to as a population growth due to increase in economic activity in an area. Senkhon considers urbanization as an increase in income, high lifestyle, easy access to superior quality services comparable to global standards [1]. According to Christopher Bryant “Urbanization is a dynamic set of processes, responding to changing values and perception of intrinsic characteristics of rural versus urban areas” [2]. Traditionally industrialization has been accredited as one of the major factor that leads to a spurt in economic activity and thereby culminating into spontaneous process of urbanization. It definitely has impact on all components of environment be it air, water, land, biodiversity, and overall urban environment is also impacted due to overcrowding leading to slum and squatters etc. land is first hand requirement for urbanization to take place. Therefore the primary natural resource that is first impacted is land. Later, after the urbanization has taken effect it impacts the air and water quality, loss of forest cover and wildlife, depletion in agricultural land as a result of urban sprawl ultimately pose

serious threats to the environment. However one cannot argue the need to maintain continuous growth pattern in any city. It means that the continuous growth is bound to consume the natural resources at a steady or rapid pace. The faster and unwise use of resources can leave us resource deficient in near future. In fact we are already facing shortages of many natural resources besides having severe impact on air and water quality in urban areas. But the growth story will continue. Therefore it is far more important for all of us to make wise and intelligent use of these resources so that they can last longer while maintaining a steady pace of economic growth. the major urban centers in India are four metros. Delhi is the biggest metro of the country. The urbanization here is reached to a level that it has now led to suburbanization. The next in hierarchy are medium and smaller cities (Tier II and Tier III towns) are now under urbanization and the resources of these towns are under threat of urbanization. In 1951 the level of urbanization in India was 17% whereas in 2011 it has been recorded as 31%. Simultaneously per capita availability of land has also decreased to 0.27Ha in 2007-08 and are as under non agricultural use has increased from 3.3% to 8.5% [3] This figure gives us an idea about

urbanization level prevailing currently in the country. These figures are going to increase further.

India is world's one of the most populous and prosperous democracy. Kadi has referred to UN report 2002 saying that India's population is growing at an average rate of 3% p.a [4]. With 1.2 billion of population it is one of the most vibrant and centers of economic growth stories. At times when developed countries have has tough times during recent recession period; India has been able to sail through the rough and bad phase of economic doldrums. India is one of the leading economies that is in league with Brazil Russia China and South Africa (BRICS nation) [5].

The migration from rural to urban is far more intense. The cities and metropolis of the country are expanding by leaps and bounds. India after the post liberalization of economy phase has got the high pace of urbanization as its by product.

The post 1990 phase of liberalization of economy saw FDI in many sector of economy. This has significant impact on India's urban growth. Today nearly 31.17% people live in urban areas. Level of urbanization can be visualized from the fact that nearly 2000 towns have been added during 2001-2011. Also the contribution of agriculture sector has reduced from 51.12% to 23.20% in 2001-2002. Whereas the service sector has grown from 11.41% to 61.77% during the same period [1]. Haryana is one of the fast growing states in country due to high level of private investment especially in urban development project. The paper analyses the development pattern in the cities of Haryana and brings out some impacts of fragmented development growth on land.

The natural increase, net rural-urban classification and rural-to-urban migration are components of urban population growth. During the year 2001-2011 the rural to urban migration has contributed significantly in the level of urbanization [6].

According to latest U.N. Report: 'State of World Population – 2007', (entitled 'Unleashing the Potential of Urban Growth'), referred by Khurana, nearly 29% of the Indian population lives in cities which is going to increase by 40.7 per cent by 2030. He emphasized on the need of a comprehensive national urban land policy Master plan are a tool by which the use of land is designated in order to achieve desired pattern of spatial and economic development [7].

## II. THE NCR REAL ESTATE

The liberalization policy of the govt. has enabled 100% FDI in real estate sector. This has led to a boom in the real estate and housing project in all major cities in India. The projects are highly dependent on global investment influenced with politico economic environment world wide. While talking of sustainable development the first and foremost principle that can be put to use is of compact development. Many authors have found the compact city comprising of high density, mixed use, with efficient public transport, neighbourhood development to promote walking.

The real estate sector saw extreme downturn in the 4th quarter of 2008 due to in seep of economic slowdown

worldwide. It witnessed its peak during first three quarters. Market speculation has raised the prices of property to highest level possible just prior to nosedive. Developers focused on the mid –higher segment of Indian real estate However they diversified their portfolio to middle class segment. It is understood that the Indian middle class form one fourth of total population forming a large consumer base with spending capacity and intention for better livable place [5].

The Gurgaon and Noida region of NCR have had premium segment vertical format projects due to high prices of land. As per report of CBRE – AMCHAM Initiative The 2010 India Real Estate Overview, more than 1 lac apartments alone were launched in the market in 2010 that targeted mid income consumers of Haryana, Delhi, UP and Punjab as investors. Most of these were in Greenfield outskirts of suburbs and catered to the low to mid housing sector. Affordable housing was a buzzword now [3].

Govt. of India has passed real estate regulatory bill 2013 which aims at protecting interest of consumers, promoting fair play in real estate transactions, ensuring timely execution of projects. It is one of the institutionalized efforts to check the growing menace of no delivery and mal practices prevailing in the real estate market. That leads to inefficient management of resources and lead to financial impact on consumers.

## III. METHODOLOGY

This is a study that has been based on literature review primarily. The cities of Haryana have been studied under different streams. Although not very much is available on planning aspects of the city, yet discussion addresses the same issue. The study of the cities in reference was conducted with specific case of researches accomplished by scholars. Author has been visiting the cities for quite some time. The study of master plans of the city was also referred to. professional planners were also discussed with this matter on Haryana cities. Analytical methods were not required for this kind of study. However, the section on issues has been discussed based on wider field visits conducted over a period of time. Author has resided/worked in these cities and closely witnessed the overall development pattern. Thus paper has been discussed majorly on the literature review and field visits.

## IV. HARYANA

Haryana being close to National capital comes under national capital region. The Haryana Sub- Region comprises of districts of Gurgaon, Faridabad, Mewat, Panipat, Rohtak, Rewari, Jhajjar, and Sonapat. Almost 50% of the total Delhi Metropolitan Area lies in Haryana sub region. The fragmented development is an integral phenomenon visible in the urban scape of many Indian cities.

### 4.1 DEVELOPMENT TODAY

The development in Haryana is taking place on the prospective road map of the New Urban Housing and Habitat Policy 2007 seeks to enhance the spotlight on 'habitat' with a 'Regional Planning approach' [8].

It deepens the role of Government as a 'facilitator' and 'regulator.' Moreover, the new Policy lays emphasis on earmarking of land for the EWS/LIG groups in new housing projects. It lays emphasis on Government retaining its role in social housing so that affordable housing is made available to EWS and LIG of the population. The housing and infrastructure projects development is taking place on a Public-Private Partnerships model. The economic liberalization after 1991 the Govt. of India has initiated development on privatization and globalization policies. The doors were opened for FDI in real estate sector as well and that has brought a big boom in the infrastructure, residential, commercial development

## 4.2 HARYANA TOWNS

### 4.2.1 ROHTAK AND ITS RECENT GROWTH

Rohtak is a town just 70 KM north west of Delhi. Delhi its closeness the rate of growth and development has been comparatively slow as compared to Gurgaon and Faridabad, on being declared as a municipal corporation in 2012 the actual development took place in the form of extension and expansion due to incorporation of eight urbanized villages in its jurisdiction [9]. In their paper Singh and Kumar have identified that the development trends from inner city to outer periphery leading to urban sprawl.

The urban environment is impacted due to lack of green cover and open spaces. They have also raised concern about the sustainability due to pace of urban transformation and emphasized on the equitable distribution of resources for a balanced spatial and territorial growth [9].

### 4.2.2 SONIPAT

Sonipat lies 40 km north of Delhi on NH -1. The recent spurt in development activity have affected the urban landscape of the city on the periphery closer of NH 1. Urban expansion has occurred very fast in the recent time after Gurgaon and Faridabad. The city landscape is expanding at a very rapid rate.

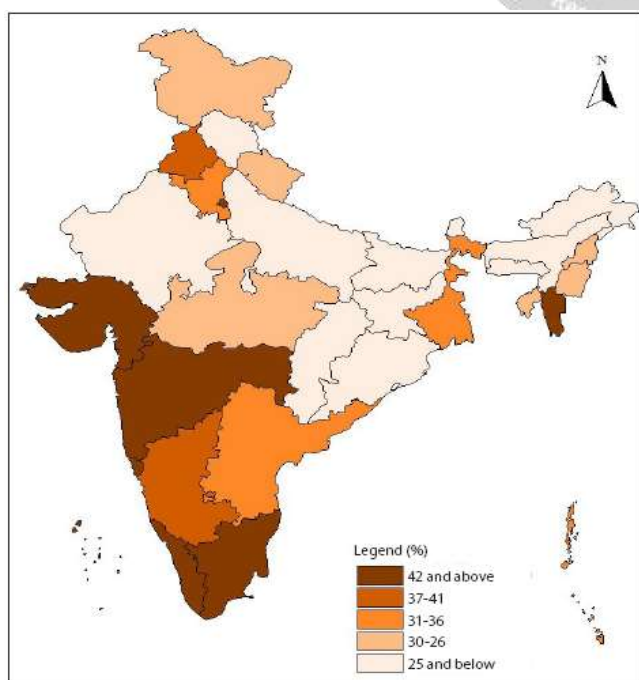


Figure 2.1 Emerging Pattern of Urbanization in India, (Source: Bhagat)

Present time development of industries, education institutions, tourism, hospitals, private residential builders and good road system has contributed the quick urban expansion and land use transformation in Sonipat city which influence sustainable use of land. Sandeep in his study has concluded that major part of agricultural land has been converted into residential, commercial and industrial sectors. At the same time he expresses his concern about the city sustainability in context of the extent and pace of urban transformation. For long term sustainability in mind he finds it important to put in place and efficient urban planning and administrative system for the monitoring and management of the city [10].

## V. ISSUES

Very imminent impact of urbanization on Land is on its erosion and degradation of Land Quality. Land is subjected to all kind of abuses in the process of construction activity. Right from the excavation till completion the polluted liquid and solid waste generated disbursed on [11]. The National land use policy has also identified the degradation of soils and land due to soil erosion as a severe problem in many regions in India. There is a problem of decline in soil fertility, alkalinity/salinity/acidity and water logging etc. due to soil degradation [12].

However, the paper focuses exclusively on the improper and inefficient use of land while urbanization. Some of the identified key issues pertaining to such a problems are:

### 5.1 LACK OF SERVICES

The large city developments are happening on the periphery and these are exerting pressure on land as well as other natural resources [13]. This development lack in basic amenities and services. Even the govt. after taking the EDC/IDC have not been able to put in place the basic infrastructure namely sewer, water, storm water drainage and roads, electricity. As these areas are far away from the city core very less attention is paid by the govt. agencies for provision of basic amenities and services as a result of which the projects which have been completed by developers are not habitable or on the pretext of absence of infrastructure on part of govt. developers are taking excuse for delay in completion of project on their part.

### 5.2 NON ACQUISITION OF LAND PARCEL IN BETWEEN.

There are many pockets of un acquired land either by govt. or by developers. The developers in many cases not been able to buy many pockets of land in lying within the precincts of their large site. These parcels of land portray many difficulties in overall development of the site. These are seen as an eyesore and out of p[lace pockets not in coherence with the development nearby. The land use of the said pocket may or may not be in line with the surroundings. Provision of access by govt. developers is also a bare necessity.

### 5.3 LEAVING THE ORIGINAL ACCESS PATH

It is customary and mandatory on part of architect and developers to leave the community path passing and leading through the fields the land use of which have been changed.

Once the development is complete these paths remain as it is which actually have no use and remain unattended.

#### 5.4 THE QUALITY OF OPEN SPACE

It has been observed with the study of site plans of many townships and during actual site visits that the open landscaped areas are of very irregular shapes and sizes. It is mandatory for a developer to meet the basic percentage of open space. The open space includes roads as well. The resulting shapes and sizes of usable green conclude that least priority is given to make these spaces actually usable. These are either too small or of triangular in shape that they can hardly be put to any good usage.

#### 5.5 SERVICES PASSING THROUGH THE SITE

Many times the developer encounters a peculiar problem of services passing through their site. All such services have to be maintained as it is and have to be regarded. These may be high voltage electrical line, under grid gas pipe line, any irrigation canal, etc. had the site been under govt. per view. The govt. deptt. could have indulged in consultation with each other and the usable portion of site could be maximized. But the services that pass through the site are a liability for them the implication is clearly reflected in the design of their township. As the land that fall under the services are simply unusable and left green of awkward shape and size.

#### 5.6 THE USAGE OF LAND ON THE EDGES

The townships are characterized by gates and fences or walls. There have been a lot of scholarly studies that highlight the social consequences of such gating and fencing. It has been concluded by many scholars that such intended separation results in social segregation. This is an example of spatial design resulting and having negative implication on social relation. The edges of the township so carved out are generally left unattended and the owner of land may happen to not put the land in any use.

It is noticed that recent development trends are along the high speed transport corridors [13]. Developers have specifically chosen the land parcels on these corridors in order to commercially exploit their geographical significance. It is pertinent to note that such transport corridors are away from the city core and land away from corridor is available at a cheaper price. But proximity to the highways justifies the high premium. The location has always been a catch and USP of any project.

The metropolitan cities are growth engines and simultaneously guzzlers of natural resources like land water energy etc. and exert extra pressure on natural environmental settings.

#### 5.7 LOW DENSITY URBAN SPRAWLS

The low density townships on the periphery have increased the dependency on motor vehicles. In absence of any efficient public transport residents are bound to rely on private transport. This not only increases number of vehicles on roads but also encourages extra fuel consumption. The need for car parking space in the township is becoming even more mandatory. The increased travel distance consumes more time (a resource) and fuel.

More no of private vehicles lead to congestion on road and loss of time and pollution [13].

#### 5.8 HIGH DEVELOPMENT COST

Since the developments take place on far away areas the resultant cost per acre is higher as compared to the land developed near city where the services and infrastructure can be tapped and no extra cost. Sprawls have never been advised against compact development pattern.

The development and expansion of cities are taking place in greenfields. The agricultural land is being purchased by developers as easy land resource for development of project. Most of the time the infrastructure to be implemented by the govt. is unexpectedly delayed beyond all time limits.

#### 5.9 LOSS OF AGRICULTURAL PRODUCTION

It is well understood but least talked about while talking of urban development. The basic resource required for allowing development to take place is land. As the land within the city is beyond comprehension, in order to bring the overall cost of low the land on out skirts seems only feasible and cheap options available with the developers. This results in loss of annual agricultural production. On average thousands of acres of land is engulfed in rapid pace of urbanization. This issue is never comprehended in right perspective as to how much of agricultural land should be allowed annually. The market ultimately controls the dynamics of conversion of agricultural land into residential or any other use. Many times a farmer has done away with his land the projects do not even take off for many years. This is a gross wastage of land resource though the land use has changed but other use has not been put into place.



Figure 3.1 Site plan Omaxe city, Rohtak



Figure 3.2 Site plan Omaxe city, Sonipat  
Source www.omaxe.com

## VI. IMMINENT SOLUTION – AN ANALYSIS

Chadchan & Shankar have very well drawn comparison between three main concepts/theories of sustainable development namely smart growth, new urbanism, and compact city. The main characteristics of sustainable development that is being promoted by all theories are compactness, mixed use, pedestrian and bicycle movement, more emphasis on public transport, compact spatial building design, affordable housing, sense of place, preserving farmland, etc. these all aspects in conservation of natural resource and built environment [13].

Garde has very well enumerated the benefits with regards to environment ecology and social aspects of built environment. The intelligent use of principles of New Urbanism (NU) results in efficient use of land as a resource thus preserving the environment and ecologically sensitive neighbourhood, districts and region. Ajay in his study he has suggested that NU is being promoted by designers and developers at the same time endorsed by officials to achieve sustainable growth of our environment [14].

Lesley Pories [15] in his paper titled “Sustainable Development zones: India’s New Urbanism” has coined the theory advocated by Jaigopal G. Rao’s in Kerala context as India’s NU: as sustainable development zones. He refers to Jaigopal’s concept of SDZ which are inspired from NU principles and promote compact development with walkable neighbourhood, mixed use – high density urban centers and low dense periphery. During the last 15 years the concept of SEZ was floated but not all of them have been established. SEZ was a phenomenon that has not excelled all across India. There are 356 notified SEZs in India [16]. Some of them have been executed and are working fine. These development were based not the economic activity as a gravitational force around which other activities and amenities were planned it encompassed educational, recreational, residential etc. the SDZ as suggested by Jaigopal had a conical structure of development with highly dense city centre and diminishing density towards the periphery on a land chunk of 30-50 acres. The concept is

similar to the traditional neighbourhood development concept as suggested by Peter Calthorpe. It served the population of 12000 persons with a floating population of another 3000. i.e. 240-400 ppa density

Recently the govt. has announced to establish 100 smart cities. Our concern should be that we should equally try to make over existing built environment equally smart and compact in order to have equitable distribution and consumption of natural resources. Ashok Kumar has concluded in his research paper titled the inverted compact city of Delhi that the concept of compact city is not merely about achieving high density but also the quality of life the residents are able to get while being a part of it. He also argues in coherence with the NU principle that the compact city has to be affordable before being sustainable [17]. Hence the compact city is one of the best solutions for impactful and sustainable environment in a city. This kind of environment will have cost effective answers to infrastructure solutions. The quality of space is also an issue to be addressed upon.

## VII. CONCLUSION

As the fourth principle in National Land Utilization Policy 2013 Govt. has laid stress on efficient utilization of resources and mitigation of impact it has said that there is a need for “Long-term planning for optimum utilization of land and saving scarce land resource is essential and as far as possible, projects should be set up on recycled lands, wastelands, degraded lands or un-irrigated lands provided these are not performing any other important function like bio-diversity, water resources etc” (Draft National Land Utilization Policy, 2013)

There is a need for a policy framework to be formulated at the national level incorporating concerns of various sectors and stakeholders so as to ensure optimal utilization of land resource through appropriate land use planning and management.

Such a policy should provide guiding framework for the States to adopt and formulate their own policies incorporating their State specific concerns. The States should develop land use policies by consulting all stakeholders and ensuring appropriate legal backing. Further, detailed land use strategies and plans should be developed in accordance with these policies so as to achieve sustainable development.

### AT A MICRO LEVEL

The development should take place after all the land has been consolidated and put to use. The services passing through the site need to be realigned readjusted after close coordination with all departments so that land wastages can be avoided. This would help in enabling appropriate size and shapes of the open spaces that can be put to better usages.

The infrastructure and services needs to be put in place prior to development option given to its citizens. The planning documents should also address the issues of vacant land within the core of city that is not put to any use prior to putting up the expansion plan. This will lead to a contiguous expansion of city on inwards –outwards. This can check the

high development cost of land as well. Gross wastage of land due to any kind of long pending litigations leave the land unused to years. Such areas are uncared for and also become targeted land parcels for unsocial use and exploitation.

The planning may be done from core to outwards so that we have exhausted all possibilities and opportunities of expansion within city core. The density may also be increased due to high land cost. The sprawls should be controlled as it involves high infrastructure cost and the dependency on use of private vehicle also increases.

The urban sprawls need not be raised. The new development should be addressed with the New Urbanism principals with walkable neighbourhoods and high density. At the same time the transport network and connectivity between the city and the sprawls i.e. the suburbs should also be improved. The design of an efficient urban transport network should reflect the foresightedness of many decades in advance. So that the infrastructural cost can be checked and it can prompt the users of the expanded suburbs to shift base from congested city core. This can help reduce burden on the core infrastructure and can justify the need of setting up of expanding city in its suburbs. The exploitation of land and acquisition process will also be justified if the actual demand is assessed scientifically. The unused and unfinished projects in the NCR region are the testimony of gross failure of actual demand of developed spaces out of city-skirts. The inflated demand led to the real estate rush and unfinished projects, besides other factors influential in the process of real estate development.

Thus in conclusion one can say that the judicious demand of developed land can address all the issue as mentioned above.

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