Territorial Integration : An Approach to address Urbanising Villages in the Planning for Delhi Metropolitan Area, India

The rural-urban interface is the most dynamic spatial feature of any mega city. The transition that the interface offers due to urbanisation is as much an impact as it results in growth. Urbanisation results in transformation of land use, environment and culture of communities, specifically, in the interface, and thereby, altering the city-region's ecology. The interface is the territory of urbanising villages with different intensities and different scales of urbanisation. The process leads to the formation of 'urban villages', which, unlike the western realities, often turns into slums.

The present paper will try to investigate the rural-urban fringe characteristics in the National Capital Territory of Delhi and also identify the causes of changes and their impacts on the urbanising villages. The author takes into account the structural changes as well as socio-cultural changes that occur due to urbanisation. Development must be compatible with the culture and needs of a community within a region. Planning without the considerations of both the metamorphosis of the village and livelihood of its villagers will lead to an unbalanced and unsustainable process of development.

The paper will try to identify the definition of rural-urban interface, the territorial characteristics of Delhi's interface and finally, the drawbacks and necessities of planning of the city-region.

Rural Urban Interface: the Fringe

Commonly known as rural-urban fringe or peri-urban, the rural-urban interface is the territory in transition, spatially located on the urban periphery. Ramachandran (1989) defines rural-urban fringe as

> 'the area of mixed rural and urban populations and land-uses, which begins at the point where agricultural land-uses appear near the city and extends up to the point where villages have distinct urban land uses or where some persons, at least, from village community *commute* to the city daily for work or other purposes (Ramachandran, 1989, p297).

McGee (1991) uses the term desakota (*desa* means rural or village and *kota* refers to city or town, in Malay). He claims that in Asian context, where the concept of the traditional settlement pattern evolves, distinguishing urban and rural areas are not valid, given the emergence of high growth rural areas close to cities and along highway corridors. These areas are composed of highly productive, but mainly small holding agriculture with participation in non-agricultural occupations and high spatial interaction of economic activities. Peri-urban areas, within the desakota region, are closest to the cities and this trend is enhanced by the possibility of daily commuting to work.

There are a few characteristics that we need to understand here: there is land area of the city where no rural uses exist (irrespective of the administrative limitations), and then there is a point or line, where, this land area ceases and partial rural uses show up. It is at this point the 'interface' begins. This is the closer limit to the city and extends till the area where most of the land is under rural use. The interface contains the inner fringe and beyond (periphery). But nevertheless, it is a surface of duality of rural and urban and needs spatial attentions as an 'interface' in planning and not as just rural or just urban. It is much more than just an area of 'mixed land use' which most of the planning authorities designate to the interface. They are distinctive parts of the urban region with particular characteristics and particular problems.

Rural-Urban Interface of Delhi

In a functional sense, the rural-urban fringe of Delhi extends beyond the borders with the neighboring states of Haryana and Uttar Pradesh. This is mainly because Delhi is the most important business centre in the northern part of the country. The National Capital Region (NCR) consists of the capital city and important city centers from the neighboring states. Though recognized by authorities, NCR play conflicting role due to the presence of multi-level as well as multi-state government, raising contradictory issues of interest. The City-State has a rural-urban fringe of its own that is fast diminishing and deteriorating in nature. If not intervened appropriately may lead to the overall deterioration of the NCT, Delhi.

*Urbanisation and Shrinking Rural Land*

No other city in India has grown so phenomenally as Delhi in the recent past. Being the capital of the country and also the biggest business centre of Northern India, Delhi attracts a large number of persons from all over India in search of employment and better opportunities. By 2001, the population had soared to 13.8 millions covering 1.3% of the country's total population. The density of Delhi (9,294 persons per sq. km.) is also the highest among all Sates and Union Territories. Its population sharply rose by 46.31% in the decade 1991-2001 (www.censusindia.net). Out of 1483 sq. km., Delhi has an urban area of 926.83 sq.kms. which is 62% of the total area. The fast growth of the city is resulting in rapid decrease in the rural areas. The following table shows the decadal fall in the rural area in the NCT of Delhi.

Table 1: Shrinking Rural Land

Year	Urban Area (sq.km)	Percentage of Urban Area	Decadal Decrease in Rural Area (sq.km)
1961	361.34	22	-
1971	446.30	30	84.96
1981	591.91	40	147.61
1991	685.34	46	93.43
2000	926.83	62	241.49

Source : Census of India, 1971, 1991. Delhi Statistical Handbook, 2000.

Figure 1: Dynamic Urban Growth
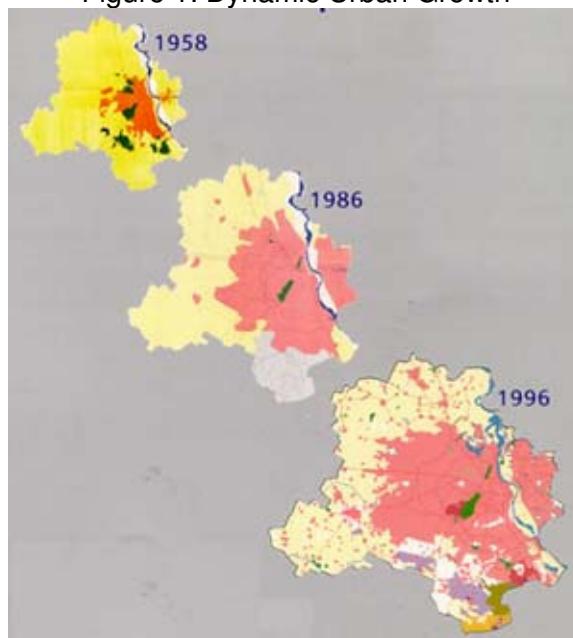
Source : The Energy and Resource Institute, Delhi, 2001.

During 1971-81, 27 villages were incorporated within the city. 1971, the demand for land experienced a substantial increase with the spurt of industrial development. The number of villages, which was 258 in 1971, reduced to 209 by 1991. Between 1971 and 2001, 56 villages were given the status of Census Town, leaving just 165 existing villages within the NCT of Delhi.

Peripheralisation and Centrifugal Pattern of Growth

Kumar (2000) called Delhi and inverted compact city due to its higher gross density in the outer areas than in the inner areas. This centrifugal pattern of population growth was evident since the decade 1981-1991, during which the growth was faster in the rural hinterland or the fringe of the NCT Delhi than in the urban agglomeration proper (9.6 % per year against 3.8% per year respectively according to 1991 census analysis). The natural growth rates during the same period were 2.5% annually in rural areas and 2.1 % in urban areas. Population densities remained significantly lower in the rural zones than in the urban agglomeration (17 persons per hectare in rural areas as against 138 in urban areas in 1991). While the former covered 54% of the total area of the NCT Delhi at that time, it only accommodated 10% of its total population.

For the first time higher residential densities were not recorded anymore, during the 1991-2001 period, in the old city core, but in two north-eastern (peripheral) sub-division or *tehsils* : Shahdara (422 persons per hectare) and Seemapuri (402 persons per hectare), while in Old Delhi and its adjoining neighborhoods densities were lower than 350 persons per hectare (Dupont, 2000). This peripheralisation took place in search for less congestion and financially more affordable localities.
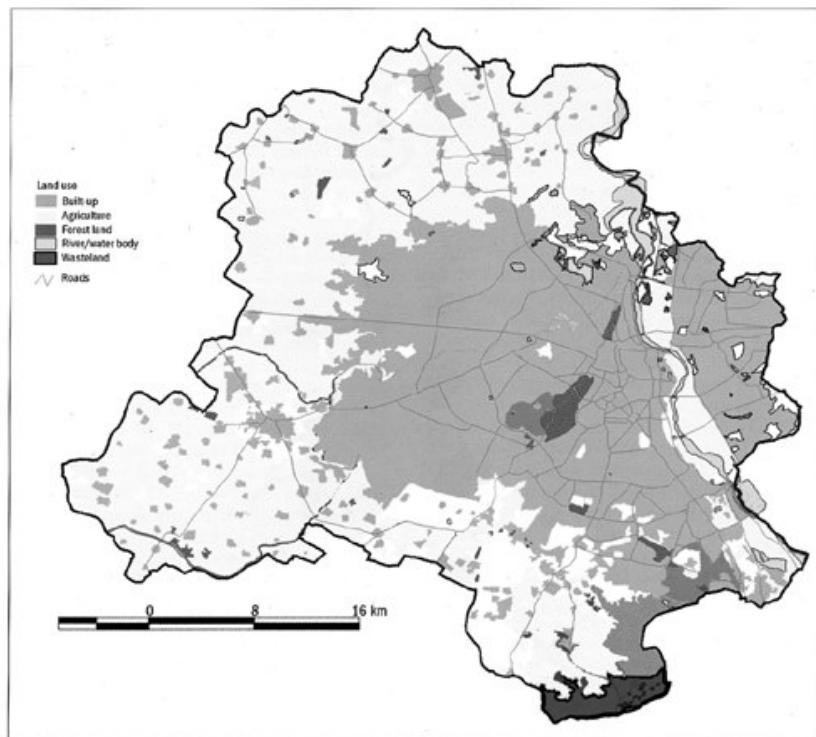
Source : TERI, 2000.

Dynamic Urbanising Villages

An urban village could be defined as a village that has acquired urban character by virtue of reduction in its agricultural base by the process of acquisition of land holdings for public

purpose or by its transformation into residential or industrial colonies. Many villages, located along the major transport corridors, are in a transitional stage. Villages that are part of the proposed urban extension area or fall within the existing urban area, also faces the threat of loosing their character or identity due to the market forces. The urban villages of Delhi exhibit a different kind of character. They carry 5-6 times more the population density than the non-village areas and caters for mixed land use, with residential, commercial and also, industrial (small or household industries), based on the demands of the surrounding localities.

> "Unfortunately, the urban villages suffer from a lack of infrastructure such as sewerage, water, power supply - due to non development of infrastructure within these areas. The acuteness of the situation is magnified by the high population densities, and leads to horrible living conditions during periods of seasonal stress as in high summer or heavy rains." (Hindustan Times, 24 May, 2003, hindustantimes.com)

The total number of villages in rural Delhi in 2001 was 165, down from 304 in 1951, 243 in 1971 and 201 in 1991 (Census of India 1951, 1971, 1991 and 2001). The city's urban influence is moving towards the northern and western sides, the area that encompasses the largest rural area with the NCT. Alipur, kanjhawala and Najafgarh Blocks still encompass a considerable rural area of respectively 52, 39 and 65 'rural' villages respectively (Census of India, 1991). Mehrauli has only 22 villages left, while Shahadra contains only 23 villages due to the physical constraint of the boundary with the neighboring city of Gaziabad. Socio-cultural practices, language, food and traditions have homogeneity across the western fringe of NCT of Delhi. The original population, mostly belonging to the Jat community, owes its tradition to the state of Haryana. This population is commonly acknowledged as the farmer's community in India. With the migration population coming in, the region is getting influenced by the cosmopolitan nature of the main city.

Two of the major concerns for Delhi's growing urbanisation are Agricultural land loss and Ground Water shortage.

Table : Loss of landmass suitable for cultivation due to urban expansion in NCT of Delhi (area in hectares)

Year	Very good for cultivation	Good for cultivation	Unsuitable for cultivation
1969-1975	5397.8	25.00	1199.5
1976-1985	17992.7	299.90	4398.2
1986-1994	55077.7	549.89	6097.5

Source : Khanna et. al. (1999)

The west fringe of Delhi, which is the remaining agricultural area of the capital, is also declared as the water crisis zone by the Ground Water Department of the city. The ground water in some parts of this zone has gone down 9 mts below surface level to 19-20 mts. It is regarded as one of the major impacts of fast conversion of agricultural areas to built-up due to urbanisation.

The transformation of rural to urban areas is common among the fringe villages. The villages in the rural-urban interface can be put under three main phases of transformation (Misra and Singh, 1996):

- Pre-transition stage: where the village is close to urban extension areas and gradually starts changing character.
- Transition stage: where the village comes under the urban extension area and is characterised by very high sub-division outside *laldora* (the legal line dividing built-up and agricultural lane uses in a village) and as a result the agriculture domain diminishes, population increases with many urban and rural immigrants and the land values start showing increasing trend.
- Post-transition stage: where the villages in close proximity to surrounding planned development gets transformed and almost becomes part and parcel of urban areas with increasing inter dependencies on each other.

Urbanising Villages: A Socio-cultural and functional Territory

The spatial widespread of the city of Delhi has cast its shadow on the villages that are located on the fringe and the rural hinterland. These villages experience a rural-urban dichotomy, physical as well as cultural, through the stages of their transformation. Villages that are located on any major transportation corridors (highways) or well connected to them, have more chances of becoming urbanised at a faster rate than those which are away from it.

Chhawala and Kanjhawala are two of the urbanising villages as studied by the author. Briefly, Chhawala village is in the middle stage of its transformation, according to the model discussed in Chapter 2. The village, undergoing both land use and occupation change, still owns a substantial part of the agricultural land. Large chunks of land have already been acquired. But major development has taken place by private developers through illegal process resulting in unauthorised colonies. It has a population of 9047 persons and covers an administrative area of 7.05 sq.km. It is a large village with mainstream cultivation pattern. Traditionally, its farmers cultivated staple crops (wheat, fodder and more recently rice). About 40% of the land is already sold by farmers and is used for urban purposes. As an occupation, agriculture is rapidly losing importance here. Land parcels located on the main road land are in demand for farmhouses. Kanjhawala Village is catering for the service industries. This village was declared a census town in 1991. It lies along the busy Rohtak Road which increases its potential for urban uses. Kanjhawala has reached the last few stages of transition. More than half of its agricultural land is sold to outsiders. Only on the west, near Ladpur village, the land is still used for agriculture. At the eastern side, towards the main city and Rohini housing colony, agriculture has virtually disappeared to make way for unauthorised colonies. The degree of planned residential areas is still low as land is lying vacant and has been plotted for future construction, some in anticipation of higher land prices. Unauthorised structures have boomed, mainly on the highway corridor. Irrigation problems due to the lack of availability of water is one of the main reasons for farmers shifting to other occupations like auto-servicing, truck-driving etc. that requires less skill.
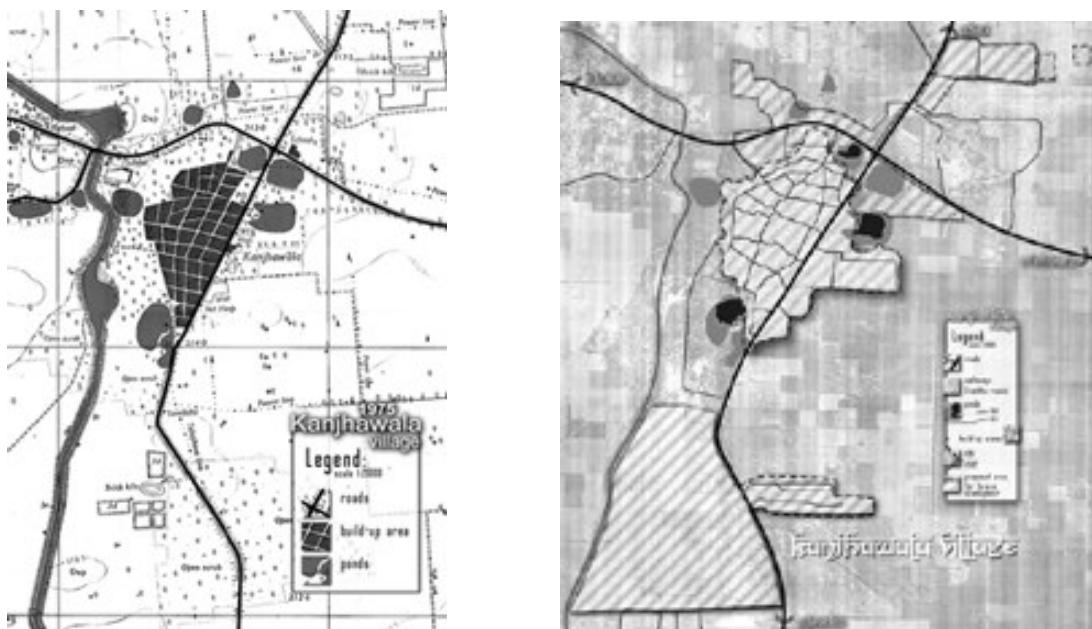
Source : Delhi Development Authority, Delhi

Understanding Cultural Embedding through Territoriality in Traditional Societies

In simple terms, territoriality is a socio-spatial concept that emphasizes human interaction with natural and socio-economic systems on a geographical space (place). As Vartiainen (1987) explains that the relation of nature to man is the basis for territoriality of a society or region. For instance, the protection of natural resources and the minimization of waste are dependent upon the substitution of physical movement (e.g. intensity of work-home mobility) by other forms of interaction (e.g. location or distance of work from home) (Vartiainen, 1987). This space-place approach of territoriality is thus inherently cultural and hence, can become an integral part of the sustainability issue.

Hansson and Wackernagel (1999) through their approach of territorial integration, described that the drive from Gemeinschaft (community or culture based) to Gesellschaft (city or economic activities based), which has contributed majorly to modernity, can be taken as an example of a concept of disembedding or discontextualisation of society from nature. In gemeinschaft societies human exchange and sharing is characterised as reciprocity and is dependent on the context where place and people both are involved. Whereas, in 'gesellschaft economy', people perceive themselves as separated and human exchange is not determined by natural context or community goals.

The process of disembedding results in diminishing attention to feedback signals from the local ecosystem. Traditional people live in reciprocal relationships, both with each other and with their surroundings. Reciprocal relationships are based on the criteria that whatever is given would come back to them and their offspring, in one way or the other. It reinforces and enriches a healthy relationship among all people and the environment in a local context (Marten, 2000). Through modernisation, previously important relationships between populations and local ecosystems are losing their significance and local lifestyles are becoming less adapted to the existing context, e.g. soil characteristics, climate and culture.

People living in cities show this disembeddedness process. Many urban inhabitants live their lives without having any knowledge or interest in how their food or other necessary commodities are produced. They are ignorant of the limited land that is available. Hansson and Wackernagel (1999) draw attention to the process of discontextualisation and claims that neo-classic economic theories could be seen as a result of this process. These theories have been formulated by city dwellers, in full conformity with their everyday experience of commodities flowing into town.

from sustainability to survivality

In traditional communities like Chhawala or Kanjhawala, land was the main element that bonded the traditional joint family as well as the villagers. Everyone could relate to land and the labour required for cultivation and production. Till the time civic association or management committee like Village *Panchayat* was active, the agricultural fields existed as partners to the original villagers. As most of the daily requirements were met in the village, the households were concerned of managing the resources in optimal manner. It was not only supporting their daily life, but was also considered as the partner that would look after their grandchildren too. Thus, the households were also concerned members of the village community. They were aware of any developmental work that was taking place in the village and were also aware of its impact on their rural life. This made them act and decide collectively for the village in many cases. The sense of belonging to the village was stronger through their common livelihood, status and goal to manage resources that would sustain and support for a long term. With Panchayat getting adjourned and land transactions taking place, the sign of getting urbanised is strong and obvious. Here, the disassociation within the rural community begins. The weekly exchanges among families within the village and also with the nearby villages disappeared. The socially sustainable village became more dependent on the city for its daily life and acquired new aspirations for wealth.

The disembedding starts with the breaking down of traditional joint family structure and are evident among generations. The younger generations no longer take part in agricultural activity. For them the city offers a far better opportunity than their village with agriculture and dairy production. The perception is stronger with the fast accumulation of money from land transactions, which in most of the cases has not been invested wisely. It has also resulted in division of status among the original villagers. With splitting of joint families and with emerging plural cultures among the residents, the sense of belonging is slowly declining. No more collective act or decisions are pursued by the original villagers. For example, ponds within the *abadi* are getting encroached and becoming dumping sites. Management of these ponds can help in regenerating the water table, one of the main problems faced by the villagers. But the villagers do not show any interest in any such management work. Eventually the Government has put boundary around the ponds and restricted their use. But interestingly, in-migrants, if required, act collectively through their residence committee. It was evident in the way they acquired water connections in the unauthorised colony. The disassociation is occurring not only between households, through emerging economic differences, but also among generations of original households. But with emerging plural societies, disassociation is strongest. It shows up mainly in two ways: One group is disillusioned with the urban expansion and the village transition. With urbanisation they foresee opportunities and the eventual status of the village depends on the city expansion. For this group, it is the city expansion and complete urbanisation of the village that will be beneficial to most. Whereas, for the other group the urban future does not hold promising as they are going to lose their age-old profession, and in the process, their partner - agricultural land and also, the livestock.

Land use changes occur very rapidly, once land transactions occur. The change is mainly with the agricultural land that is converting to built-up or empty uses. The important point to be noted here is these conversion forces cause a greater effect by covering larger area of agricultural land loss than the figures that are generally indicated. 'It is estimated that for each hectare of land actually transferred into an urban related land use, almost 2 ha of additional land is lost for agricultural use' (Fazal, 2001, p12). In these villages, inefficiency in the use of land is high through large area under empty use (vacant land and farmhouses). Here, Blaikie and Brookfield's socio-economic definition of land degradation can be mentioned as 'the reduction in capability of land to satisfy a particular use' (Blaikie and Brookfield, 1987, p6). The deterioration of land in the urbanising village is not obvious through built-up increase as it is concentrated at the *abadi* (the settlement area) and near it. It

is the socio-economic degradation that takes place through large areas of land kept unused for long period. Farmhouses are operational where the functional efficiency of the land does not confirm to agricultural use, although it is categorised under it. The land areas, ranging from 0.2 ha to 2 ha and owned by higher income groups, are underused for a long period. They restrict cultivation by the original farmers due to ownership change. If used efficiently, these lands can provide employment to many in a village with ever increasing population of unemployed. With respect to the functional use of land, more than degradation of physical qualities like soil, vegetation or water, it is this social degradation of land that needs immediate attention. The vacant land and land under 'empty uses', thus can be considered a good practice from environmental point of view, as it remains green areas and can help in water recharging for the area and absorb CO_2. But the question arises: Is the 'real' existing use of land significant for village sustainability? The vacant or empty land remains unproductive and inefficient for a long time and hence, can be categorised under culturable waste (and not under agriculture). These lands have the potential, if tapped and used efficiently. But currently, their subsisting use is adding up considerably to the social problem of unemployment and land-loss in Chhawala.

from green livelihood to search for livelihood

As urbanisation increases, the livelihood becomes predominantly non-agriculture. But in the transition period the change is concentrated between non-agriculture and dual livelihood, where mostly the in-migrants belong to the former and original villagers to the later.

In-migrants take up any kind of livelihood, formal or informal. They are ready to take the risk with any kind of livelihood mainly because their settling in the village is temporary. They always have their original village to go back to or move to a new one, if the present livelihood becomes inefficient or if they do not benefit by living in Chhawala.

The most effected, due to livelihood change, are the population of unemployed group. It mostly covers younger generations and elder generations, in both genders from the original households. It has generated a kind of unconscious competition among the original villagers and in-migrants for the limited jobs available in and around the village. But higher literacy among the in-migrants supports their higher employed population. Also, the in-migrants are not hesitant of doing low profile jobs unlike original villagers, specifically the younger generation. Low employment among women is part of their cultural preferences, giving rise to dependency ratio. Scarcity of job in the fields after change in land ownership and holding size, adds to the high unemployed population.

When they sell their land, the villagers invest in local property for rent and for shops or other small businesses. For enterprising villagers, the new livelihood can benefit more than the previous agriculture. With transition and urbanisation, the options increase. Even government jobs are available for the better educated ones. With better accessibility, urbanisation has brought in better information, opportunities and awareness. But at the present stage, the non enterprising or with limited skills are falling back in the race of survival. Unemployment is rising. Although, this can be seen as a temporary social status, the situation can also lead to a social insecurity, if not intervened. Land transactions raise the income level temporarily and

are moderately influencing with respect to increase in income. This has generated a disinterest among the original villagers from further land sells. Farmers benefiting from the transactions still own agricultural land, in a few cases. This is for speculation during the most rapid period of transition, to obtain maximum profit.

Livelihood is bound to change as urbanisation is inevitable in the fringe villages. Continuing with agriculture can be seen as an outcome of the villagers' failure in new ventures. It is the choice made not by interest but by compromise due to lack of entrepreneurship and limited skill. The interest remains as long as the village is in the outer-fringe. But the compromise comes up as a result of urban expansion. It is the sign that the eventual conversion of agricultural land, in the matter of a decade, is inevitable. Low profile, daily waged jobs are more insecure than farming. Agriculture is like a 'gamble' livelihood as it depends on so many external 'uncertain' factors like water availability, weather etc. It is not a formal sector and does not provide any health-care benefits or pension. The elder generation villagers continue with agriculture in order to keep their future better off than having no livelihood. In older age, when unable to attend their businesses or provide hard labour, they can rent out their land to tenant farmers to get some economic return. This return is significantly lower than the pension money one gets in formal sector.

from concerns to responses

The overall urban growth of the city is so high that it becomes problematic for the city authority to keep up with the development in the urban fringe. Also, price offered by the dealers are significantly higher than that offered by the Government. Even slight clue for any kind of 'development work for public purpose' (that will require land acquisition by government) gives rise to spontaneous transactions and unplanned growth. With the construction of Government's planned housing complex or institution a number of unauthorised colonies mushroom up in villages that are at closer proximity or well connected to it. The main infrastructure that is provided

Dealers vs Govt. Rates

to the village is on the basis of the original population and is already under pressure of population increase. The congestion within the *abadi* is high putting pressure on the household's physical infrastructure. The lack in provision of facilities can also be contributed to the conflict among different authorities in power. The trend of transition and increase in congestion are evidences towards the ultimate transformation of urbanising villages to urban villages, unless intervened. Delhi's planning authority ignores the very transition process of
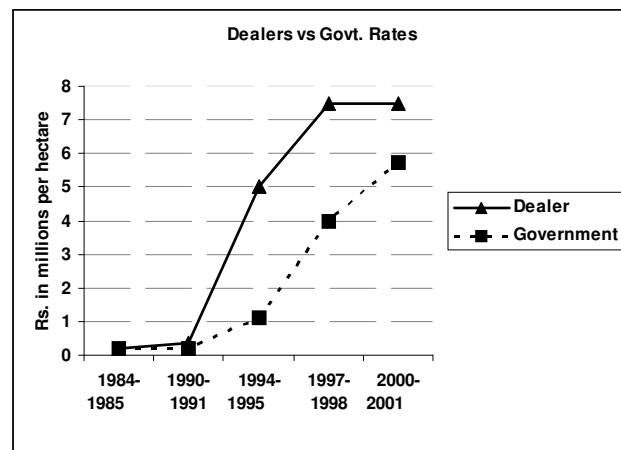
the 'urbanising villages' in the fringe and ends up with another 'urban village' within the urban expansion. The urbanising villages of 1970s are at present intensely commercialised, high density settlements beyond the reach of the building bye laws. For e.g. Jia Sarai and Kotla Mubarakpur are two urban villages functioning as service provider to IIT Delhi and Defence Colony, two of the important institutional and residential places of the city, whereas Munirka and Hauz Khas villages are now specialised as furniture and dress material markets for the city. They not only stimulate unplanned and uncontrolled growth and congestion, but also lead to high increase in built-up, pressuring the existing infrastructure and facilities. This results in high consumption of resources, disturbs the hydrology of the region, creates pollution and social insecurity.
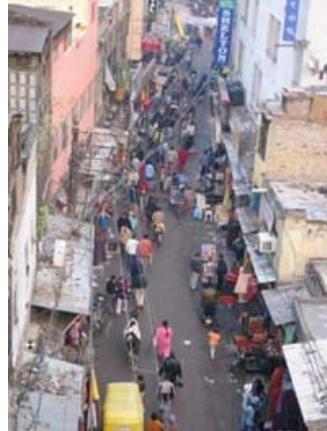
The urban villages come up as specialised market serving the nearest section of the city. But this market is determined by the characteristics of the initial as well as at the highest growth period of transition of the urbanising villages. Hence, understanding the process is of foremost importance in order to recognise the village's potential of growth in future. Poor intervention and ineffective control at this stage leads to an immensely complicated situation where 'urban villages' are categorised as slums of the city.

Urbanising villages cater to lower and middle income groups in the dense *abadi* and unauthorised colonies. The farmhouses belong to the higher income groups. But as per the practice of the farmhouse owners, the speculation is profit motivated. The profit is high especially when all the agricultural land is transacted for urban use. The irony is that the Government does not have strong influence in the change of land use that takes place. Legal restrictions are largely violated as in the case of unauthorised colonies. It may also involve the local politician and *Patwari*. The villagers do not prefer government's intervention. For them, government's intervention means they lose freedom to chose the time for transaction, as in when to sell the land. It also restricts their decision on the land area to sell. Once Government wants a particular land area, villagers can hardly protest. This may lead to judiciary conflicts and harassments. Whereas, property dealers keep the land price relatively higher even when the government keeps it down. Apart from the villagers own responses towards land transaction, property dealers are the main influencing actors here in land dealings, and later to decide on tentative use of the land. These dealers make maximum profit from the land dealings and keep the local authorities, related to land, in tow by giving them a share of the overall profit.

Even if agricultural land gets converted, the overall agricultural sector of the city does not get majorly affected. This is mainly because the city's food supply is met entirely from outside NCT boundary. This is also one of the reasons that the planning authorities are ignorant about the large agricultural land loss through built-up. But for an individual village, the land conversion effects the household's consumption of the village. The marginal land holdings

provide for the household's demand of food. But with land sales and smaller land holding size, even this in-house demand needs to be fulfilled from the market. The market prices being higher for the same products, it calls for an extra purchasing power for these lower and middle income households.

Planning Responses for NCT - Interface Region

Delhi Development Authority (DDA) has played an enormous role in the urban spread of the capital. Acquisition of agricultural land took place at large scale by DDA to set aside a reserve or 'land bank' mainly for the implementation of various housing and development programs in future. Delhi Metropolitan Area (DMA) comprises of the NCT and a few fast growing urban settlements like Gaziabad, Faridabad, Gurgaon, Bahadurgarh, Kundli. These are located in the adjacent States. DMA is not an administrative boundary but just a planning area boundary. Hence, the framework of DMA hardly plays a role, in reality. The planning authorities in the neighboring states bargain with the Delhi Government on the basis of their own interests. They have their own state level policies for industrialisation and housing. In a way, these neighboring authorities are competing with Delhi for tax-revenues and employment benefits.

Master Plan of Delhi for 2021 acknowledges the problems of planning within the limitations of administrative boundaries and shows its concern for the environmental problems. But it fails to regard agricultural land as limited natural resources which require attention for conservation. The plan rather aims towards consuming more agricultural land from the fringe villages in order to cater for the city needs for residential or other urban uses. Although the plan aims for a better land market process in the city in order to prevent encroachments and illegal transactions, objectives like participation by villagers and village development plans are absent in the Master Plan 2021 draft recommendations. Also, the change in livelihood and unemployment as a result of inefficient use of agricultural land are not recognised at all in the planning policies. The duality in livelihood is also not given due acknowledgement for development of these areas and long term sustainability.

Also, lack of cooperation among the multi-level governance is creating more conflicts. The status of Delhi as the capital of India has led to a complex structure of municipal administration. The National Capital Territory (NCT) includes areas administered in conjunction by the Govt. of Delhi and three Municipal corporations. These are Municipal Corporation of Delhi (MCD), New Delhi Municipal Committee (NDMC) and Cantonment Board. The MCD administers the largest area, including all rural areas within the NCT. In case of urban villages, after the annexation of the village, the Panchayat (Village Committee) ceases to exist and comes under the jurisdiction of MCD.

The ignorance of planning authorities towards the rural-urban interface for sustaining the traditional cultures and thereby, conserving the last pieces of agricultural land is sign enough for the city's deterioration in future. The territorial planning approach, the local actors, their culture and their space of living (community) are important to consider for their sustainability in the long-term and for planning of the city-region. Cultural plurality and actions of local actors determines the course of future of rural-urban interface. A meaningful intervention could be achieved through recognising its territorial identity.

Absence of area planning approach

There is no department within DDA or MCD that is responsible for village development plans. As a result of which adhoc decisions are made resulting in encroachments and haphazard growth. Delhi's rural land is utilised as property for housing supply and for resources for food, livelihood and rich ecology. Planning policies draw policies for villages cetres as locations for health facilities, markets, rural industrial area. In the absence of a detailed

village development plan, the acquired village land is often gets alloted to less desirable uses or get encroached upon. But the most important issues is the lack of planning for the development priorities. Multiplicity of agencies involved in the development work and absence of development plan for the village creates a huge gap between priorities for development and intentions of planned development.

The Rural Development Board, created by Delhi Government, proposed the rural areas under 'special zone' for planning. But their planning proposals finally needs approval from DDA and the conflict in interest of these bodies ultimately delays finalisation as well as implementation of plans. The mini master plans, as they are called, is proposed for the agricultural land (acquired by DDA) around the main abadi. The process which ultimately give birth to another 'urban village'.
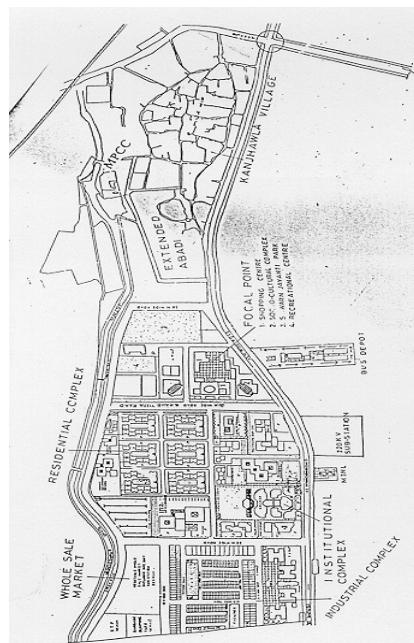
Source: Land and Building, Govt of Delhi, 1999.

An Approach towards Sustainability in Dynamic Territories

Pattern of population distribution and growth in a city is related to a number of factors: patterns of land use, the availability and price of land or residential property, and the accessibility of employment opportunities and urban services. If the centripetal force of the past spatial growth and distribution were explained by the last factors, the actual centrifugal tendency is associated with the scarcity of land for new residential constructions and its consequent appreciating value in central areas. The less congested peripheral zones provide more affordable housing possibilities, as well as more accessible sites for squatting. The expansion of the urban periphery can be explained as the relationship between planning attempts made by the Delhi Development Authority and private initiatives and responses.

While planning for the main city, planners must be regardful towards the management of the natural resources in this transitional region and also acknowledge the socio-economic and psychological needs of the population residing in this region. Specially, considering the rapid urbanisation and growth of Delhi, the rapid transformation of once-sustained villages become of major concerns.

Sustainable Development from an environmental perspective, strikes for a balance between human activities with the environmental resource base within an urban system, whereas,

urban development calls for physical and human growth and restructuring of urban systems. Urban sustainability, therefore, is bringing the two together. But the key point here is that each of the main components - human activities, environment resources, population growth, and urban structure - is constantly changing, not only within the Cities but also at their suburbs. Here, Castells (2000) talk about dynamic sustainability, which is

> 'both conservation and improvement oriented leading to an enhanced quality of life including social justice....Sustainability of cities should not be simply the conservation or preservation of the conditions of the reproduction of what it is, but a dynamic production of situations that addresses new issues and bring afore aspirations' (ibid. 2000, p).

This is more in the lines of Norgaard's (1988) *sustainability of changing interactions* between people and their environment over time. The dynamic nature of the city system is well accepted. The processes in it are dynamic too. But the conditions and extent of dynamism varies from culture to culture. This change takes place, mostly, in a gradual manner. Here, the adaptive response by people to changes comes into focus. These adaptive responses are required for the dynamic nature of development. Here, one needs to note that the traditional societies with their environment are often more sustainable than the interaction of modern society because the traditional system (community, culture) are coevolved (with other eco-systems) and more importantly, coadaptive (to the changes in their system as well as others'). But it is rapid change that is dangerous to any kind of systems, traditional and, more strongly, the modern societies. Sustainable Development in this paper will be defined as **the coevolutionary and coadaptive approach to development for communities where the actors of the community mobilise and practice 'intelligent' use of natural resources to ensure minimal environmental externalities, social coherence and economic prosperity**'. Here, sustainability is not only seen as a goal but a means to the end. The actors include all levels of stakeholders, from individuals, households to local government. 'Intelligent' use should involve constant assessing of their practice, ethical judgments of the conditions as well as the benefits and will enable them to learn from their own as well as neighbor's mistakes. This is also to ensure less or decreased use of non-renewable resources from the outside world of their region, to achieve low ecological footprint, and also to encourage optimal use of locally available renewable resources. This 'intelligent' use will be the key point behind any community's sustainability in the long-term.

The planning for the interface should be of importance not only to ensure continued existence of the villages but also for the main city that has embedded socio-cultural relationships with its interface. The planning policies should aim for alternative livelihood policies in the villages falling in the interface. A separate department for Rural Development accounting for the interface - structural as well as livelihood changes - should be established. A city-state like Delhi needs to conserve its rural-urban interface, its socio-cultural entity, in order to sustain the city.

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