

Process and Forces of Farmland Alteration in Delhi: A Micro Level Study of Budhpur Village



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Abstract

Being the nodal location and primate city character, Delhi city attracted large number of immigrants since independence from different parts of south Asia. The continuous inflow of skilled, semi-skill and unskilled labour force in city boosted the economic flow. The availability of cheap labour force in abundance enhanced the economic opportunities in quaternary, tertiary and secondary sector activities. Subsequently, the increasing number of rural-poor immigrants in the city became the force of its economic engine by supplying cheap labour perennially. The perennial inflow of immigrants increased the population of Delhi city from 17.44 lacs in 1951 to 167.88 lacs in 2011. The increasing population of city has multiplied the economic opportunities manifold which further required space to expand in the form of urban sprawl.

The study deals the sequence of process and forces of farmland (cropland) alteration for variety of non-farming activities. The micro-level study of village Budhpur which is location on fast moving G.T. Road in north Delhi elaborates the gradual deviation of native farmers from farming activities. In the process of farmland alteration farmers sold their croplands on very remunerative price to private investors and further invested that amount in non-productive assets as construction of house, marriage of their children, purchase of vehicle and procuring the logistics for raising the living standard in accordance to latest technology. Initially, croplands located along the moveable roads are sold and altered for commercial activities and gradually over the time increasing demand of land further engulfed the almost entire croplands for other than cropping or agricultural purposes.

The missing link between the infrastructural demand of city and its supply by developmental and planning agencies get increased tremendously. To provide the alternate and fulfill this gap, private developers purchased the croplands from farmers on cheaper prices and further sold to urban traders on exorbitant prices. To meet the increasing demand of space for urban population, village croplands and its residential Laldora land diversified into warehouses, recreational and commercial party lawns, repairing workshops of vehicles, industrial units, commercial shops and showrooms along with vacant walled plots.

The study synchronized the sequent-occupance of cropland to commercial land and native farmer to urban suitcase farmers. The role of distance decay factor from city margin and ineffective (vogue) administrative policies of developmental and civic agencies are interpreted at micro level to synthesize the dynamicity of rural-urban fringe landscape. The urban greed of land to meet their infrastructural need and failure of developmental agencies in accordance to increased demand on the one hand and farmers changing attitude due to least remuneration from cropping are the binary forces of cropland diversification in rural Delhi.

Keywords: Laldora, Consolidation, G.T.K. Road, Farmhouses, J.J. Colonies, Acre, Revenue Village, Phirni, Suitcase-Farmers, Artisans

Laldora: It is the residential area of a revenue village earmarked with red ink on the village map (sizra) segregating the inhabited area from agricultural, pastures and other land.

Consolidation: It is a process of consolidating the widely spread-over croplands of the farmers at more than one place to put it at one bigger

chunk of cropland. So, farmers may develop farm-related infrastructure and utilize the cropland with more efficiency.

G.T.K. Road: It's the Grand Trunk Karnal Road which is also known as National Highway No. 1 from Delhi to Amritsar (erstwhile Kolkata to Peshawar) via Karnal.

Farmhouses: These are the walled farmlands used for commercial (marriage party lawns) or recreational activities by the urban-suitcase farmers. These farmhouses are not utilized for any kind of agrarian economic activities.

Revenue Village: It denotes the complete area of the village spread over in different shape and used for cropping, water bodies, canals, roads, wetlands, pastureland and residential purposes.

Phirni: It is the outer road of village residential (Laldora) area.

Acre: It is the standard size of rectangular cropland in revenue record measuring an area of 4840 yard square (198 ft. north-south and 220 ft. east – west extent). One Acre (kila) of farmland/land is further divided in 5 bighas.

J.J. colonies: These are the unauthorized, illegal, haphazard and densely inhabited unhygienic settlements by first generation poorest of the poor immigrants from rural areas on common land along the road, rail lines, parks or lowland etc. It is the local name of slum habitation derived from Jhuggi-Jhopri which means thatched hutments.

Artisans: These are the traditionally native castes of the village which perform varied handicrafts activities such as blacksmith, goldsmith, carpenter and potter etc. These social-groups indirectly support the farming societies with their respective skills.

Suitcase-farmers: The urban traders and investors who purchased the farmlands from the villagers, not for farming purposes but for varied commercial activities. They are not performing any kind of farming but altered the farmlands/ croplands into non-farming activities.

Introduction

The large scale rural to urban exodus in India leads to rapid expansion of big cities as Delhi, Mumbai, Ahmedabad, Bangalore and Chennai etc. Though, rural to urban migration is age old process but after independence and particularly during post-green revolution period its intensity increased manifold in India. The introduction of machines in feudalist farm sector forced to out migrate the rural landless unskilled poor labourers to urban areas at faster and larger pace. The primate nature of cities with pre-existing urban infrastructure attracted the maximum number of in-migrants. The large urban areas with varieties of small scale, ancillary and assembling nature of foot-loose industries along with heterogeneous quaternary services becomes the magnets to attract the skilled, semi-skilled and unskilled work force. Subsequently, the availability of cheap work-force in abundance becomes the significant driving force of urban economic engine.

The rural out-migration have taken place all over the country but the areas with natural hazards and disaster like floods in UP and Bihar and droughts in Madhya Pradesh, Maharashtra, Rajasthan, Uttarakhand and Karnataka recorded faster, larger and perennial migration to urban centers in India. The destinations of large size of skilled and unskilled rural out-migrants have been the bigger metropolitan cities with the potential of their employability. The perennial inflow of immigrants in a few selected cities provided the cheap labour and further boosted the economic engine with increasing return of investments. The smaller cities had limitations in providing the employment to the rural out-migrants, therefore, influx of poor rural migrants becomes boon for the economy of larger metropolis urban areas as Delhi, Mumbai etc.

The following table no. 1 shows the higher decadal population growth rate of big cities in comparison to smaller urban centers during last five decades.

Table 1: Population Growth Rate of Big And Small Cities in Last Five Decades

S. No.	City (Urban Agglomerations)	Decadal Population Growth Rate (%)				
		1961-71	1971-81	1981-91	1991-01	2001-11
1.	Delhi	52.93	53.0	51.45	47.02	21.20
2.	Mumbai	43.80	46.57	35.99	33.39	28.15
3.	Bangalore	37.0	76.7	41.3	23.5	65.2
4.	Chennai	42.8	32.3	17.6	13.1	63.2
5.	Ahmadabad	69.6	29.0	31.7	36.6	24.5
6.	Tuticorin, Tamilnadu	28.4	13.4	10.4	7.92	11.32
7.	Samastipur, Bihar	22.70	49.62	24.81	5.16	9.55
8.	Dibrugarh, Assam	37.39	N.A.	N.A.	1.98	25.70
9.	Nagaur, Rajasthan	50.02	31.71	42.09	31.72	12.04
10.	Mahboobnagar, Telangana	N.A.	N.A.	N.A.	17.28	20.4

Source: Census of India, 1951-2011.

Delhi city carry unique properties in global perspective as it is the largest continental city in the world. The historically rich heritage, administrative city, strategic location on the Aravali Hills facing river Yamuna and surrounded by fertile agricultural land with suitable cropping seasons and development of transport nodes of roadways, railways, airways, pipelines and electric network are some of the important geographical factors which consistently

supported the growth of the city. Ever since the withdrawal of British colonialism from India, Delhi city accommodated the heterogeneous composition of voluntary, forced and refugee immigrants from the different parts of south Asian subcontinent in short and long term both. The Delhi city remains the main destination for Punjabi speaking Hindu immigrant refugee's during the partition on religious lines and liberation during independence from West Pakistan.

During independence of India, the partition of Indian subcontinent on politically imposed boundary lines, formation of two nation theory and withdrawal of British colonialism without constitution and transfer of power to nominated government in 1947, resulted into exchange of millions of people on religious basis. In this process out of the total 9 lacs population of Delhi about 3.3 lacs Muslims out migrated from city to West Pakistan. In lieu of that, about 5 lacs Hindus (mainly Punjabi speaking) in-fluxed in city as refugee's largely from Peshawar-Quetta-Bahawalpur-Lahore quadrilateral doabs of five rivers. The Punjabi speaking Hindu immigrants from West Pakistan remained different in selecting the destination from Bengali speaking Hindus from East Pakistan (i.e. Bangladesh). Punjabi immigrants always preferred urban centers as their destination due to their trade skills which developed over the time subject to their close proximity of historically central Asian trade routes. The Bengali immigrants preferred the rural destination as they were skilled in subsistence labour intensive rice dominant staple food grain farming.

After the partition of Indian subcontinent on religious lines, Delhi city second time experienced the large influx of Bengali speaking refugee's from East Pakistan during 1971-72 after the liberation of

Bangladesh from Pakistan. Further, over the time the hydrological disasters mainly floods by Himalayan rivers forced the people particularly poor, rural and landless to migrated out to big urban areas. Every incident of earthquake and cloud-burst in Himalayas particularly Uttarakhand and Nepal further intensified the highland to lowland migration. The inconsistent monsoonal climate also leads to recurring droughts in dry land farming areas and forced the farm-labourers to out-migrate from rural to urban areas.

The caste based unequal and feudalistic agricultural land resource ownership in rural areas further increased the economic gap between rich and poor which intensified the rural to urban migration for minimal livelihood due to their exclusion from development process. In farm sector, the introduction of mechanization forced the large number of artisan societies as blacksmith, potters, carpenters and weavers etc. in rural Indian feudal society to out-migrate as rural skilled to urban unskilled labourers. The better and advanced service sector with modern logistics also attracted youths in the primate cities for higher, technical and vocational education, health and paramedical facilities, research laboratories, inter and intra-regional trade of industrial and agricultural products along with the allied activities.

TABLE 2: CHANGING DEMOGRAPHIC COMPOSITION OF DELHI: 1901-2011

Census year	Population size in lacs	Decadal Growth Rate in %	Annual Exponential Growth Rate in %	Sex Ratio (females/thousands males)
1911	4.14	1.98	0.20	793
1921	4.89	18.03	1.66	733
1931	6.36	30.26	2.64	722
1941	9.18	44.24	3.67	715
1951	17.44	90.00	6.42	768
1961	16.59	52.44	4.22	785
1971	40.66	52.93	4.25	801
1981	62.20	53.00	4.25	808
1991	94.21	51.45	4.15	827
2001	138.51	47.02	3.85	821
2011	167.88	21.20	1.92	868

Source: Delhi Statistical Handbook 2015

Urban Sprawl: Modus-Oprandi

Delhi city has been the most assimilating destination for immigrants from different linguistic, regional and cultural backgrounds since independence. The increasing population boosted the industrial development, trade and service related activities which further generated the vast potential of employment in varied fields. The liberal policy of local administration towards poor and unskilled immigrants gave birth to slums, squatter settlements, and illegal residential colonies as Jhuggi-Jhopri colonies which literally means as thatched and temporary houses without basic amenities, highly unhygienic and missing organization or planning. In Delhi, slums evolved on common land and their shape evolved on the basis of availability of vacant space along roads,

railway lines, canals, river bed, parks, forested land, village common land or other vacant land earmarked by development agencies for varied purposes. The slum habitations are the breeding grounds of epidemics, air pollution and urban petty crimes. The slum colonies are developed on the land which is owned by different government agencies and slum dwellers who are not the owner of the said land. The illegal, unauthorized and unapproved residential colonies which provided cheaper houses to poor immigrants in Delhi are developed on agricultural croplands meant for green belt or village common land meant to restore the village ecosystem. Though, the dwellers of these illegal colonies carry clear-cut individual ownership of their residential premises.

Table 3: Linguistic Composition of Delhi, 2001

S. No.	Language	Population	Percentage %
1.	Hindi	11,210,843	81.13
2.	Punjabi	988,980	7.16
3.	Urdu	874,333	6.33
4.	Bengali	208,414	1.51

5.	Tamil	92,426	0.67
6.	Malayalam	92,009	0.67
7.	Maithili	85,331	0.62
8.	Gujarati	45,145	0.33
9.	Nepali	44,367	0.32
10.	Sindhi	42,841	0.31
11.	Oriya	29,178	0.21
12.	Telgu	28,067	0.20
13.	Marathi	26,472	0.19
14.	Kashmiri	21,325	0.15
15.	Dogri	6,974	0.05
Total		13,818,220	100%

Source: Delhi Statistical Handbook 2015

In the process of mass rural exodus and urban explosion since 1970sonwards in India, it was observed that big population sized cities registered faster urban growth rate than the smaller sized cities (Table1). Bigger cities, on the one hand recorded higher population growth rate while on the other hand their absolute population size remained very high. Therefore, the decadal additions of absolute number of population in bigger cities are higher than the total population of many smaller cities. In India, the largest metropolitan cities attracted heterogeneous composition of people from different parts of country with different linguistic groups and hydrological disaster regions. The bigger cities become magnet to attract skilled, semi-skilled, unskilled, educated, illiterate, rural and urban people due to assured employment with the misnomer of better living conditions.

Urban Over-Flow of Delhi

Since independence, Delhi city consistently absorbed large number of immigrants (legal, illegal and refugee's), therefore city size keep expanding in its all directions. To accommodate the perennial influx of immigrants, the developmental authorities initially expanded the urban planning for residential purposes towards the Aravalli hills and its undulated outcrops in southern part of Delhi. Further, city expanded in eastern and western margins because of its poor farming output. The northern part of Delhi is bestowed with fertile soil, regular water supply from Western Yamuna Canal and presence of river Yamuna flood prone area which carry higher groundwater availability, therefore, urban planners initially restricted to expand the city in its northern margin. The large part of northern and western Delhi was earmarked as green-belt zone (i.e. area only for farming/agricultural purposes) in all its master plans including the delayed third master plan.

The Missing Links of Urban Planning

The perennial inflow of immigrants on permanent basis always remained higher than the infrastructure and allied facilities developed by different civic and developmental agencies in Delhi. The demand of housing and allied amenities always exceeded the supply. The master-plans of city which is the blue-print for urban development for 20 years are primarily oriented to provide residential housing infrastructure. The urban development agencies failed to procure low cost houses for the large number of poorest of the poor immigrants in city. Whereas the private developers and builders transformed the

agricultural farmland in green belt into low-cost residential colonies and first generation poor immigrants became able to purchase the small plotted or flatted house in these illegal and unauthorized colonies. It proved to be the spill-over of city to accommodate the poor immigrants who could not afford to purchase the house in planned colonies due to its limited supply and exorbitantly high purchase cost.

Urban planners could not develop the sufficient warehouses or goods storage infrastructure in accordance to the increasing demand of city. Subsequently, to meet the need of the city, the farmlands along the roads and transport network are gradually altered into built-up warehouses to store the grains, electronic items, medicines, paper engineering goods etc. Gradually, large complexes of ware houses on green-belt mushroomed in the outer margin of city within a stipulated proximity. Simultaneously, with increasing trade practices in Delhi the number of vehicles (private and Commercial) increased rapidly. During 2008, the total number of registered vehicles was 56.2 lacs which further increased to 88.2lacs in 2015. Though, the share of commercial registered vehicles remains merely 3% but the number of commercial vehicles which are entering into Delhi is exorbitantly high. In the absence of transport centers along the national highways in Delhi, the commercial vehicles are always parked along the roadside which are the major cause of traffic jam and these stationary commercial vehicles stumbles the mobility of all other vehicles. Urban planners of city could not provide desired space for parking, repairing and terminals for loading /unloading of commercial vehicles in the city.

Objectives and Study Area

The revenue village Budhpur in north Delhi has been identified to study the process and forces of land use (cropland and residential) change for commercial purposes over the time with increasing urbanization in Delhi. The village Budhpur is inhabited in the western margin of G.T. Road, a few kilometers away from urban continuum. The agricultural croplands of the village are spread over both the sides of G.T. Road. Therefore, village Budhpur has advantage of easy accessibility by road network which boosted the rapid cropland transformation into non-cropland activities. The drain no.6, (Bawana Escape Canal) which was initially constructed to absorb the flood water of river Yamuna to save the Delhi city from flood disaster, also crosses through the revenue

village Budhpur. Now, the same drain no. 6 is disconnected from river Yamuna and used to drain the chemically sooted and highly polluted water without STP of Bawana and Narela Industrial complexes to further lower course of river Yamuna next to Wazirabad barrage in Delhi.

The habitation of the revenue village Budhpur (near Alipur) is almost centrally located in the farmlands. Initially, before 1988 consolidation of the village, the total Laldora (area for habitation) was merely 10 acres out of the total 360 acre land of village. Further, during 1988 land consolidation scheme, the residential area of village which is called Laldora, has been increased to 103 acre area. (One acre land is equal to 4840 yard² with 198 feet north-south and 220 feet east-west extent). The expansion of Laldora and allotment of one additional residential plot for each native family free of cost of the village attracted the large number of immigrants for permanent habitation in the village as the initial purchase cost of these plots remained very low. As per the broad observational estimate by village head (Mr. Raj Singh s/o Chandgi Ram), there are less than 15% households residing in extended Laldora. Whereas more than 60% plots are utilized for residential purpose and 40% plots are used for various commercial activities as warehoused in extended Laldora residential area. In extended Laldora residential area of the village more than 80% of the total inhabited households are immigrants and all these plots are sold by the villagers to immigrants. The cost of these residential plots is comparatively lower than the houses provided by DDA. The native

villagers preferred to reside in old Laldora residential area with increased population density, small plots and high rise buildings in unorganized settlement. The slow development of infrastructural amenities in extended Laldora remains the stumbling block to reside by native villagers.

The economic activities of the native villagers also diversified from primary (farming and allied artisans) activates to tertiary activities mainly services and trading. Renting out the residential property for residential, industrial and commercial (warehouse etc.) purposes are the additional source of livelihood of the villages. The proximity of national highway no. 1 (G.T. Karnal Road) provided opportunity to diversify the economic activities at faster rate in Budhpur village than other villages which are located far from G.T.K. Road.

Sequent Occupance of Land Use Change

The increasing population size of Delhi from 17.4 lacs in 1951 to 167.8 lacs in 2011 becomes the driving force of land use change in rural-urban fringe area and its habitations. To meet the urban basic needs the rural croplands are altered into non-cropland purposes such as warehouses, recreational, commercial, repair workshops and shopping etc.

As per the empirical study of each and every acre land of village Budhpur, Delhi, it was found that out of the total 360 acre land of revenue village now less than 10% land is utilized as cropland. On the basis of empirical-participatory field study, the each and every acre-plot (residential and croplands both) of village was studied on temporal basis and divided into seven different types of land use of the village.

Table 4: Spatio-Temporal Dynamics of Land Use in Budhpur Village, Delhi

S. No.	Purpose/Uses	Land use change of village in %		
		1985	2000	2018
1	Warehouses/Godowns	---	10.55	36.8
2	Recreational/Commercial Farmhouses(not the cropland)	---	5.0	6.9
3	Commercial – Shops & Institutes	0.83	1.1	2.7
4	Residential Use	2.7	8.0	12.5
5	Vacant Land (Including walled plots)	---	25.55	30.3
6	Industrial and other uses	---	1.1	1.9
7	Cropland/Agricultural Use	96.38	48.61	10.0
Total		100%	100%	100%

Source: Based on Field Survey

Cropland To Built-Up Structure of Ware Houses

Village Budhpur, (Alipur), Delhi has two broad purposes of land use, one for the habitation or Laldora land and other is green belt for agricultural uses as crop land. With increasing urban population of Delhi, the demand of warehouses/goods-storage/godowns has been increased tremendously in city. Because of the limited availability of land and exorbitantly high price of land in city, the traders of city explored the possible locations for warehouses to meet their demand. In the process of city based traders search of large land on cheaper rates with road accessibility and social security, the village Budhpur, found to be one of the most suitable location for urban trading community.

Proximity of G.T.K. Road (N.H.1) and farmer’s greed and attitude to alter their cropland for instant economic boost of household are the two

factors which attracted urban traders to construct warehouses in the village. The location of G.T.K. Road (N.H.1) through the village croplands and three canals from different directions dissected the village croplands at six different non-connected locations which become non-remunerative for the farmers to grow crops on small and fragmented croplands. In the absence of continuity and accessibility, the croplands have been non-profitable economic affair for the farmers to grow crops and it became the force to alter the farmlands/ croplands into non-cropland (non-farming) commercial purposes.

Forces of Cropland to Warehouses Alteration

During 1985, almost entire cropland was used to grow crops in the village, but by 2000, almost 10.55% (38 Acres) of the total land has been diverted for warehouses/godowns. With increasing demand in 2018 further 36.8% (131 Acres) of the total land of

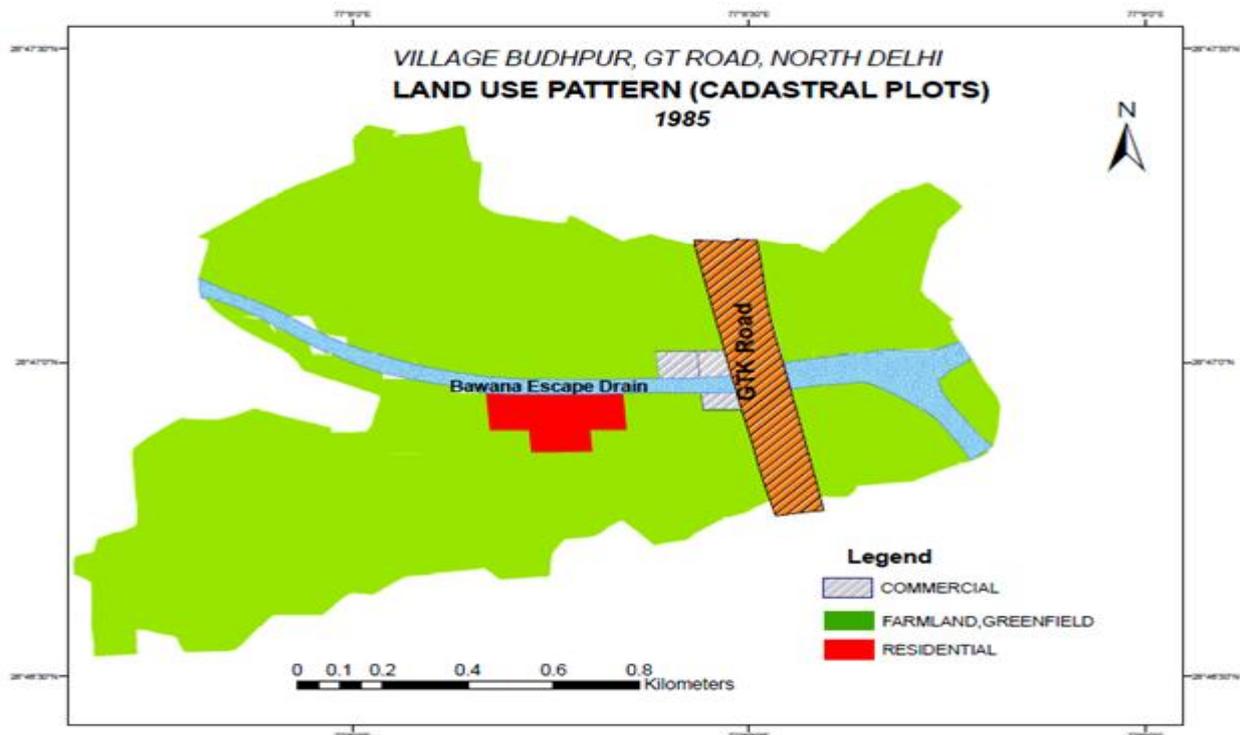
village have been diversified for warehouses which are the largest diversification among all other land uses. The process of warehouses/ godowns construction initially started in the residential extended Laldora land along the G.T.K. Road (N.H.1), further, croplands along the peripheral and approach roads in the interior are also altered for the construction of warehouses. Among all the warehouses/godowns which are built-up on croplands of the village are not owned by even a single native farmer, as urban traders purchased the cropland on very cheaper price and later constructed the warehouses illegally without any kind of permission from local municipality or any civic agency. Village Budhpur is bestowed with the advantage of accessibility of heavy vehicle to transport the bulky items and small vehicles to transport the stored items to City Centre in small installments.

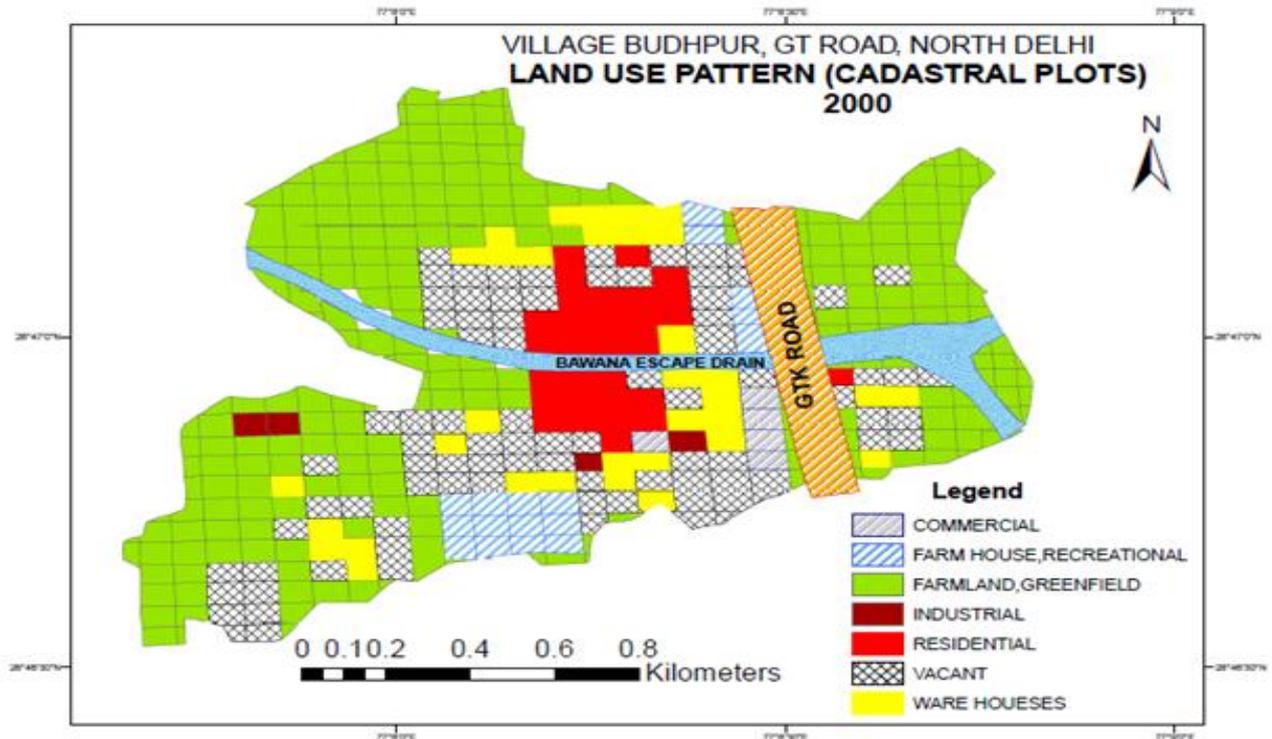
Majority of warehouses in the village are used for the storage of non-perishable food items such as food grain (wheat, rice, paddy, gram, bajra etc.), pulses, millets and oilseeds as mustard, soya bean, Taramira etc. Industrially processed food items as refined oil, wheat-floor, powder milk, sauces, catch-up, cold drinks, juices and jams-jelly etc. are other products which are stored in these warehouses because it is the ideal location with quick-supply to city centre due to its proximity and connectivity. Apart from food items the engineering goods, machines, tires, pharmaceutical products, paper and variety of chemical items are also stored here which are

required on daily basis in the city whereas storage costs in the city is exorbitantly high.

Cropland to Plotted Walled and Vacant Land

In the process of cropland diversification during last two decades, large numbers of croplands plots are altered into walled plots which are not meant for cropping. These walled plots are ranging from 2 acre size to 200 yard square plot in accordance to purchaser's need and capacity. With the construction of warehouses in the village, the market value and demand and of the croplands has been increased for commercial purposes as it developed the complex of godowns. Simultaneously, the economic orientation of farmer's gets changed to non-farming activities. Subsequently, in a well-organized sequence, croplands are sold by farmers from main roads to interior (inaccessible) croplands to non-government private investors. Majority of the croplands are purchased by urban traders and real estate investors for commercial purposes and fragmented into 4 to 5 feet high walls. These walled plots are lying vacant without any occupancy or cropping as the cost of the land is increasing in cumulative order. In order to maintain the ownership in absentia, some of the vacant walled plots are sappedled with eucalyptus trees and a temporary room for guards by the urbanite owners. Some of the walled vacant plots are further rented out for the storage of non-perishable items as old rubber and plastic items and for parking the commercial goods vehicles.



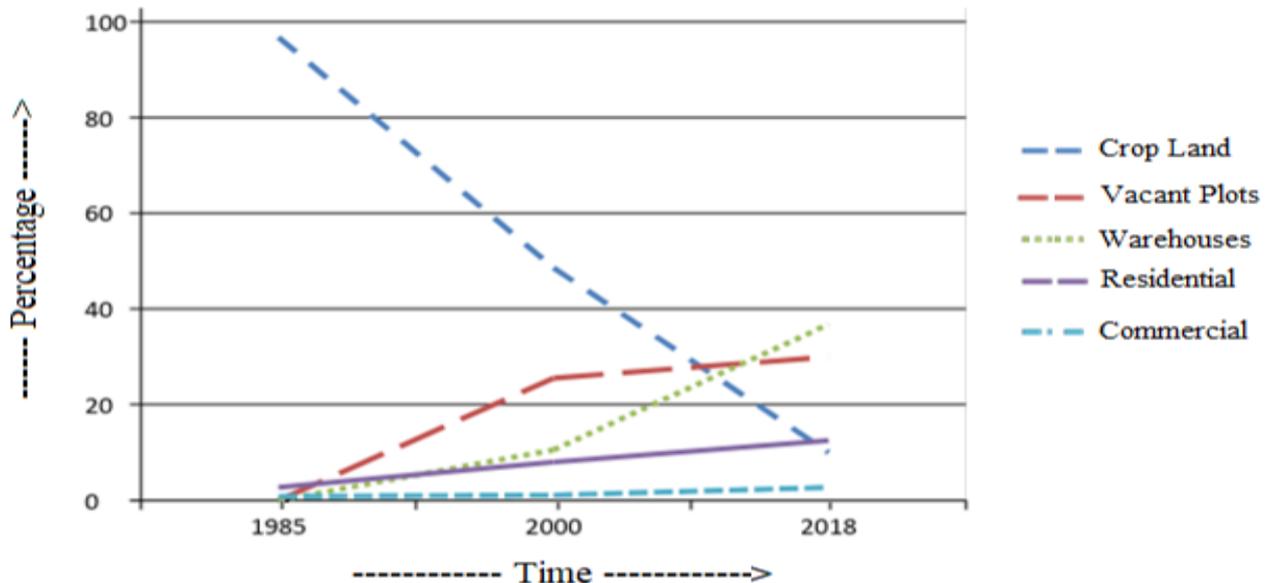


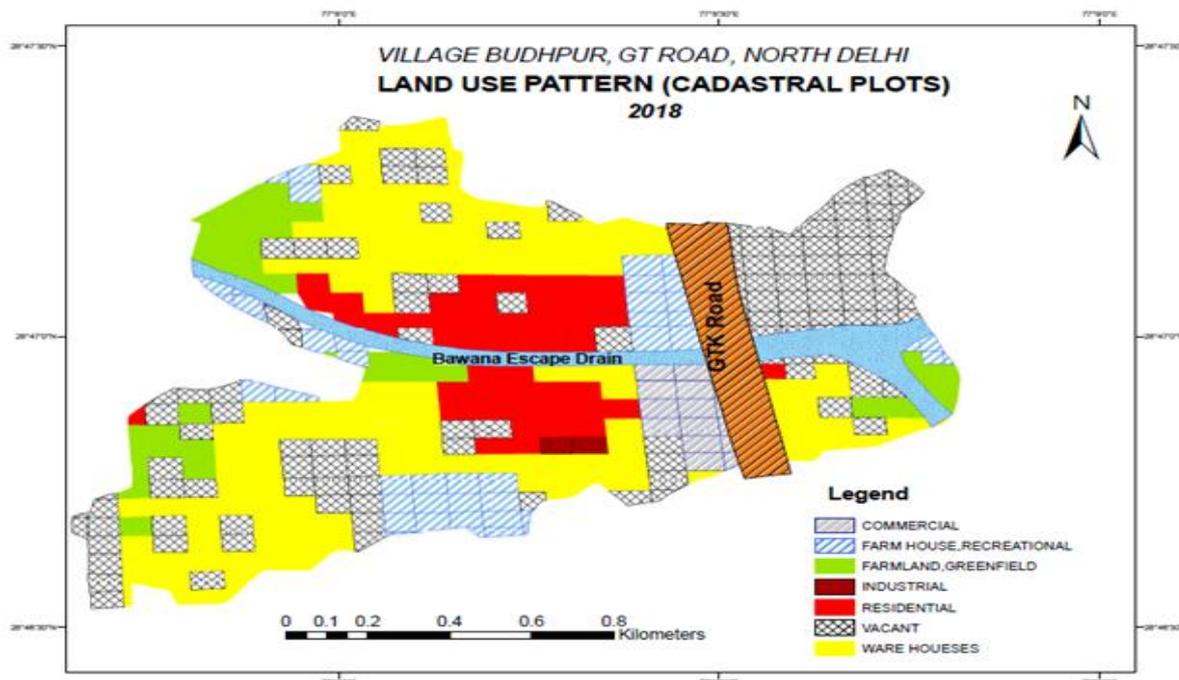
Source: Based on Comprehensive Field Survey

During 1985, there was not even a single walled or vacant plot developed in the village, but after 15 years by 2000, almost 25.55% of the total land of revenue village (92 acre) altered for the said purpose. Currently, in 2018 almost 30% of the total land (108 acre) has been altered for warehouses only. Apart from the individual purchasers of croplands for their respective commercial investment, the Govt. of NCT Delhi also acquired almost 40 acre (200 bigha) of cropland in 1997 of the village from farmers across the G.T.K. Road and near both the canals which

passes through village. The objective of acquiring vast land of three villages by Delhi Govt. which included some share of village Budhpur croplands also was to construct STP (sewerage Treatment Plant) to treat the industrially polluted waste water before draining it into river Yamuna. But the Delhi Govt. failed so-far (due to various undefined reasons) to construct or develop the STP on the said land and same vast tract of land is lying vacant since 1997 till date in the possession of state government.

Graph 1: Changing Trends of Land Use Pattern in Rural-Urban Fringe of Delhi In Village Budhpur: 1985-2018





Source: Based on Comprehensive Field Survey

Expanding Residential Space on Croplands

The vicinal proximity of the village to urban outer margin, the location of village on fast moving G.T.K. Road and gradual alternation of cropland to plethora of commercial activities attracted large number of immigrants as skilled and semi-skilled labour in the village. The availability of rapid road transport facilities and comparatively cheaper land cost to other parts of urban fringe are the secondary forces which increased the population size of the village.

The consolidation (chakbandi) process to minimize the fragmentation of cropland and enhancing the residential space (Laldora) is accordance to the increased needs of inhabitants by the revenue department of Govt. of Delhi

altered the vast croplands of the village into residential space. The last consolidation of village Budhpur was completed in 1988 which is considered as the bench mark in village land use change. Before 1975, the total land for residential purpose was only 9 acres. During 21 point programme of Govt. of India, 8(eight) acre village common land was distributed among landless and downtrodden communities for residential purpose. Further, in 1988 consolidation due to increasing demands of land for residential purpose, the revenue department further allocated 86 acres of land for habitation as extended Laldora. Therefore total land allocated for residential purpose become 103 acres which constitute 28.6% of the total land of revenue village.

Table 5: Trends of Land Use Pattern For Residential Purpose in Village Budhpur, Delhi

S.No.	Year	Area earmarked for habitation	% of the total 360 Acre land of revenue village
1.	1970	9 Acres	2.5% (As old Laldora).
2.	1975	17 Acres	4.7% (Under 21 point programme extension).
3.	1988	103 Acres	28.6% (After comprehensive consolidation process).

Source: Field Visit with Participatory Approach

The extension of Laldora (residential area of village) increased the commercial value of land as Laldora land does not require any legal certification from municipality or development agency due to proposed vogue regulation for the planning, construction and development of habitation in native villages. Subsequently, villagers started their allotted residential plotted land in extended Laldora to sell-out for short term economic sustainability. These residential plots in extended Laldora are utilized for both the residential and commercial purposes by the purchasers.

Out of the total residential land (Laldora : social space) of 103 acres, the actual inhabited land is only 45 acres which is merely 43.68% to the total Laldora land, whereas maximum residential land of extended Laldora is altered for warehouses and vacant land for commercial purpose. None of the altered-residential-Laldora land is utilized for various commercial activities is owned by the villagers, which indicates that native villagers have not modified their economic activities with expanding urban economic activities in rural areas.

Recreational and Commercial Farmhouses

To compensate the increased urban-demand of land, the easily accessible land with road connectivity is being altered for recreational purposes, marriage and other commercial party lawns, weak-end visiting sites and individual private family resorts etc. All such types of commercial farmhouses are not meant for cropland but for all sorts of non-farming activities in the name of farm-houses are exercised on such croplands. Therefore, farm house is the fictitious nomenclature for strangers or laymen. These farm houses used for commercial purposes are owned by urban-suitcase farmers in the name of farming along with safe and secured investment as their economic safety valves. During 1985, there were no such farmhouses were in existence but by 2000 in 15 year time span, almost 19 acres of land (5% of the total

land of village) is being converted for the said purpose. Now, in 2018, a total of 45 acres of land (6.9%) to the total land of village is utilized for such commercial farmhouses. Till the land remains with the ownership of native farmer, its value remains minimal but once the land is sold/ transferred to urban-suitcase farmer, its price become exorbitantly high and readily transferred for further cumulative economic gains.

Depleting Cropland and Distance-Decay Factor

In the process of urban explosion of Delhi city, the physical character of rural-urban-fringe has changed rapidly. The distance of the village from urban margin is continuously decreasing. During 1970^s the village was almost 21 km. from urban margin and now it becomes the part of urban-continuum as urban-conurbation.

Table 6: Relation between Distance-Decay and Cropland Cost

S.No.	Year	Distance of Budhpur From City Margin	Actual Cost of Cropland (Rs./Acre).
1.	1970	21km.	Rs. 20,000.
2.	1980	16 km.	Rs. 75,000.
3.	1990	12 km.	Rs. 300,000.
4.	2000	09 km.	Rs. 700,000.
5.	2010	5 km.	Rs. 1,000,000.
6.	2018	0 km (Part of Conurbation)	Rs. 30,000,000.

Source: Participatory Field Visit and Interaction with Farmers

In last three decades, diminishing distance-decay factor increased the pressure on land and the share of actual cropland (net sown area) of the village decreased from 96.38% in 1985 to merely 10% in 2018 to the total land of revenue village. It leads to the diversification of economic dependency from agrarian to tertiary activities. In accordance to distance decay factor the actual cost of cropland increased from Rs.20000 per acre in 1970 to Rs.3 Crores per acre in 2018. On the one hand, the population density of village keeps increasing, while on the other hand multiplicity of non-farming activities on cropland has been increased. Croplands are further divided from acres to bighas (one acre is equal to five bigha and one bigha is equal to 1000 square yards) and further bighas into yards which resulted into bifurcation of plots for higher economic returns from non-farming and commercial activities.

Table 7: Determinants of Demographic And Land Use Indicators of Village Budhpur Delhi

Indicators	Area specific	1981	1991	2001	2011	2018
Area	Vill. Budhpur (km ²)	1.457km ² (360Acre)				
	Delhi –Rural (km ²)	891(60%)	798(54%)	528(38%)	369(25%)	N.A.
	Delhi –Urban (km ²)	592	685	925	1114	N.A.
	Delhi –Total (km ²)	1483	1483	1483	1483	1483
Population size	Vill. Budhpur- Persons and households.	N.A.	1269(213)	---	3524(694)	N.A.
	Delhi (Lacs)	62.20	94.21	138.51	167.88	---
Population Density (persons per km ²)	Vill. Budhpur.	N.A.	769	---	2135	N.A.
	Delhi	4194	6352	9340	11297	N.A.
Cropland (Actual cropped land or net sown area)	Village Budhpur (Acres)	347 (96.38%)	N.A.	175 (48.61%)	N.A.	36(10%)

Source: Actual cropped land data is based on empirical field survey.

End-Consumers of Cropland and Laldora Land

The cropland of the village initially purchased along the GTK Road and main peripheral roads by the financiers, builders and urbanite businessmen. There are series of end-consumers of cropland and Laldora land other than native villagers' are as follows:

1. Builders, financiers and developers who purchased the land to further sell-out on remunerative prices.
2. Suitcase Farmers who are urbanite business and purchased the cropland as future investment as their economic safety-value. Such croplands are lying vacant for decades in the form of walled plots.

3. Urban Wholesale Trades who purchased both the cropland and Laldora residential land for the construction of warehouses and godowns.
4. Urban Investors who purchased the land and constructed the building for warehouses, industry or institutions as additional source of income from their rent and appreciation of property both.
5. First Generation immigrants who purchased the residential plots in Laldora residential land for their habitation ranging the plot size from 50-200 yard square on minimal and affordable price.
6. Urban Businessmen who purchased the big sized cropland (1to10acres size) for commercial and recreational use in the name of farmhouses for arranging the marriages and other party functions.
7. Government Agencies which purchased the vast cropland for the installation of STP, widening the GTK Road and expanding the canal etc.

Kaleidoscopic Pattern of Land Use

The land use pattern of revenue village Budhpur is largely influenced by presence of highly busy G.T.K. Road (N.H.1) which passes through the village croplands and two canals. In last three decades the land use change of cropland to variety of many other commercial purposes has been taken place. Though, none of the cropland diversification in the village is legally permitted by civic and developmental agencies. The cropland and residential-Laldora land along the G.T.K. Road (N.H.1.) have been altered into commercial purposes as shops, repairing workshops, showrooms, educational institutes, marriage and party lawns etc. The cost of the land is exorbitantly high along the G.T.K. Road and it decreases going away from the main road. The sizes of the plots are also comparatively smaller where shops and vehicle repair workshops are in dominance.

Along the peripheral roads in the village residential and croplands, the warehouses, godowns, goods-storage houses are constructed on big sized plots (1000 to 5000 yard square) with high roof upto 25 feet and acrylic ceiling. In these big warehouses the large sizes goods loaded trucks enter without any hindrance. Such buildings have been predominantly spread-over the front side of roads. Many vacant plots are used as vehicles halting and garage purposes as big sized vehicles brings the goods to warehouses and small sized vehicles distribute the goods in city.

The morphology of old-residential space (old-Laldora) is highly dense with dead-end, narrow and zig-zag streets and small sized plots with multi-store buildings. The older buildings are constructed in a fashion to rent them out with separate entry to the workers employed in ware-houses and allied activities. While the new or extended residential space (extended-Laldora) is predominantly used for commercial activities rather than residential purposes.

The croplands which are still retained as net-sown area (NSA) are either by the rich and big native farmers or these croplands are inaccessible and devoid of commercial purposes. Almost one third of the total land of the village is lying vacant and these vacant plots are spread all over the village and owned by urban dwellers for their safe investments.

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