

Full Length Research Paper

Urbanization of arable land in Lahore City in Pakistan: A case-study

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This study is intended to explore the extent of converting arable land for urban use and the pace of construction activities on the residential housing schemes. In most of the schemes, more than half of the plots are inbuilt because by-laws are very flexible and owners of vacant plots have no fear of cancellation and they consider this investment a better safeguard against inflation. Moreover, speculators invested their money in the plots because no cost / taxes are involved in the keeping of vacant plots. By implementing strict by-laws and imposing capital gains tax on vacant land and converting the collected taxes from the schemes to create revolving funds for house building for really needy, low-middle income groups, the extent of conversion arable land into housing schemes can be reduced

Key words: Speculators, pace, conversion, vacant plots, density, land policy.

INTRODUCTION

Cities throughout the developing world are facing challenges as they attempt to cope with unprecedented population growth. They are considered the engines of economic and social progress that embody the diversity and energy of human pursuits (Lash, 1996). Moreover, they offer employment opportunities, entertainment, potential efficiencies and other amenities. Pakistan like other developing countries in the region has witnessed accelerated process of urbanization. The country experienced massive urban population explosion. This resulted in server pressure on the urban land and infrastructure of big cities. According to Siddiqi (2004), the total population of Lahore district was 6.32 million, while the migrants among them were 1.03 million, which constituted about 16.4% of the whole population. Thus the area is faced with growing educational, water, sanitation, conversion of arable land for urban use and other social problems because of squatter settlements that are rapidly emerging to house these migrants. The impact of urban area on the surrounding productive farmland is an issue of growing concern (Bernstein 1994). Pakistan is one of the most urbanized countries in

South Asia while its metropolitan city Lahore is the second highest as compared to other cities. The overall populated urban area in Pakistan is 36% while 84% of the Lahore population resides in Metropolitan city area (Government of Pakistan, 2011). Lahore is expanding, growing and delivering economic incentives and amenities at the cost of productive agricultural lands. These trends may put severe strain on Pakistan's ability to increase food production in parallel with population growth. This issue concerning the protection of farmlands from housing schemes at the surrounding of the big cities in Pakistan is not properly addressed at government level and city planners are not clear regarding moving forcefully towards managing farmlands as sustainable basis. However, the good news is that many efforts are under way to explore policy instrument in areas such as provision of housing within manageable cost and need oriented basis. Urban growth in Lahore continues to ascend according to 1981 to 1998 population census but at a slower rate on average by comparison to previous census 1972 to 1981 because much of the population shift involves movement away from concentrated urban centers to vast, sprawling metropolitan regions or to small and intermediate size cities. With its explosive growth which is under way at 4% per year, this trend is projected to continue for several decades and is expected to be about 54% urban by 2025

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in Pakistan and 90% in Lahore alone (Elahi, 2010). Lahore harbors huge populations of the urban poor who are shut off from them the benefit of economic growth. In spite of a number of vacant planned developed housing schemes, many live in vast squatter settlements. This situation creates pressure on surrounding lands and natural resources. The pattern of urban growth in Pakistan and its metropolitan, Lahore is not much different from what occurred a century ago in Europe and North America. Many of the forces driving urbanization today are the same. Among them is the shift from agriculture to industry and services and the concentration of economic opportunities in urban area (Arif and Ibrahim, 1999). Economic growth during the last four decades remained undeniably more favorable in Pakistan and particularly in Lahore which committed irrevocably to urbanization at an accelerating pace. This situation in the urban Lahore has increased housing backlog progressively; from a shortage of 30% dwelling units against demand, in spite of converted 114,630 suspended hectares of fertile land for construction of housing units (Haque, 2007; Elahi, 2010). A remarkable number of plots are yet lying idle in colonies equipped with all immediately demanded utilities. This has become policy concerning matter (Bajwa et al., 2007). So, to identify the causes of slow pace of construction of houses in such schemes, this paper is prepared for action oriented policy recommendations. .

Objectives of the paper

The purpose of this research is to study urban land growth and housing of peripheral housing schemes by taking Lahore City in Pakistan as case study. This paper intends to (1) examine the pattern of land use activities in urban areas, (2) determine the tempo or pace of urbanization pattern, (3) identify the causes of low pace of house building units in the residential scheme, and (4) suggest action-oriented policy recommendation measures.

METHODOLOGY

Considering the scope and objectives of the study, both the primary and secondary data approach is adopted. Primary data means information observed and collected directly first hand to ascertain the extent of house building construction activities and to investigate the problems of low pace of construction specifically to address the problems in question through face to face interviews, by calling individuals and through informal interviews from focus groups (Property dealers, builders, owners of plots, town planners and presently residents of the housing schemes). Secondary data was collected from the agencies dealing with the construction sector, that is, Lahore Development Authority (LDA), house building and finance (HBF), defense housing authority (DHA) etc. More specifically, data was gathered from relevant documents published by relevant public and private sector agencies (population census, agriculture census, Punjab development statistics and Pakistan

economic survey). The analysis presented in this paper is based on discussions with Senior Town, planners, policy makers dealing with housing and urban development, builders, real property agents and individual owners of plots and residents. It has also relied heavily on the research interest and direct observation of the author concerning the interaction between planning regime and other development of Lahore.

USE OF ARABLE LAND FOR URBAN PURPOSE

The conversion of arable land in Pakistan cities for urban use is divided into two categories. Categories are planned new expansion areas and unplanned informal settlements on either private land or mixed private and state land (Slingsby, 1991). According to published data by Governorate of Punjab in 1999, 49% of overall urban Punjab and 15% of Lahore populations live in informal settlement known by slums and katchi abadis. Statistics of land development pattern in Lahore district were derived from the data obtained from LDA and agricultural / population census conducted during past 40 years. According to LDA, 254 schemes have been approved in urban area of Lahore since 1970. Out of which 231 schemes were established by private / Employees Cooperative Housing Authorities, 14 by LDA itself and 9 by DHA. Slingsby (1991) discussed that the value of planned land with services equals two times the value of unplanned land as slums are developed for providing affordable shelter to low income groups. Table 1 illustrates that during the past 40 years, districts in Lahore reached a total urban area of 114,630 (ha), that is, 64.7% (52nd place in Pakistan). About 18% conversion of agriculture land was acquired under existing land acquisition procedures prevailing under the present 1984 land Acquisition Act which according to (Ellis and Dowall, 2007) needs to be reviewed to permit speedy and efficient acquisition for shelter when the acquisition is executed by the public sector. In this regard, there is need for a specialized study of the procedure that relates to acquisition, transfer, assessment of price and other to envelop clear recommendation on which government can act. The remaining 82% was acquired for industrial and Government Mega Projects and for informal settlements.

In Lahore, land development was under taken through Housing and Physical Department, LDA, DHA, Private Developers and Cooperative Housing Schemes. Data in Table 1 shows that 8% land was developed by Private / Cooperative Housing Schemes, 5.3% by LDA, 6% by DHA and 82% by the mixture of Government Authorities and informal sectors. In Lahore, about 3,016 ha of agricultural vast areas on the fringes of the city are being converted to urban use annually. If present, land use policy and norms are not modified by the remaining total cultivated area of 52,332 ha will be exhausted in year 2030. According to (Dowall, 1995), ever-increasing numbers of housing schemes in urban areas of Pakistan are not only reducing the cultivable area but also

Table 1. Agricultural land conversion in Lahore Metropolitan District of Pakistan.

Period	Total area (hectares)	Cultivated area (hectares)	Overtime(%) change in cultivated area	Use of converted cultivated areas (Hectares)					Total converted cultivated area	Urbanize land
				Private / cooperative housing schemes	LDA regular schemes	DHA schemes	Other Use, that is, industrial, informal settlement, mega projects			
1972	177204	166862	94.2	-	-	-	-	-	10342	
1972-1980	177204	163413	92.2	182.6(5)	2794.4(81)	229.5(7)	242.8(7)	3449(100)	13791	
1980-1990	177204	114298	64.5	1680.2(3)	2753.3(5)	708.2(1)	4473.5(91)	49115.2(100)	62906	
1990-2000	177204	81040	45.7	2930.4(9)	271.5(1)	819.9(2)	29236.4(88)	33257.3(100)	96164	
2000-2010	177204	52232	29.5	1494.5(16)	804.1(3)	5350.9(19)	18159.0(62)	28808.5(100)	124972	
Overall	-	-	-	9287.7(8.1)	6123.3(5.3)	7108.5(.2)	92110.8(82)	114630.3(100)	-	

Figures in Parenthesis indicate percentages.

affecting crop production.

According to Government statistics given in Table 2, wheat, rice, maize, sugarcane, vegetables and fruits production dropped considerably during the corresponding period (1987 to 2008). About 114,630 ha decreased in the cultivated area that were eaten up by housing schemes, which are the major reason for the decrease in major crops production. Housing schemes owners usually, walled their lands even if they were not in use, leaving several hectares of agricultural land uncultivated for years. According to Saleem (2007), an influx of smuggled Chinese production into the Pakistan market had destroyed several industries whose owners invested whatever that is left with them in the real estate. Big land owners followed industrialist and set up housing schemes, on their farmland. Government should bring industrialists back into productive activities to stop the spread of housing schemes. Generally, the rate of agricultural land conversion into housing schemes was higher than the rate of population growth and people demand for accommodation, the government must check tendency because population growth should soon lead to more land

use by housing schemes.

In Lahore, inadequate housing production is not due to the lack of serviced land, but it is cramped in the hands of speculators and too expensive. Dowall (1996) inferred that in under developed countries, governments sponsor land developers and are charged with the responsibility of developing and distributing residential plots to residents. Over the past ten years in Pakistan, these developers have had a difficult time because they have been setting their allotment prices at cost recovery and transferring a considerable "development gain" to allottees. Since there is no guarantee that the allottees are of low or moderate income, the transfer of this gain serves little social purpose. In fact, it creates speculative demand for plots.

Dowall suggested that development authorities would have been better off if charged full develop value prices for the allotment and use the additional revenues to build low cost housing or cross-subsidize the sale of plots to accurately targeted low income households. Market pricing could be achieved by disposing of plots by auction. He further suggested that land conversion

can be reduced by implication subdivision standards on Land use and infrastructure utilization. The efficiency of subdivision and plot cost can be influenced by (a) plot frontage; (b) block length, and (c) street width and infrastructure standard.

PACE OF URBANIZATION IN LAHORE DISTRICT OF PAKISTAN

Urbanization refers to the rise in proportion of total Population living in urban areas (Jone, 1991). A better way to explain the urbanization process is to look at the pace of urbanization. The pace of urbanization represents the change in the levels (proportion of urban population in the total population over a period of time). Two indices have been used in this study to measure the pace of urbanization: One which is called, "Conventional Index", gives the percentage in the proportion of urban population in the total population, over a given period of time. For example, if the percentage of urban population in total population in 1951 was P_{51} and the corresponding

Table 2. Percentage change overtime in the production of different crops grown in Lahore as a result of decreased cultivated area.

Crop	Production (000 tons)		Percentage change
	1986-87	2007-2008	
Wheat	155.71	89.20	- 42.7
Rice	83.30	53.40	-35.9
Maize	19.10	6.10	-68.1
Sugarcane	49.90	17.50	-64.9
Vegetables	7485.00	2825.00	-62.3
Fruits	44335.00	32199.00	-27.4

percentage in 1961 was P_{61} then the conventional index of urbanization is given by:

$$\frac{P_{61} - P_{51}}{P_{51}} \times 100$$

The second index used in this study is called the Eldridge index which indicates change in proportion of urban population as a ratio to the maximum possible percent change. From the earlier example index for the Inter-census period 1951 to 61 is given by:

$$\frac{P_{61} - P_{51}}{100 - P_{51}} \times 100$$

Both indices provide an indication of the time dimension of the process of urbanization. The difference between the two indices is in the nature of denominator used, since the numerator is the same in the two cases. The conventional index (which indicates the change with respect to initial level of urbanization) is greatly influenced by the initial level of urbanization. When the initial level is low, the index tends to be inflated and vice-versa. The Eldridge Index on the other hand measures the change in proportion urban in the light of the extent to which maximum possible urbanization (100%) remains to be achieved from the level of previous census. This index may be considered better of the two as it is less influenced by the initial level of urbanization.

Table 3 shows that the pace of urbanization in Lahore as indicated by both indices, suddenly jumped in the inter-census period 1951 to 1961 (which predominantly reflects the post independence effect for the period between 1947 and 1951), the Eldridge index having gone down from the level of 21.76% for 1951 to 1961 to 20.91% for 1961 to 1972. For the next inter-census period of 1972 to 1981, the Eldridge index became negative (4.53%). The next inter-census period of 1981 to 1998 however, shows a sudden retardation in the pace of urbanization, when the Eldridge index for this period

became much lower (-11.85%).

Population of Pakistan which was estimated at about 33.82 million (with 17.8% urban share) at the time of first population census 1951, after independence, increased to 173.5 million in 2010 (with 36% urban share) (Table 2). The total population at Lahore in 1951 was 1.13 million (with 75.73% urban share) increased up to 8.83 million (with 87% urban share) in year 2010.

In terms of absolute number, the population living in urban areas of Pakistan and Lahore increased from 6.02 and 1.13 million in 1951 to about 63.05 and 7.72 million in 2010. The present urban population exceeded the total population of the country and Lahore district in 1951. The average annual growth rate of urban population of Lahore declined from 4.72% for the inter census period of 1961 to 1972 to 3.32% for the 1981 to 1998 period. The urban population share in Lahore decreased from 84.3 to 82.44% during 1981 to 1998 census data. The reason for slackening the tempo of urbanization during the 1980 to 1998 might be due to the communities adjacent to large cities have been counted as rural in 1998 census as compared to 1981 census when they were considered urban due to updating of delimitation of areas. Arif (1998) indicated that urban enumeration is very difficult and has not been conducted exhaustively. In big cities of Pakistan like Lahore, large segments of population earning their livelihood leaving their dependents or partially dependents in their original residents, towns/villages, remit money and send material goods at original residences, and visit their dependent family members to support financially weekly or on monthly basis in spite of settled since years at their working cities. At the time of enumeration, they avoid to include themselves as urban citizens of these cities on any status because the majority do not own a house, consequently, enumerated proportion of urban population seems as lower side in Lahore, where as the facts are contradicted.

The population density per square kilometer of different census conducted in Pakistan in different period is one of the determinant factors of quality of life (Leautir, 2006). The average population density per km^2 in Pakistan comes to 218 in 2010 compared with 43 km^2 in 1951 while

Table 3. Population size, density, change overtime and growth rate of total and urban population in Pakistan and Lahore (1951-2010).

Particular	Areas	1951	1961	1972	1981	1998	2010
Population size (millions)		33.82	42.98	65.32	84.25	130.58	173.5
Annual growth rate	Pakistan		2.45	3.66	3.05	2.61	2.05
Population density /Sq.km	Overall	42.5	54.0	82.0	105.8	164.0	218
Percentage change overtime			27.08	51.98	29.02	55.10	33
Population size (millions)		6.02	9.66	16.59	23.84	42.46	63.05
Annual growth rate	Pakistan		4.92	4.73	4.38	3.45	3.35
Percentage change overtime	Urban		60.47	71.74	43.70	78.10	48
Pace of urbanization Eldridge index			5.72	3.63	3.89	6.97	5.04
Percentage of total		17.8	22.5	25.4	28.3	32.5	36
Population size (Millions)		1.13	1.63	2.59	3.54	6.32	8.83
Annual growth rate	Lahore		3.69	4.27	2.87	3.46	2.83
Population density /Sq.km	Overall	640	918	1460	2001	3566	4983
Percentage change overtime			44.25	58.90	36.68	78.53	40
Population size (Millions)		0.86	1.32	2.20	2.99	5.21	7.72
Annual growth rate	Lahore		4.4	4.72	2.80	3.32	3.32
Percentage change overtime	Urban		53.49	66.67	35.91	74.25	48
Pace of urbanization Eldridge index			21.76	20.91	-4.53	-11.85	25.97
Percentage of total		75.73	81.01	84.98	84.3	82.44	87

while in Lahore comes 4,983 km² as compared to 640 km² in 1951. The relative increase density in Lahore during the period of 1951 to 1972 was 128% as compared with 149% during the year 1981 to 2010. This may indicate that the living condition in Lahore is more stressed than overall Pakistan because of less space availability per person. According to Mirza (1977), this phenomenon of urbanization must, therefore, be restricted through concerted and integrated programs of socio-economic uplift of rural environment with adequate job opportunities by establishing industry in non urban areas and the ancillary socio-cultural services net work.

PACE OF HOUSE BUILDING

A housing scheme is fully colonized when no vacant plot is available within the housing scheme to be allotted to any prospective house builder. District Lahore comprises the city of Lahore and its suburbs. River Ravi flows on the North and West side of the district across which lies district Sheikhpura, Kasur on the south and Indian border on the East and North East.

The district is spread over an area of 1,772 km² comprising new towns namely (1) Nishtar Town, (2) Shalimar Town, (3) Aziz Bhatti Town (4) Ravi Town, (5) Data Ganj Bakhsh Town (6) Allama Iqbal Town (7) Wagha Town (8) Samanabad Town and (9) Gulberg Town and the second biggest city of Pakistan and

provincial capital of Punjab.

In 1966, Lahore Master Plan was prepared to control the unplanned growth of Lahore and in 1975 Lahore improvement trust (LIT) was converted into LDA. Major development started after the formation of LDA which is principal public body involved in supply of residential plots and look after the private housing schemes in Lahore. The Lahore cantonment Board, Housing and Physical Planning Department, Defense Housing Authority Cooperative housing societies have also been involved in housing and land development in the city (Anjum and Hameed, 2007). Data regarding the size of housing schemes and information about their inception date was obtained directly from LDA and DHA and further through field visit construction pace was calculated by observation, discussion with the house builders, residents, and real property agents involved in these schemes. Data obtained was analyzed and presented in Table 4.

During 1970 to 2010, about 231 housing schemes were developed by private developers and cooperative societies on 9,288 ha, DHA Lahore since 1973 developed 9,000 ha of land in 9 phases, 55 sectors and LDA developed 14 regular schemes on 6,123 ha. These schemes mostly expanded along North, South areas while DHA developed large Tracts of land located in the south-eastern part of the Lahore. The city has expanded along with three major highways, Grand Trunk Road, Ferozepur Road and Multan Road.

Table 4. Extent of colonization and urbanization in Lahore Metropolitan.

Year of establishment	Range of % constructed area	Extent of colonization		Average area (Kanal)
		No. of schemes	% of schemes	
1970-80	0-25	-	0	-
	25-50	1	9	29
	50-75	4	36	207.1
	Above 75	6	55	458.8
	Overall	11	100	328.9
1980-90	0-25	8	9	585.6
	25-50	5	6	57.8
	50-75	20	22	340.9
	Above 75	57	63	405.8
	Overall	90	100	416.8
1990-2000	0-25	35	64	979.1
	25-50	6	11	1414.8
	50-75	6	11	1400.7
	Above 75	8	15	522.5
	Overall	55	100	1006.2
Above 2000	0-25	43	57	921.0
	25-50	15	20	1220.5
	50-75	12	16	1558.1
	Above 75	5	7	2109.2
	Overall	75	100	1162.0
Overall	0-25	86	37	913.5
	25-50	27	12	1099.4
	50-75	42	18	827.3
	Above 75	76	33	534.3
	Overall	231	100	794.8

One Kanal is equal to 4500 sq. feet.

Data presented in Table 4 indicates that 11, 90, 55 and 75 private cooperative housing schemes were developed during 1970 to 1980, 1980 to 1990, 1990 to 2000 and 2000 to 2010, respectively. House construction activities have been almost completed on the scheme established during the seventies. The 15% schemes established during the eighties have still 50% vacant area respectively. On the whole during last four decades, 50% area has been developed in the shape of houses in 49% schemes established in different times.

The regular houses schemes developed by LDA during seventies, that is, Iqbal Town, Model town extension, Faisal town, Township and Green Town fully colonized at the extent of about 98% schemes developed during the eighties, that is, Johar town (30% vacant), Subzasar (20% vacant) Tajpura (5% vacant) while schemes

established during nineties and recent past decades almost vacant, that is, Jubilee town (99% vacant) Mohlanwal (99% vacant) in LDA Avenue still work in progress since 2003.

DHA Phase-1 commenced and completed during 1978 to 1982 Phase II, 1981 to 1984 Phase III 1983 to 1988, Phase IV, 1986 to 1993, and is almost colonized at the extent of 98%. In Phase V and VI, mushroom of houses at rapid speed is very visible. The development work in Phase VII, VIII, and IX is under progress. DHA Lahore reflects a modern segment of Pakistan where all residents are enjoying a high quality life with excellent facilities for education, health, business and security. Anjum (2007) observed that DHA strategy worked well in ensuring rapid colonization in 1st five phases of the housing scheme.

FACTORS AFFECTING THE HOUSE BUILDING IN LAHORE

There is multiplicity of housing related issues in the country and especially in metropolitan cities like Lahore, Karachi and Islamabad, mainly generated by population explosion which grow from 84.254 million in 1981 to 130.580 million in 1998 census; the total number of housing unit throughout the country, was 19.3 million, 67.7% housing was in rural areas and 32.3% in urban areas. The following factors are affecting the House Building in Lahore.

Availability of transport and security

Availability of transport to the job market is the most important factor in determining not only the value of land but also the house building pace in urban areas. Physical security comes first. Men should be able to leave their families and go to work without fear of them being harmed in their absence. Anjum (2007) concluded that more closely a new housing scheme is located from the existing built up area, the more it will have the chance to be colonized rapidly. Since it gives the potential occupiers a sense of security, closeness to built up area also gives feeling of being part of the city rather than an isolated place and this adds to the attractiveness of the scheme

Availability of high order services and facilities

Piped water supplies, electricity, gas, sewerage, street lights, parks, schools, community centers are very important determinants of house building. These services have not only contributed to swift sale of plots, but also rapid house building.

Prices of house and land

In house building, profitability or rate of net return is not a single factor. There are many other motives which contribute to growth of houses. House building is generally done to fulfill ultimate desire of having a shelter ownership. This provides the inhabitants secure and safe guard environment to enjoy the blessing of settled life under available resource. The housing units which have been built and sold to the people have been beyond the reach of low income classes on account of the price of plot and the down payment demanded. If land is developed and given at a reasonable price to the people who will actually live there, they will manage to set up shelter suited to their own needs. Property prices have increased 3 to 4 times after 9/11 events, when remittances were sent by overseas Pakistanis who are not the direct beneficiary of the stocks and real Estate

Business. However, it was just the paper of the plots and the built up houses that changed; in other words, no new house was built. These phenomena, which many believe was the result of rising inflow of remittances, more liquidity in the banking sector and lack of any other profitable and secure ventures for the holders of the black money in the country. Shortage of housing units is forced by the land mafias, and become impossible for the middle class families to even dream of a house in the big cities. Nationally, the average occupancy rate per dwelling is over sized and the estimates did not meet the annual demand. For housing, the unit's property bubble created a severe situation for real middle class buyers. The presently available housing or land stock has become extremely expensive during the recent past. For example, a plot measuring 5 marlas (1125 sq.ft) in LDA schemes in Lahore which had a price tag of Rs. 0.3 million in 2000, is now being sold at Rs. 2 million. Similarly constructed house supply is experiencing a meteoric rise. This situation occurred due to lack of capacity and capability in the planning and implementation agencies Mohan (1982). A lot of town planning will also be required if the cities are not to grow haphazardly.

Speculation

Generally, the element of speculation has been lowering down the construction activities even for the plots purchased on subsidized rate or gifted to the needy households. With the passage of time, this has become money generating practice and the professional speculators have become beneficiaries of this. Though such subsidized public schemes are developed and implemented to narrow the gap of supply and demand of housing sector, yet the speculators avail the benefits of such policy and each plot is sold on an average 3 to 4 times before the house construction is completed on it (Illis, 2007). In entire Lahore, 2,584 persons had no shelter as reported in 1998 census while the number of persons per housing units has increased from 6.9 in 1980 to 7.1 in 1998. Housing availability in Lahore increased from 0.45 million in 1981 to 1.07 million in 2011 at a rate slower than population growth (from 2.99 to 9.052 million over the same period) implying thereby that house have been congested with time of slow tempo of construction and high growth rate of population. Most of the plots in these schemes are those in which house has not been constructed. About 75% vacant plots are in the hands of professional speculators. They have invested their money because no cost/tax is involved in keeping a vacant plot. By laws are very flexible and owners of vacant plots have no fear of cancellation plots. They have alternate residences like Government and family etc. About 10% plots are in the custody of those who are really needy but due to high cost of construction material they are unable to build their house. Financial institutions provide loan on a very high rate of interest and obtaining loan from these

institutions is another serious problem. About 10% plots are in the hands of those who earned black money and keeping vacant plots are best safe use of such money. Investment in trade/industry is very risky; 5% kept vacant plots because they think, this investment is better safeguard against inflation.

Nuclear family

In Pakistan, expansion of nuclear families is on the rise; percentage of population below poverty line stands anywhere between 25 and 30%. For housing pertinent to low and however middle income group, land is a key asset that ascertains gradual development and improvement in housing conditions. Over the period of time, status of land has changed. It used to be a social asset which was provided to the needy through state support. Now it has become a commodity which is openly traded in the market and attributing towards complexity in construction activities.

Socio economic factors

An estimated 0.065 million persons arrives every year in Lahore. They usually stay with friends or relatives until they find a job, after which they call their families and live in rented shelters in cheaper areas. These constitute irregular employees, skilled laborers, the industrial proletariat and lower level white collar workers. Their financial conditions do not permit them to think about house building in Lahore (Siddiqi, 2004).

Small businessmen and the traders

For this group, ideal place for them is to function where competition is not too stiff. The manufacturer and whole sellers usually move to places that are becoming submarkets and are in the process of consolidating themselves provided that they are easily accessible from other industrial and communication terminals. They are able to find cheaper premises and labor for their work in these settlements.

ACTION ORIENTED POLICY RECOMMENDATIONS

The following outlines a general framework for undertaking urban land policy reforms, however, it is not claimed what constitutes an optimal urban land policy and only offered what can be considered as a preliminary set of guidelines for carrying out urban land policy. In the light of aforementioned, diagnostic analysis following recommendations for improvement of house building development are given.

1. Compliance to building bylaws regarding fixed period by the LDA and/or other concerned agencies;
2. Plot once allotted may be canceled after the termination of construction period and it should be auctioned in the open market and income earned through this exercise may be fixed as for revolving loan fund for house construction in the same scheme on a very low rate of interest;
3. Adoption of built lease and transfer (BLT) policy by house building finance corporation;
4. Create a database of needy and non owners along with keeping in view their monthly income and status in order to provide them with an installment at very low interest rate;
5. Facilitate loans for purchasing plots from the financial institutions and rate of interest may be fixed keeping in view the appreciation in the property.
6. Critical public facilities such as parks, open spaces and urban services, which the private sector cannot profitably produce and sell, are impossible to provide without government intervention. Thus the solution to ineffective urban land policies is not to do away with government interventions and policy initiatives. Housing projects / schemes are not designed keeping in view the needs of those interested in purchasing housing units and plots. A review of integrated master plan for Lahore (IMPL) by World Bank revealed that, it does not have a strong strategic orientation or clearly vision for the future development of the city based on a consensus among the stakeholders; Land subdivision regulation could exacerbate the slow pace of construction in Lahore. Land supply for housing requires a targeted approach to reach out to the beneficiaries. It is important to make sure that subsidies for land, water supply and other services are carefully targeted to those who are really in need of them. Land must be recognized as being valuable in its natural state and not simply be seen as raw material for urbanization; according to this study, the 15% schemes established during eighties has still 50% vacant residential area, respectively. On the whole, during the last four decades, 50% residential area has been developed in the shape of houses in 49% schemes established in different times. If these plots were fully occupied at their planned densities, they could accommodate 21% of the added urban population; the track record of development authorities to develop residential projects is poor and much of their land is vacant. In Lahore, 30% of the land is owned by government; but if these pieces of land are placed on the market, they could provide opportunities for residential, commercial and industrial development.

Studies undertaken in 10 cities throughout Pakistan including Lahore suggested that households should pay a premium to obtain land located in planned areas ranging between 2.1 and 3.5 times the value of land in unplanned area because services are available and title to land is more certain. This amount is used as a revolving fund for

shelter project. Both the LDA and the Punjab Development of cities Act, 1976 permit development authorities to mobilize funds through issuance bonds or borrowing from various types of lenders. Management of urban land is the growing concern of development specialist. Beneficiaries of various public housing schemes have received financial benefit from those schemes which are 6 times greater than they paid to the authorities who developed those schemes (Dowall, 1996). Property taxes recover only a fraction of their potential; capital gains taxes have been not received and vacant developed land is not taxed at all despite the gains made by the allottees and speculators of public housing schemes when they received plots. To discourage the speculators to keep vacant for long time and encouraged a construction activities, a clear policy of recouping some of value accruing to the beneficiaries of publicly developed housing schemes need to be articulated which would incorporate reforms of property taxes, possible re-introduction of capital gains taxes, usage of betterment taxes and recovery of profits through direct participation in schemes. The intent of this taxation policy will mobilize resources stabilize land markets and reduce extent of arable land conversion (Ellis, 2007).

CONCLUSION

The purpose of this study is to discuss the nature of problems associated with urban land issues and explore various strategies and instruments available to urban land managers for achieving specific objectives of housing schemes developed for house construction. It has been determined that during the last 40 years, 11,4630 ha of arable land was converted for urban use out of which 18% converted land is under 252 housing schemes. It has also been examined that in 49% schemes, 50% plots are those on which house have not been constructed and 75% of these plots are in the hands of professional speculators; these raised the cost of plots and house building reached beyond the low middle income group. Effective land use policies, building by laws and standards that addressed backlogs of houses in Lahore have not been adequately enforced. Tax policies are significant factors that efficiently encourage speculators to keep the plot vacant unproductively at no cost. Consequently, development authorities have insufficient resources to finance urban services and for accelerating house building activities for the city which is growing at an unprecedented rate in which housing availability increased slower than the population growth for some decades ago. To discourage the speculators to keep vacant residential plot for long time and encourage construction activities, a clear policy of recouping some of value accruing to the beneficiaries of publicly developed housing schemes need to be articulated which would incorporate reforms of property taxes, possible

re-introduction of capital gains taxes, usage of betterment taxes and recovery of profits through direct participation in schemes. The intent of this taxation policy will mobilize resources, stabilize land markets and reduce extent of arable land conversion.

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