

Housing Need and Supply Gap Affects Housing Affordability

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Abstract: Housing is one of the basic human needs. The shortage of housing in a country is mounting due to immense growth rate of population. The current housing situation in Sukkur is not very different from the national one. A significant percentage of the urban population and the majority of rural migrants live in terrible living conditions and there is a strong shortage of adequate and affordable housing units. Furthermore, the deficit continues to rise; like more shelters, less population is forced to live in deplorable conditions. Families below the poverty line have been neglected. Land is also scarce resource and major contributor in housing supply. Related obstacles include dill planning of land without any management system together with higher cost of land and materials. Hence, the objective of this study is to evaluate housing nee. The housing supply gap was used to analyze through multiple secondary source data. The findings are defined as the housing demand is increasing with limited supply of housing with average backlog of 5000 houses. Government also is failed to take strong initiatives of supply of housing and this gap strongly affects affordability.

Keywords: Adequate housing, demand, supply, backlog, real estate

1. Introduction

Housing demand is honestly housing desire which is backed up by way of the potential and willingness to pay. It relies upon on the different behavior of individuals, that how two families share really able to spend their limited sources to satisfy their wishes of housing devices as well as items and services. Pakistan is faced with a extreme scarcity of housing, in particular for low and middle-earnings groups. Estimates disclosed that there may be a shortage of approximately 7.5 million housing units [1]. The shortage between supply and demand is increasing by means of extra 3.5 than 0.35 million gadgets according to annum based totally on the estimates furnished by way of the Population Census 1998 [2].

Dwelling is seen as one of of the the most basic human rights and an important element of the right to an acceptable living standard. Sufficient and social housing is needed not only for safety and comfort, but is also important in promoting a nations social stability and growth. For this research, McLennan and Williams (1990) definition of affordability is adoptive within the context of this study. We described affordability as ensuring some given housing quality some given housing quality (or varying standards) at a price or rent that does not place an un necessary burden on family income in the eyes of some third party (usually government) [2].

One of the main measures was using to assess affordability a round the population is the number of homes a family with a given amount of average income can buy. This guarantees a need for public housing is based entirely on the ability or income level. For example, low income housing management could be accomplished by analyzing families earning 60 percent of average income. That is why many city

planners and researchers have identified the harmful effects of sufficient. As per the 1998 housing census, Pakistan had 19.3 million families, with an average family size of 6.6 persons and density of 3.3 persons per space. The total housing supply consisted of 39 percent of Kucha building, often without sufficient water supply, 40 percent of semi Pucca, mostly without planned sanitary conditions or wastewater, and 21 percent were Pucca buildings.

Compared with the expected cumulative need for an approximately 570,000units per annum, only about 300,000 units now being built annually, primarily in city areas. Appropriately, by 2007,the housing deficit, estimated at 4.3 million homes in 1998,grew to approximately 6.5 million homes.

Affordable housing refers to any housing that meets some shape of affordability criterion that may be profits level of the family, length of the dwelling unit or affordability in terms of EMI length or ratio of residence price to annual profits [3]. The gap between supply and demand for housing is constantly rising in Pakistan. Previous section actually shows that in step with annum housing demand is round 0.35 million. The unavailability of new housing unit increases the congestion and homeless peoples inside the United States. This requires governmental intervention to provide first rate lodging to each household.

For urban and country poor, a residence is asylum in addition to the crucial necessity inside the budget. Indeed, simple housing for the homeless who stay in shacks made by using covering and leaves or in tin roofed cottages expands the gains of the detainees a few fold [6]. But the situation of housing devices for a widespread majority of humans has declined in city areas, including some major towns of

Pakistan, particularly owing to fast increasing population and migration from rural area.

The motive of take a look at is to find the gap between demands and deliver and endorse a policy measures for the affordable housing. This study will assist for the local authorities for providing low cost housing to the low profits human beings.

2. Related Work

Housing can be a simple and essential human need. Today, there may be a virtual housing crisis in the country. Rapid populace growth, overcrowding, shortage of supply, growing older housing stock, development of slums and Katchi Abadis, sera metropolis of land and absence of economic belongings has further aggravated the case. The provision of cheap housing in proximity of mass transit and associated with manner distribution, has grown to be severely imbalanced during this period of rapid nearby urbanization and developing density convergence. After 67 years of existence, Pakistan continuously faces the matter of shortage of housing devices. The cumulative shortfall in deliver of homes equals 8.0 million gadgets in accordance to trendy estimates and is predicted to reap the 10 million figures thru the year 2020 [7].

Housing demand is without a doubt a housing need, which is backed up via the potential and willingness to pay. It depends at the different sorts of behavior of individuals, that how various households spend their limited assets, to satisfy their needs of housing units as well as their need for goods and services. The need of city housing is affected via a number of elements, such as: rural to city migration, growing population, low investment in housing improvement, low purchasing energy of household, poor urban infrastructure and geography [5].

Housing require in the state sector is believed to be equal to immediate needs, while demand in the corporate sector is limited by accessibility. The parameters affecting housing demand can be divided into following three categories:

1. Financial parameter
2. Population parameter
3. Social parameter

1. Economic Factors

In contrast to demographic and social factors, other variables such as house prices, employment, wealth and money transf ers economic factors also influence housing demand's need a nd accessibility (Carlinger, 1973; Kau and Keenan, 1980; Fr ancke, 2004; Miron, 2004). The sum a family will spend on housing depends largely on the wealth and income of the family. However, house price inflation often relies on the availability of loan funding, as well as families with cash to buy the ideal housing units. They wish to buy. 11 Figueroa (1993) did a study, and information was gathered via the Paraguayan administration's layout survey on housing prices. The author concluded after looking at the data that environmental factors such as small population income has a strong influence on housing initiatives. Figueroa (1993) confirmed that perhaps the sales price of city infrastructure and initiatives had an effect on resources

2. Demographic factors

There will be different demographic factors which determine the price of housing. The research indicates that nuclear family and trends of relocation play an important role in generating cost of housing (see e.g. Brown, 1989; Filardo, 1996; Prybolsky, 1997; Brown and John, 2002; Sanchata, 2003). The nuclear family comprises the population size, the gender of each member of the family, the relationship status of the relatives.

Population size is characterized, according to Wunsch and Termote (1978), as demographic research, its rise via birth and migration, and its decline by mortality and migration. The evidence strongly suggests trends are the key predictors of the housing supply. Other variables such as earnings, cost of housing, money supply, replacement home prices, market trends, consumers prices particularly important are consumer expectations, supplement prices and investor priorities (Goodman, 1990).

3. Social Factors

Lengthy-term financial and social advantages are often related to the type of building which one occupies. Owning a home also plays a major role in preserving and minimizing loan payments. Besides monetary rewards, this also encourages the betterment of both the person owner's social class in the community for having a good home of the whole household. New building brings benefit to society overall.

Decision makers and different housing communities come up with creative housing schemes of both achieving the personal gain and making money, however. As per Gate (2007), certain cultural factors like growth rate, increasing behavior to family, number of kids per monthly premium and females employed 15 fulltime also affect the price of housing. The fertility rate per household has decreased, enabling household to include extra savings and investments which can be aimed to purchasing new dwellings, thus increasing the supply for accommodation and new houses. Gate (2007) claims that these changes in society have a significant impact on housing supply, but their impact is relatively clear.

The quality and availability of the accommodation, based on the household size, can not be ignored along with increasing income and wealth associated with the housing demand [4].

2.1 Planning strategies with limited perspective of demand

Development initiatives approved by either state or private industry are restricted in the methods, as they aren't introduced with the possibility of future growth for poor and working-class residential units. The housing demand is increasing in Lahore caused by an increase in population of the city due to remote-urban population growth and other socio-economic reasons, as long argued in the summary of urban growth and accommodation. The shortfall in property production and consumption is a result of being ignorant of making plans policies to poor vision of actual facts and data of lacking residential units. For starters, the Seventh 5 year Plan for Karachi expected a figure of 4.7 million housing institutions during the 1989-1993 policy. But at the other

side, if computations were successfully carried out, it revealed that the indicated.

1. Cost of land

Lack of economic and job opportunities for the lower class are a main driver for them all to reside on unregulated land in unsafe and essential circumstances lacking sufficient services and infrastructure. The property reserved to lower classes also arrives with local taxes, monthly payments; debt-bearing debt payments keep something out of control of small-income groups.

2. Lack of Cooperation between Responsible Sectors

Also a major factor behind the inability of institutional housing supply is the lack of information and concern among concerned spheres, including parliament, commercial development, Organizations and local communities, in the planning system. Collaboration of all such industries is a must for a productive achievement of any housing development.

3. Inadequate Public Involvement

The outcome will always be successful where concerned community groups are integrated in the planning strategy. In addition, none can examine the issues and define needs other than the focus group concerned. Leaving out their perspective is what ultimately makes the idea itself a tragedy.

4. Insecurity of property

While improving or planning to move is targeted at the proposed communities, but if a stable property career is not ensured then poor and working class citizens are not really involved in such ventures. Having property tenure safe ought to be a focus since in crucial times it support planning as a functional and sustainable strategy.

2.2 National Housing Policy

In Pakistan, the gap between supply and housing demand is continuously rising. The preceding segment clearly shows that demand for housing is around 0.35 million per annum. The lack of new unit raises the nation's poverty and homeless communities. Which calls for state intervention to provide every household of decent accommodation Pakistan did not even have a housing policy. In 1992, First National Housing Policy was created and amended in 1994. This policy introduced several creative ways to boost housing stocks and enhance the quality of current housing units. However the government failed to develop that program. Later, in 2001, Pakistan's policy had adopted a National Housing Policy (NHP).

The NHP 2001 addresses all big housing market issues, such as property issues, public financing, and development services sector, and low-cost affordable housing, and building material, development of infrastructure, zoning bylaws, and administrative structure.

2.3 Housing Finance in Pakistan

House finance is assumed to play a key role in the financial and economic system's efficiency and stabilization (Sheng, 2003). Home financing growth and growth provides opportunity to expand the financial market. Housing building is considered a major economic development driver for the manufacturing sector. Because of its labor-intensive existence, development projects include job opportunities for professional as well as workers (Erbas and Nothaft, 2002).

According to facts, housing investment by traditional financial firms is very low in developing nations and household finance is only a small portion of foreign assets (Buckley, 1994).). The cause next to low productivity was either the semi-existent housing market, or the huge home buyers dropped to delivery. The traditional institutions' loan credit availability was less than 16 per cent of the total spending in developed nations' housing (Buckley, 1994). HBFC and commercial banks together reported total outstanding funding for the housing industry at Rs. 70.34 billion as at June. At the other hand, the share of HBFC has decreased from 35 percent in 2005 to 20 percent in 2010. The number of unpaid lenders has decreased from 135,689 in 2005 to 101,632 in 2010.

Approximately 68 per cent of borrowers get housing finance from HBFC. The overall rate of interest rose from 10 percent in 2005 to 15.76 percent in 2010 from HBFC. while the rate of inflation was 2.2 per cent in 2005 and 3.74 per cent in 2010. Borrowers downtown was largely due to high rate of inflation on home funding in 2010, fall in the lenders was largely due to high inflation rate on housing, mainly for low and middle profit agencies.

Estimates disclosed that there is a shortage of approximately 7.5 million housing units [4]. The hole between deliver and call for is increasing through greater 3.5 million than 0.35 million gadgets in line with annum primarily based at the estimates supplied by using the Population Census 1998 [7].

Table 1. Housing Finance in Pakistan

Indicators	2005	2006	2007	2008	2009	2010
Gross Outstanding (Rs million)	55,293	61,957	76,004	83,786	76,663	70,337
□ Share of All Banks & Other DFIs	65%	82%	84%	80%	79%	80%
□ Share of HBFC	35%	18%	16%	20%	21%	20%
No. of Outstanding Borrowers	135,689	99,671	125,490	123,107	115,959	101,632
□ All Banks & Other DFIs	19,112	23,416	26,073	28,624	27,372	24,855
Average Loan Size						
□ HBFC	116,577	76,2555	99,417	94,483	88,587	76,777
Weighted Average Interest Rate (%)	10.10	10.31	12.14	14.65	16.15	15.76
Average Maturity Periods (Years)	13.2	13.6	12.8	12.2	12.6	13.6
□ HBFC (Rs. Millions)	0.083	0.087	0.092	0.86	0.74	1.22
□ Commercial Banks (Rs. Millions)	1.95	2.33	2.60	2.35	2.49	3.55
Non-Performing Loans (Rs million)	N.A	N.A	N.A	12,314	15,260	17,368
NPLs as a % of Total Outstanding -Overall	N.A	N.A	N.A	14.7%	19.90%	24.71%
□ All Banks & Other DFIs	N.A	N.A	N.A	9.1%	14.42%	19.57%
□ HBFC	N.A	N.A	N.A	37.6%	40.97%	44.82%

The financial situation of different organization according to allocation of fund in housing sector can be seen in table 1.

Elements that are responsible for developing an opening between demand and supply of formal housing in urban areas must be identified for society. The following are the the elements that can cause problems with the delivery of the proper housing units. The critical condition of the development nations that the economics status of different Social entities can be unequal is essentially the price and the possibilities for an uneven distribution of public property. At the same time, the wealthy get richer and the poor due to Income models and the inequality of the wealth, as the Company remains unchanged with similar earnings and continues to receive a certificate on economic equality.

The high profit community is the outstanding proportion of the urban population that confiscates al institutional housing dependent on income when it is main public location. Unattainable, the low income group is the opportunity to find affordable accommodation. Studies on housing options in well known Pakistani profit organization indicate that high income entities have greater institutional life prospects compared to hundreds of middle and low income business shown in figure 1.

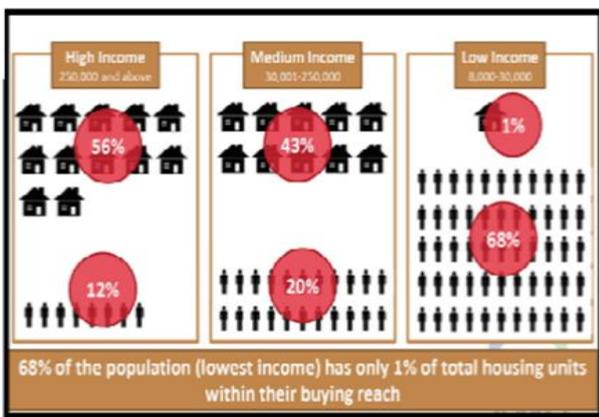


Figure 1 – Housing accessibility according to local Income level.

A vital contributor to the swelling housing name for is the increasing housing backlog. At the 12 months end, consistent with some studies, the backlog stood at nine million housing units, in which the town element was three to three. Five million units — almost all in low-income households. The supply and phone for situation inside the housing market is mainly skewed, indicating there is big “cash on the table”. According to a few estimates 68% of Pakistan’s population has great 1% of brand new housing stocks, even as 56% of housing stock is supposed for 12% of the upper profits segments. There seems to be an untapped market and unmet name for housing devices inside the metropolis areas in particular for the low- and lower-middle profits segments. According to the Planning Commission of Pakistan approximately 300,000 housing devices are constructed annually, especially in town areas. The variety falls quite short of the call for, and so, gives upward push to the backlog interior the big city agglomerations already bulging because of migrations for higher healthcare, educational, employment and organization opportunities, and protection and security. Katchiabides and shanty towns then serve the excluded

3. Methodology

Sukkur is a city in the Pakistan, province of Sindh alongside the western financial institution of the Indus River, directly across from the ancient metropolis of Rohri. Sukkur is the third largest town in Sindh after Karachi and Hyderabad, and is 14th maximum populous city in Pakistan.

A methodology adopted to regulate this study started with a comprehensive literature review and by conducting survey of sampled population. The required data were collected through reviewing literature and census report of Sukkur. Through secondary source data was used to analyze the gap between demand and supply of housing. Population projection formula was used to predict the desired year population and after that researcher used formula for computing housing demand by using interval of 5 years to display the required results.

3.1 Computing additional housing demand

Additional Housing Demand is computed as follows:

1. Incremental Population during each period ($P_y - P_x$)
 $= (\text{Pop. of the succeeding year} - \text{Pop of preceding year})$
2. Average uniform Household Size (6 persons/D.U)= H
3. Total Additional Dwelling Units Required
 $D.U. = (P_y - P_x) / H$

1. Population projection 1998 to 2003

P_t	$P_o (1+r/100)^n$
2003	$33555(1+0.032)^5$
2003	$33555(1.1745)$
2003	394,104.6
2003	~394,105

➤ **Pop. of the succeeding year – Pop of preceding year**

$(P_y - P_x)$
2003-1998
$(394,105 - 335551)$
=58554

➤ Total Additional Dwelling Units Required

$D.U. = (P_y - P_x) / H$

D.U.(dwelling units)	$(P_y - P_x) / H$
D.U	$58554/6$
D.U	9759

➤ **Total demand-backlog=supply**

Total demand-backlog	Supply
9759-5000	4759

Table 2 Shows the demand of housing unit's in 1998 to 2003 is 9759, supply is 4759 with the interval of 5 years backlog remains constant 5000.

4. Results and Discussion

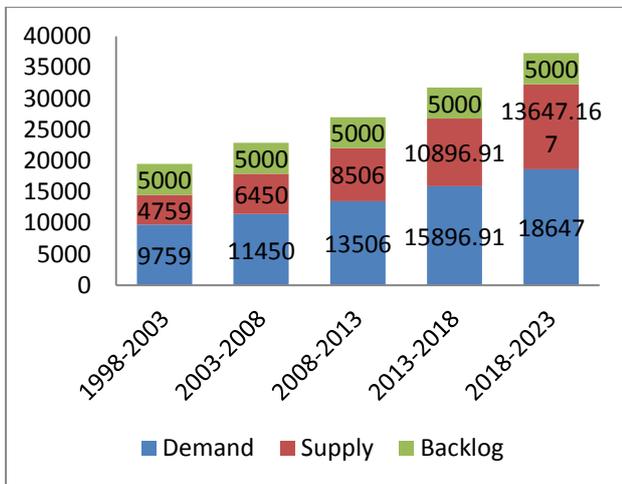


Figure. 2: Demand, Supply and Backlog chart

Figure 2 shows that demand of housing is increasing day by day with addition of 5000 units of housing backlog and Supply of housing doesn't meet the demand.

5. Conclusion

Housing is one of the most basic human needs. Millions of people all over the world are struggling to have a roof over their heads. For the past several years, Pakistan has been faced with housing issues both in qualitative and quantitative terms. The problems concerning housing are more serious in the urbanized Pakistan. Multiplication of urban population through rural to urban movement for varied opportunities and a better standard of living has been the major source of the problem. As discussed in the literature, there are so many factors exist that can affect the supply and demand parameter of the study area. The factors that influence demand for housing are economic factors, demographic factors and social factors. Usually, housing policies are formulated by public and private sector organization for their own interest, these policies are not often focusing housing supply and demand factors for urban as well as rural population. From Strategic Development Plan-2010 and District Census Report-1998 of Sukkur, it is determined that there is supply-demand backlog of 5,000 dwelling units/year. Furthermore, the number of people in the study area is also increasing with an annual growth rate of 3.27% that put immense pressure on the housing demand. Hence, it can be anticipated that the gap between supply and demand of housing units would be increased with the passage of time, which would left many

households without proper shelter facilities in future. By considering the land pooling and land banking the gap between demand and supply may be reduced.

Therefore, it is a high time to plan for the housing needs of the people of study area, as to curtail the supply-demand gap of housing units.

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