

Addressing the Affordable Housing Challenges for Urban Poor in Pakistan

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Abstract *The rapid growth of urbanization has resulted in tremendous pressure on housing in urban areas, particularly for middle- and lower-income groups. The formal sector has been unable to cater to the affordable housing demand, particularly for urban poor. Islamabad is the planned city and capital of Pakistan; its development started in 1960. Several squatter settlements have emerged in this planned city which are increasing over time. The government of Pakistan, realizing the gravity of the problem, started various programs to address this issue. This paper discusses various international and national approaches in this context. For this purpose, squatter settlements in Islamabad were studied. To keep pace with rapidly increasing urban growth and to stop the emergence of squatter settlements in future, it is recommended that affordable housing programmes for low-income people near their workplace should be initiated by the government immediately.*

Key Words:
Squatter Settlements, Katchi Abadi, Affordable Housing, Urban Poor

Introduction

UNHSP & UNESCAP (2008) declares that urbanization gave birth to different informal settlements, which are called slums, squatter settlements, and illegal subdivisions of land. Due to scarcity of formal housing stock, the low, as well as middle-income people, are forced to seek abode in informal settlements because it's affordable and conveniently located. These informal settlements have a variety of sizes and forms, mostly called slums. The word slum describes a neighborhood of housing that was once in good condition, but after deterioration has become the abode of the low-income people.

Wesolowski & Eagle (2010) define slums as residential settlements established on state-owned or private land with or without having a legal claim to the land and permission from concerned authorities to build the house. Due to their illegal status, the infrastructure is inadequate in these slums. Slums mostly lack durable housing, sufficient living area, access to clean water, access to proper sanitation and secure ownership. Slums are characterized by dilapidated and poor-quality housing overcrowded and high-density population and unhealthy living environment.

UNHSP&UNESCAP (2008) defined that squatter settlement is an area of poor-quality housing built on illegally occupied land. A slum settlement refers to the condition of a settlement, while the squatter settlement refers to the legal position of the settlement. If the legal landowners sell or rent out their owned land into sub-standard plots without adequate infrastructure and amenities, and without the approval of the competent authority, this is called illegal subdivision.

Various studies conducted by Garau, Sclar&Carolini, (2015), UNHABITAT (2011), UNHABITAT (2012) and UNHCR (2014), find that about 1 billion people in the world, i.e. one-third of urban and one-sixth of world population, live in slums with low standard, an unhealthy environment without having adequate access to clean water, sanitation, living space and security of tenure.

Informal Urban Settlements in Developing Countries

According to UNHABITAT (2008), over the last fifty years, enormous demographic changes have been observed in Asia and movement of people from rural areas is one of these due to which, percentage of people living in urban areas is increasing fast. In 1950, only 232 million people were living in cities in Asia, which was merely 17% of the total population of the continent. In 2005, the urban population had risen to 1.6 billion, which is about 40% of the total population of Asia. The United Nations expects

That more than 50% of Asia's total population will be living in cities by the year 2025, which is estimated to reach 54.5% by 2030. This dramatic increase in urban population takes place in three ways:

- I. By Natural Population Growth
- II. By Rural-to-Urban Migration
- III. By Reclassifying Rural Areas into Urban Areas

Makindi (2012), Yuen (2007) find that although the number of urban populations is increasing about 37 % of the world population lives in slums due to massive rural-urban migration and migration from smaller to bigger cities. Slum-dwellers have minimum access to health, education and other civic amenities.

Netzband et al. (2009) find that one-third of Dhaka population is living in slums where various health problems are caused due to insufficient water supply and waste disposal, lack of access to basic services. United Nations in 2008 reported that, 533 million people, i.e., 42% of all urban Asians were living in slums, and most of them are ordinary, hard-working people who cannot afford decent housing.

Potsiou et al. (2010), Pugh (2000), Azfar&Rehman (2004) found that in developing countries, the proportion of the urban population living in slums or informal settlements is 30%. About 90% of new urban settlements in sub-Saharan Africa are slums, usually built on hazardous sites on high-risk and locations vulnerable to climate change impacts.

Hussain et al. (2019) declare that katchiabadis either develop near high-income residential area or outskirts of the large cities due to economic reasons. UNHSP & UNESCAP (2008) explore that informal settlements in Asian cities come in all shapes and sizes, but the common denominator is their highly dynamic response to an absolute lack of other options. In Mongolia, the city's rural migrants have brought their nomadic style, felt-lined ger tents with them. In Phnom Penh, the rooftop slum has emerged in the shape of roof terraces on derelict apartment buildings. In Mumbai India, 55% of the population lives in a slum, and many can't afford to buy houses in slums. In Manila Philippines, 35000 households earn a good living gathering recyclable waste, but must still poor live-in conditions. In Thailand, urban poor are forced to live in slums existing along railway track and canals.

The Squatter Settlements in Pakistan

A slum settlement refers to the condition of a settlement, while the squatter settlement refers to the legal position of the settlement. It has been declared by the Government of Pakistan that any area occupied unauthorizedly before March 23, 1985, and continues to be occupied and has at least 40 dwelling units in it, will be a squatter settlement (KatchiAbadi)". (KatchiAbadi Act 1992)

UNDP (2002) estimated that 33% to 35% of the urban dwellers in Pakistan live in katchiabadis, and most of them are migrants from a rural area or small towns. The formal Housing sector has been unable to meet even 10% of housing need. Islamabad has been developed as a clean and green city, but unfortunately urban poor could not find proper housing; therefore, KatchiAbadis emerged due to weak control and poor enforcement of regulations on the part of CDA.

Haider & Badami (2010), relying on the 1998 census, revealed that nearly half of the housing in Pakistan is inadequate and informal and in Baluchistan province, the situation is more terrible. Siddiqui (2014) finds that several practical problems which discriminate the low-income households are high cost of land, low-income level of the people, investment of high-income people in planned housing for profit-making, slow development of housing projects in the public sector, a big gap between demand and supply of residential plots, high cost of building materials etc. Due to the above-said problems, illegal development of slums on government land in big cities of Pakistan has become a source of low-income housing for the poor.

Anwar & Zafar (2003) find that in Pakistan, there are over 3000 katchiabadis having a population of 7 million. There were 689 katchiabadis in Lahore subjugating the land of Auqaf and Pakistan Railways. These abadis comprise 162,324 dwelling units and 1.13 million people living there. Out of this 689 katchiabadis, 240 are regular, and 79 are irregular. The biggest KatchiAbadi is SukhNehr established on an area of 840 kanals having a population of 16870 persons living in 2410 dwelling units.

Lahore is the second-largest city of Pakistan and the economic hub of Punjab province. SAMPAK (2011) revealed that there were 689 katchiabadis in Lahore subjugating the lands of Auqaf and Pakistan Railways. There are 93 katchiabadis in Faisalabad out of which 43 % abadis are located over an area of 597 acres. These settlements comprise of 23,564 housing units and accommodate 185,900 persons.

Siddiqui (2011) explained that soon after partition, katchiabadis emerged as an alternate of affordable housing in major cities of Pakistan. Majority of such settlements are situated in the city centre because of its proximity to the workplace of the urban poor. These abadis are growing haphazardly without any plan having narrow and dingy streets, devoid of schools, mosques and playgrounds etc.

Research Methodology

In order to carry out research work, literature available on the subject was studied thoroughly. A list of squatter settlements showing location, area of each settlement and registered number of dwelling units in each recognized settlement was obtained from KatchiAbadi Cell, Planning Wing, Capital Development Authority (CDA), Islamabad. The information regarding un-recognized katchiabadis was obtained from Enforcement Directorate, CDA. Various approaches adopted by CDA to address the issue of squatter settlements were examined, and recognized squatter settlements were visited to know the impact of these approaches. The strengths and weaknesses of these approaches were discussed with the concerned experts of CDA. Keeping in view the prime location, France Colony was selected as a study area. Existing layout plan, area and population data were obtained from KatchiAbadi Cell, CDA. The selected case study area was visited personally, and questionnaire survey was conducted to get information from residents of the selected settlement. A sample of 10% of residents being representative of the settlement was taken. The first household was identified randomly, and then every 10th household was surveyed; thus, a total of 60 households were interviewed. The data collected was analyzed by using SPSS, and results were presented in the shape of tables and diagrams. The cost of land in the area was calculated on the basis of the previous auctions in the same vicinity conducted by CDA after discussion with Cost Accountant, CDA. The cost of construction was derived from the estimates of buildings prepared by Programming and Evaluation Directorate, CDA. Planning standards and building regulations were obtained from the Urban Planning Directorate, CDA. On the basis of findings of the survey, discussion with the experts, and literature review a new mixed-use approach to provide an affordable and sustainable solution for urban poor was suggested to resolve the issue.

Squatter Settlements in Islamabad

Islamabad is a planned city and capital of Pakistan; its development was started in 1960 under the Capital Development Authority (CDA) Ordinance 1960. In order to carry out development work of the newly planned city, labor was brought from various remote areas of Pakistan, and two labor colonies were established in NurpurShahan (Later on it was named as katchiabadi Muslim Colony) and the other in G-8/3. Later on, this colony was dispersed in Sectors G-7/1, G-7/2, G-8, F-6, F-7 and F-9 (CDA, 2000).

According to CDA survey report, there were 10 recognized katchiabadis in Islamabad in 1995, which also existed up to 23rd March 1985. Most of the squatter settlements in Islamabad emerged around natural streams, posing serious environmental threat and hotspot area for climate change (UNHABITAT, 2014).

Capital Development Authority surveyed this katchiabadis in 2004, and there were 3805 dwelling units in 10 recognized katchiabadis of Islamabad. The detail of each katchiabadi is given in table 1.

Table 1. Detail of Recognized KatchiAbadis in Islamabad

S. No	Name of Katchiabadi	Location	Area (Acres)	No. of Units	
				2004	2014
1	DhokNaju	I-10/4		182	0
2.	HaqBahu	I-11/4		243	0
3.	EssaNagri	I-9/1	6.23	213	273
4.	Muslim Colony	Bari Imam	60	993	3200
5.	Hansa Colony	G-8/1	14.62	693	784
6.	Tent Colony	G-7/1	11.38	308	404
7.	66 Quarters	G-7/2	9.70	475	669
8.	48 Quarters	G-7/3	3.59	98	195
9.	100 Quarters	F-6/2	8.84	300	443
10	France Colony	F-7/4	11.18	418	595
	Total		125.54	3923	6563

Source: KatchiAbadi Cell, Planning Wing CDA, Islamabad, 2019

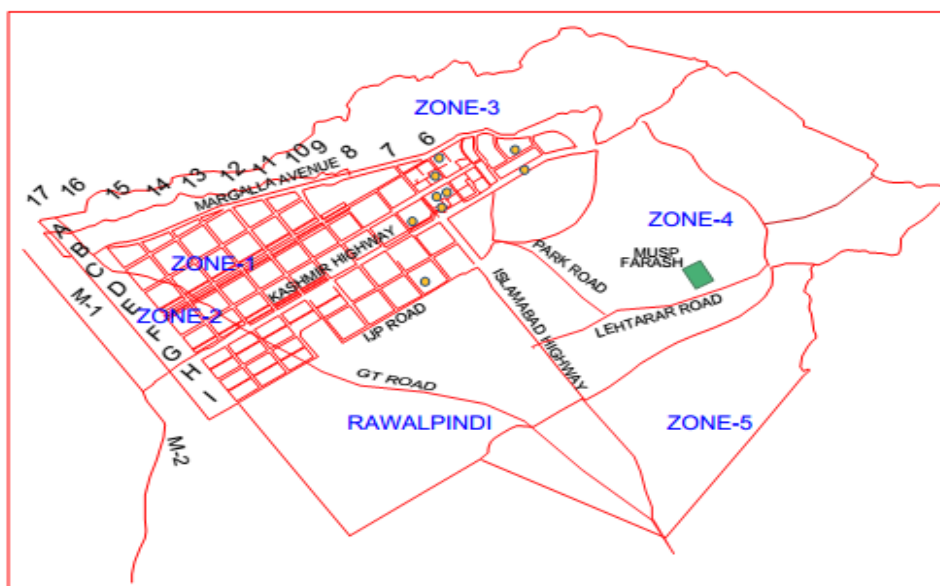


Figure 1. Master Plan of Islamabad showing the location of recognized katchiabadis in Islamabad.

Illegal Katchiabadis in Islamabad

As per CDA record, the katchiabadis which emerged in Islamabad after 23rd March 1985 is illegal, and in the year 2009, there were 25 such illegal katchiabadis, which have encroached CDA land. As per the report of Akhtar Hameed Khan Resource Centre (2014), there were 34 katchiabadis in Islamabad having 12283 households and population of 85981. The analysis of the report shows that the original affectees of Islamabad who have their claims of compensation still unsettled with CDA have also been included in the list of Katchiabadis. Govt. of Pakistan (2018) stated that there are 15000 households living in katchiabadis in Islamabad. UNHABITAT (2018) reported that due to Afghan War, swat and Waziristan trouble, fight against terrorism, 2005 Earthquake in Kashmir, the disparity in education and health facilities caused rapid migration from such areas to other parts of the country including Islamabad which caused an increase in squatter settlements. Major illegal settlements are Shopper Colony in Sector G-7, Maskeen Musharraf Colony and Maskeen Colony in Sector G-8. Enforcement Directorate CDA with the help of NADRA surveyed encroachment on CDA land in 2014 and identified 13 un-recognized katchiabadis as given in the Table:2

Table 2. Growth of Illegal Katchi Abadis in Islamabad

S. No	Name of Katchiabadi	Location	Area (Acres)	2004		2014		Status
				No. of Units	Population	No. of Units	Population	
1	Railway Line H-11/4	Near Islamic University H-11/4		-	-	109	861	
2.	H-10/4	H-10/4		-	-	54	486	Removed
3	Dori Bagh	Bari Imam	2	10	60	32	215	
4.	Miskeen Colony	G-8/4	2	25	120	150	1500	
5.	Afghan Basti	I-11/1	20	25	200	930	7995	Removed
6.	Benazir Colony	I-11/4	10	243	1994	755	2564	Removed

7.	Margalla Town	Orchard Scheme 10 th	-	25	200	40	300	Removed
8.	AkramMasih Colony	Avenue H-9/H-10	5	-	-	214	1839	
9.	Green Belt	H-12/I-12	4	-	-	191	1357	
10	Musharaf Colony	G-8/4	2	20	80	75	675	
11	Dhobi Ghat colony	G-6/2	2.5	-	-	50	250	
12	Shopper Colony	G-7 Markaz	8	70	200	600	3700	Removed and re-occured
13	Muzaffar Colony	H-11/4				350	3000	
Total			55.5	418	2854	3550	24742	

Source: Enforcement Directorate, CDA, Islamabad (2019)

CDA carried out operation cleanup and removed four illegal katchiabadis from 2014 to 2015, till a stay order was issued by the Supreme Court of Pakistan in 2015 after removal of Katchiabadi Afghan Basti from sector I-11. However, it can be concluded from the above table that illegal katchiabadis are swelling in number and size over a period of time which shows poor enforcement control of CDA.

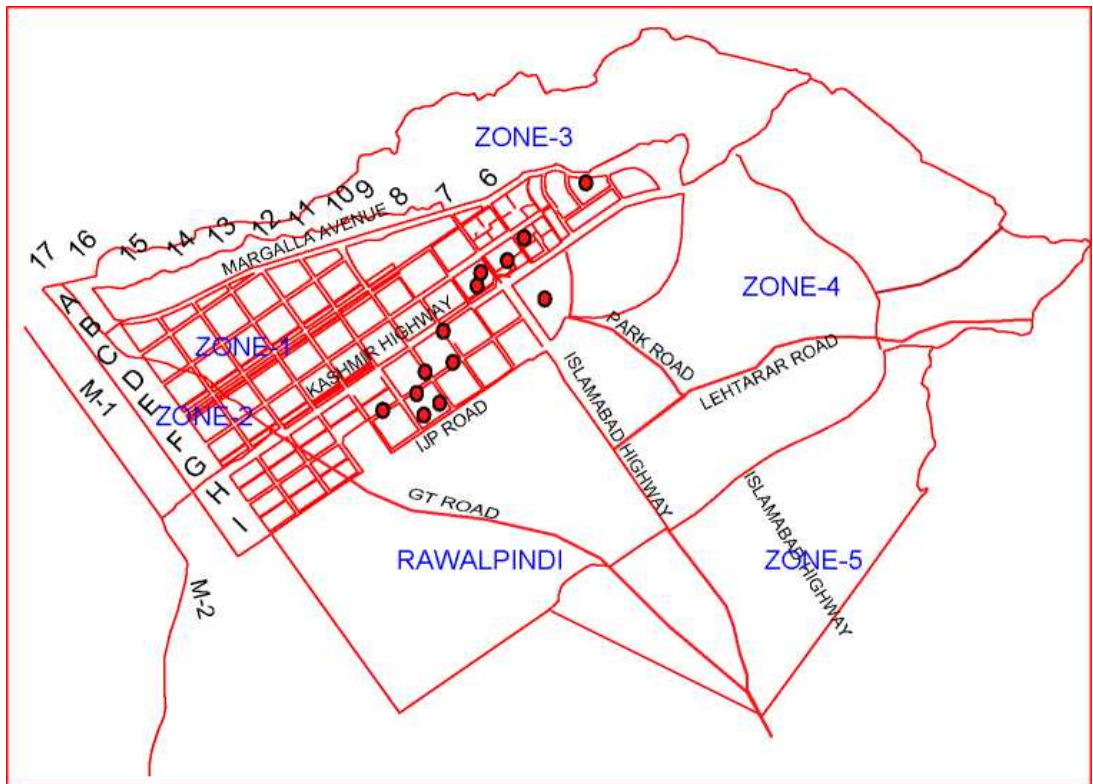


Figure 2. Master Plan of Islamabad showing location of illegal katchiabadis



Figure 3-7. Condition of Unrecognized katchiabadis Unhealthy and Unhygienic living conditions in Un-recognized katchiabadis in Islamabad

Approaches Adopted by CDA to Resolve the Problems of Katchiabadis

UNHSP & UNESCAP (2008) has identified five key approaches for resolving the issue of squatter settlements

- i. On-Site Upgrading;
- ii. Resettlement;
- iii. The government built new public housing;
- iv. Sites and Services;
- v. City-wide housing strategies

UNHSP (2005) explain that poor will always exist and their basic need of access to the shelter will require special attention of the government.

CDA has been making some efforts to control and improve the situation since 1985 when the Federal Government announced the award of proprietary rights to the dwellers of the recognized katchiabadis of Pakistan. Initially, CDA opposed the award of ownership to the dwellers of katchiabadis in Islamabad at the existing location. However, upon the intervention of the Federal Government, CDA adopted the following approaches to resolve the issue of squatter settlements in Islamabad:

- i. Up-gradation in an organic manner at the same place
- ii. Re-planning and Redevelopment at the same place
- iii. Relocation at planned site.

Up-gradation in Organic Manner at the Same Place

CDA, s Board in its decision dated 18-9-1994 regarding Katchiabadi F-6/2 Islamabad decided to allot 190 plots to Christian Multi-Purpose Society at CDA's reserve price. The size of each plot was 600 ft. This scheme was planned on the land of an existing squatter settlement in F-6/2. However, due to some mismanagement by the society administration, this scheme could not be implemented successfully. Later on the Federal Cabinet in its meeting held

on 27-10-2004, decided to allot 1300 dwelling units to the dwellers of katchiabadis of G-7/1, G-7/2, G-7/3 and F-7/4 at the same location as detailed below:

Table 3. Katchiabadis to be Upgraded at The Same Location in Organic Manner

S.No.	Name of Katchiabadi	Location	No. of housing units	Area of Katchiabadi (Acres)
1	Tent Colony	Sector G-7/1	308	11.38
2	66 Quarters	Sector G-7/2	475	9.70
3	48 Quarters	Sector G-7/3	98	3.59
4	100 Quarters	Sector F-6/2	300	8.84
	France Colony	Sector F-7/4	418	11.18
	Total		1299	35.85

CDA prepared a list of bonafide dwellers of above said settlements and improved physical infrastructure by providing water supply, sanitary and sewerage system, the pavement of existing street network and protection measures along the nullah sides. The electricity and gas connection has also been provided by relevant departments after NOC from CDA. Due to this strategy, environmental condition and living standard in these squatter settlements have been improved up to some extent; however, living conditions still lag behind from the surrounding planned communities; therefore this approach cannot be quoted a success story.



Figure 8. Tent Colony, Sector G-7/1



Figure 9. 100 quarters, Sector F-6/2



Figure 10. France Colony Sector F-7/4,



Figure 11. 66 Quarters, Sector G-7/2

Since these settlements were not planned, therefore, still look like unhealthy, unhygienic community lacking basic civic amenities like open spaces, playgrounds, community centre, places of worship, education and health facilities. Open dumping of untreated wastewater into the adjoining streams is creating pollution and other environmental and health hazards. Moreover, these squatter settlements are a source of panic and insecurity for the adjoining planned communities. However, the dwellers of these squatter settlements were happy for not being displaced and adjusted close to their workplace. The dwellers of the squatter settlements are adamant about relocating and demanding to be adjusted at the same place because of proximity to their workplace.

Re-Planning and Redevelopment at Same Place

As per Katchiabadi Cell, CDA in December 1995, Prime Minister of Pakistan directed to allot 575 plots to the dwellers of katchiabadi in Sector G-8/1, Islamabad. To accommodate dwellers of Hansa Colony katchiabadi G-8/1, a re-development scheme was planned on two pockets suggesting 575 plots measuring 20'x30' each at the cost of Rs.40,000/-. The first phase of the scheme comprising 105 plots was completed in 1996. Rs.15000/- were taken as down payment and remaining Rs.25000/- were payable in easy instalments of Rs.500/- per month over a period of 4 years. By the year 2009, CDA could complete allocation of 500 residential plots. Due to a shortage of land, all the dwellers could not be settled due to which project could achieve about 80% of the target as per CDA plan. However, this approach has remained most

successful among all other approaches adopted by CDA for settlement of the dwellers of katchiabadis in Islamabad because the area was re-planned keeping in view healthy planning parameters. The streets were properly planned along with the provision of community facilities and the development of basic infrastructure. All the plots were kept of the same size, and residents were allowed to construct their house after seeking approval of building plan from CDA. After the development of this scheme, other strategies were failed because the residents demanded the same strategy in other schemes.



Figure 12-13. Hansa Colony Sector G-8/1 (Re-Planning and Re-development at the same site)

Relocation at Planned Site

In November 2001, President of Pakistan directed CDA to remove the following four Katchi Abadis from their existing locations for relocation at Model Urban Shelter Project (MUSP), Farash.

Table 4. Katchiabadis to be Relocated at MUSP

S. No	Name of Katchiabadi	Location	No. Housing Units
1	Muslim Colony	Near Prime Minister House	993
2	EssaNagri	Sector I-9	213
3	HaqBahu	Sector I-11/4	243
4	DhokeNajju	Sector I-10/4	182
	Total		1631

For the settlement of dwellers of squatter settlements situated on sensitive locations and planned plots, the residential project was planned and developed in 1991 outside the city at a distance of approximately 15 kilometres along Lehtrar road known as Model Urban Shelter Project (MUSP) over an area of 165 acres. The land-use plan of

this project provides for 4007 residential plots each measuring 20'x40'(89 sq. yds) have been planned along with facilities such as shopping centres, masjids, community buildings, schools, parks and playgrounds. The allottees of plots in this project have to pay the nominal cost of Rs.21000/- in easy instalments. The scheme has been developed in phases, i.e., in the first phase, Paved Roads, Combined Drainage & Sewerage Network and Hand Pumps were provided, in the second phase electricity and gas are proposed to be provided.

A comprehensive policy to relocate the squatters was chalked out according to which the residents were directed to demolish their structure in katchiabadi and handover possession of land to CDA. After taking possession, CDA allocated a pocket of planned plots in MUSP. Plot number was allocated through balloting. Two katchiabadis namely Haq Bahu Colony and Dhoke Najju were completely shifted, and the land was utilized for construction of IJP Road, whereas relocation task of Muslim Colony and Essa Nagri could be completed 70% and 30% respectively.

Table 5. Katchiabadis Relocated at MUSP

S. No	Name of Katchiabadi	No. of Units Shifted
1	Muslim Colony	753
2	EssaNagri	73
3	HaqBahu	Completely Shifted
4	DhokeNajju	Completely Shifted
		1251

As per a survey conducted by KatchiAbadi Cell CDA in 2014, it has been reported that more than 50% allottees have sold their houses and they again returned to their previous abodes from where they were relocated. Since the dwellers were settled far away from their work location, therefore this approach failed to achieve the desired targets.



Figure 14-17. A view of Model Urban Shelter Project, Farash

A New Approach: Residential Plus Commercial (Mixed Use land) Approach

Introduction

The discussion at prepares show that with the passage of time, CDA adopted different approaches to address the issues of squatter settlements in Islamabad, but none of them could be a complete success story. Keeping in view the situation analysis, literature review and demands of the dwellers of these squatter settlements, a new approach is required to be introduced in Islamabad which is socially acceptable for the residents, environmentally sustainable, financially affordable and does not pose extra load both on CDA and the residents. This is a mixed-use (Residential and Commercial) approach in which on-site re-development of land is suggested to rehabilitate the dwellers at the same site.

Existing Condition

As a pilot project, this approach is being suggested for Katchiabadi France colony, sector F-7/4. The total area of this squatter settlement is 11.18 acres and has 418 households. This scheme is situated in Sector F-7/4 along the double road in the south of Markaz F-7 (Jinnah Super Market), which is a very busy centre and attracts customers from high-income people. As per a survey conducted by CDA in 2004 which swelled to 595 in 2014, is This squatter settlement is physically segregated from the adjoining residential area having natural streams on two sides, 50 feet wide street on the east and 150 feet wide road on the southern side. The prime location of the colony makes it a very costly and high-value land which may have value Rs.200,000/- per square yard (residential) and Rs.1,000,000/- per square yards commercial value of the developed land as per standard of the adjoining area. Since the land is very costly due to its location, therefore, it can be redeveloped into a residential cum commercial site. The location plan of Franc Colony is shown in Figure 3.



Figure 18. Location of France Colony, Sector F-7/4, Islamabad

During the site visit, it was observed that public utilities like water Supply /Electricity and gas are available at the site. Streets are narrow, zigzag and partially paved. The entire colony is bounded by a wall to avoid further extension. The existing condition of the colony is evident from pictures in figure 4, and the layout plan of the France colony is at figure-5.



Figure 19-22. The existing condition of France Colony.

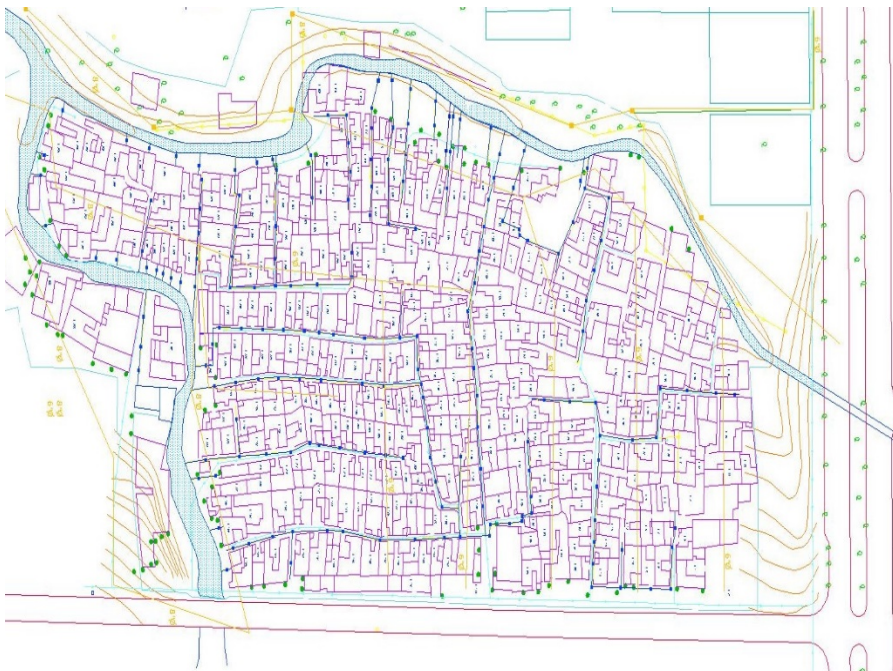


Figure 23. Layout plan of France Colony F-7/4

Source: KatchiAbadi Cell, Planning Wing CDA, Islamabad, 2019

Socio-Economic Condition

A socio-economic survey of the residents of France Colony was conducted by taking a random sample of 10%. A questionnaire was constructed to collect data from the residents, and results have been narrated below:

Average Monthly Income of the Household

There is a mix of the monthly income of the residents of France Colony. The average monthly income of the household from all resources is given in the following table:

Table 6. Average Monthly Income of the Household

S. No	Average Monthly Income of the Household (PKR)	Number of Households
1	Less than 20000	13%
2	20000 to 30000	25%
3	30000 to 40000	53%
4	More than 40000	9%

Distance from Work Place

The majority of the residents of France Colony are labourers working in the same sector. However, a considerable number of residents are employees working in various government departments. As per the survey, the distance from the workplace of the residents is given in the following table:

Table 7. Distance from the Work Place

S. No	Distance from the workplace (Kilometers)	Number of Households
1	Less than 1	23%
2	1 to 2	25%
3	3 to 4	33%
4	More than 4	19%

Age & Condition of Building

The survey revealed that 13% of the residences are as old as the early years of Islamabad city, 7% say that their houses were built before 1980 while resting 80% buildings were built after 1980.

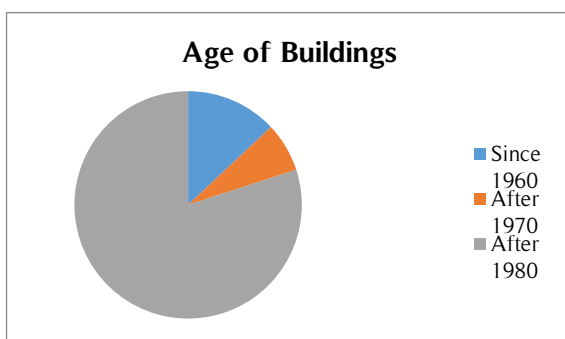


Diagram 1. Age of Buildings in France Colony, Sector F-7/4, Islamabad.

Satisfaction with the Condition of Buildings

Most of the respondents are satisfied with the condition of their buildings and considered them to be strong in structure and good in light and ventilation. Although, in most of the houses, the light was blocked mostly due to adjacent building heights and 34% shared that their building condition is bad or dangerous.

Family Type and Household Size

During the survey, it was found that 80% of the respondents have a joint family system and the rest 20% have nuclear families. While more than 70% of the respondents have three or more families are living in the same building, thus having an average of 10 persons living in one unit. There is an average of three rooms in one unit, and the average number of persons in one room is 3.3.

Occupation

The survey data shows that 46% of the respondents in France colony were government employees, and rest 53% have private jobs majority of them are laborers working in nearby houses.

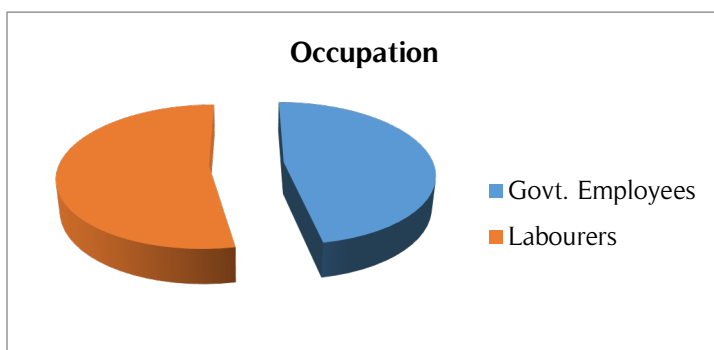


Diagram 2. Occupation of dwellers in France Colony, Sector F-7/4, Islamabad.

Number of Living Rooms

It was found that 65% of the houses have three or more living rooms and 30% of houses have two rooms and only 5% of houses have a single room.

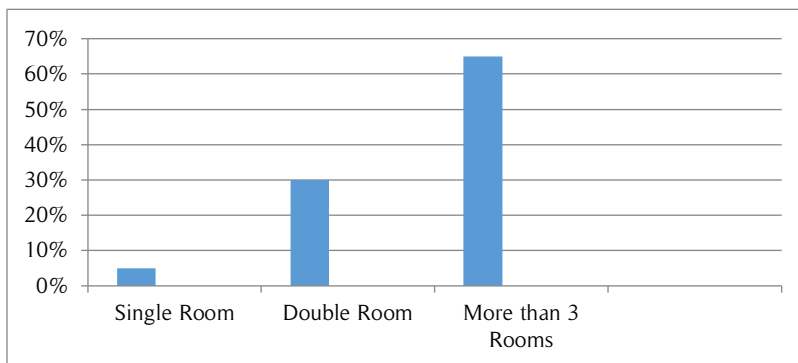


Diagram 3. Number of Living Rooms of dwellings in France Colony, Sector F-7/4, Islamabad.

Willingness to shift

When inquired about willingness to shift to another location, a large majority of 80% showed unwillingness. Only 20% were willing to shift to another location provided they are offered better facilities.

Willingness to pay

In order to improve the existing slum condition 53% of the respondents were ready to make a payment from their resources, 30% residents say that they are ready to make partial payment and rest of the 17% residents claim that government should come forward to upgrade the slum without any financial liability upon them.

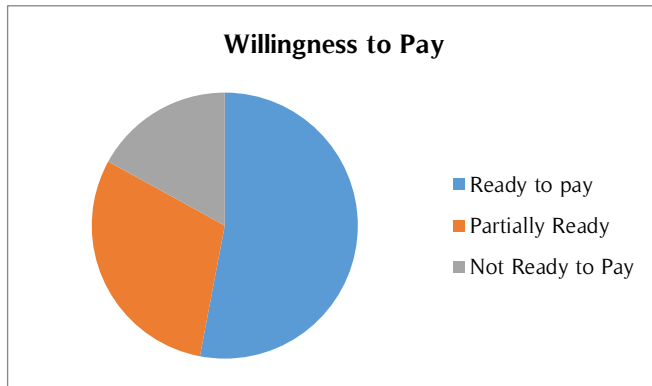


Diagram 4. The willingness of dwellers in France Colony, Sector F-7/4, Islamabad to pay for rehabilitation.

Proposed Rehabilitation of France Colony

Anwar et al. (2010) find that improvement of living condition in squatter settlements not only improves the environment, but it also improves the general health condition of the dwellers and reduces their expenditure on health issues. On the basis of the literature review, learnings from various approaches adopted by CDA and socio-economic survey of France Colony, the most suitable and successful approach proposed for rehabilitation of France colony is replanning and Re-development on the same place.

In order to accommodate the dwellers of France Colony, a re-development plan has been proposed having two parts, i.e. residential and commercial. To accommodate the dwellers, 600 apartments are proposed to be constructed in the shape of 5 storeys walk-up apartments comprising 15 blocks on 3 acres of land. To meet the cost of planning and development and value of land, the one-acre area is proposed to be planned as commercial and remaining 7 acres area will be left for circulation, parks and parking. Proposed layout plan for onsite re-planning and Re-development of France Colony Sector F-7/4 is given in figure-24.

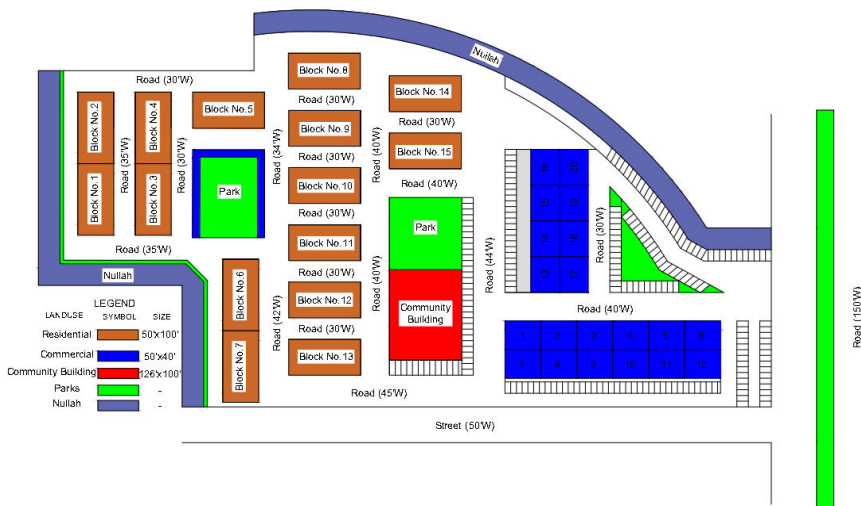


Figure 24. Proposed Re-development Plan of France Colony, Sector F-7/4, Islamabad

Source: Prepared by the researcher

In order to uplift the area facing Markaz F-7, can be developed as 20 commercial blocks each measuring 40'X50' as per bylaws of Markaz area which may fetch about 4500 million rupees. The residential blocks may have an expenditure of 1600 million rupees; thus, CDA may fetch a financial gain of 2900 million rupees from this

project. The cost of land under residential apartments may be shared by CDA and cost of construction of apartments can be recovered from dwellers of France Colony in easy instalments as the survey result show that they are willing to pay.

Development of Residential Pocket

The financial analysis of the construction of 600 apartments is given below

i.	Block Area (95.5X47.25) =	4512.37 Sft
ii.	Number of flats in one Block	40
iii.	Total Blocks	15
iv.	Area under Blocks	67685 Sft (12.44 Kanals)
v.	Open and Circulation area	67685 Sft (12.44 Kanals)
vi.	The total land under apartment scheme	24.88 Kanals
vii.	Cost of development per Kanal	Rs.2 million
viii.	Total cost of development	Rs.49.76 million
ix.	Flat Area	460+218=678 Sft
x.	Cost/Sft	Rs. 3,708/-
xi.	Costof construction per Flat	678X3708=Rs. 2,514,314/-
xii.	Total No. of flats = 600	
xiii.	Total Cost of 600 flats = Rs. 1,508.40 Million (1.5 Billion)	
xiii.	Total Cost (Cost of Development +Cost of Construction) =Rs. 1558 million	

Development of Commercial Pocket

In order to uplift the area facing Markaz F-7, can be developed as commercial blocks as per bylaws of Markaz area. The financial analysis of commercial development is given below:

i.	Size of Plot	40x50 [222.22 square yard]
ii.	Number of Plots	22
iii.	Unit Price	Rs 1 Million per square yards
iv.	Total saleable area	22X222.22=4888.84 square yards
v.	Total Price	Rs 4888.84 million (4.8 Billion)
vi.	Development Charges of site	130 million (@ Rs 2 million per Kanal)
vii.	Income from Commercial pocket	(4888.84-130) = Rs.4758.84 million
viii.	Expenditure on residential flats	Rs. 1558 million
ix.	Net income from rehabilitation	Rs. 4758.84-1558= Rs.3200.84 million

The total income to CDA from the above said proposed rehabilitation of squatter settlement is expected to be Rs. 3200.84 million. This model may be replicated to rehabilitate other recognized squatter settlements. As the residents are willing to pay for their adjustment on the same site, therefore an easy instalment plan can be chalked out by taking Rs.150,000/- in advance and the remaining amount to be recovered in monthly instalments of Rs. 10000 each per month in 20 years.

Conclusion

The formal sector has been failed to provide affordable housing to the urban poor due to which, in developing countries, more than 30% population live in squatter settlements, and the majority of them are the new migrants from rural areas or small towns. Islamabad was planned as a modern city, but the lack of affordable housing for low-income people, weak enforcement of regulations has given rise to the squatter settlements. By the year 2014, there were ten recognized and 13 un-recognized katchiabadis in Islamabad, and now this number has been decreased to 7 and 9 respectively. In order to resolve the issue of squatter settlements, CDA adopted various approaches including resettlement, re-development at the same site and up-gradation at the same site in an organic manner but only Re-development at the same site remained successful. The resettlement was made 20 kilometres away from the city at MUSP Farash by spending massive money on developing 165 acres residential scheme comprising over 4000 plots. Most of the residents sold their plots allocated to them in MUSP and returned to katchiabadis. The survey results revealed that residents of recognized katchiabadis are not ready to resettle at any faraway place and demand to be accommodated at the same site. CDA started forceful eviction of dwellers from illegal katchiabadis and four katchiabadis were completely demolished. Due to the intervention of the Supreme Court of Pakistan in 2015, the process of eviction has been halted. However, keeping in view, the survey results

made by the researcher re-development plan of KatchiabadiFrance Colony has been suggested, if implemented, CDA not only can accommodate all the dwellers by providing affordable housing without spending a single penny from its budget but at the same time can generate huge money amounting to billions of rupees besides improvement of the physical, aesthetical, environmental condition of the locality and also generate more employment opportunities. In order to keep pace with rapidly increasing urban growth, stop the emergence of squatter settlements in future, it is recommended that affordable housing programmes for low-income people near their workplace should be initiated by the government immediately.

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