



An Assessment of a Quota for Provision of Affordable Housing by Private Sector: A Case Study of Faisalabad City in Pakistan

Abdul Rehman and Malik Asghar Naeem

Abstract— Affordable Housing is a major issue for low income people in many developing countries, including Pakistan, especially in metropolitans. Faisalabad city has been taken as a case study to examine private housing. Due to limited resources, public sector departments have been unable to provide affordable housing. Punjab Government has made it mandatory for private developers to provide 20% of total plots for low income people. This paper aims to find out that whether affordable housing issue is being resolved through this administrative and legal measure. Key informant interviews with local authorities and developers, along with household survey of occupants living in private housing schemes were done. Based on the analysis, it is seen that the condition of 20% small-sized plots does not address the housing needs. Developers meet the requirement, but these plots are being sold on market rates and resultantly go in the hands of high or middle income groups. No mechanism has been set up to regulate verification of socioeconomic condition of the target people. This study recommends provision of even smaller plots, decreasing road width, and permitting the more floor area ratio coverage, give incentives to developers, and set up public private partnership to solve housing shortage.

Keywords— Affordable, housing, low income, Pakistan, Punjab.

1. INTRODUCTION

The population of Faisalabad soared from 2.1 million to 5.4 million from 1947 to 1998, showing an average increase of 3.2 % per annum [1]. The rapid growth of population created huge demand for urban housing. In order to meet this demand, a number of housing schemes have been developed initially by housing department during 1960s and later by the Faisalabad Development Authority (FDA) during 1970s and 1980s. Since the supply of housing remained short of demand, the FDA also invited private sector to contribute and since 1980s, the private sector has also been developing housing schemes. Till to date, 85 private housing schemes have been passed by FDA. Private housing schemes inspection shows that a large number of plots in these housing schemes are lying vacant. This is either due to speculative reasons or lack of interest to convert it into housing unit.

So, on one hand, a large number of residential plots are lying vacant and available for the middle and high income people to grab and on the other, hand low income people or the poor have nothing in these new planned schemes and are forced to live and develop squatter settlements and hence, there are 71 Kachi Abadis with 23640 dwelling units are present at the moment.

Moreover, the public sector has further worsened the situation for low income groups because no new schemes have been developed by FDA exclusively for them. FDA city housing scheme has been recently developed by

FDA, comprising of plots of various sizes. The minimum plot size in FDA city is 126.3 sq. meter but this category of plots is also owned by high or middle income group. The reason is that FDA has given these plots through open auction. There was no provision in the scheme for the low income group which leaves a question mark on the government side to provide housing to the urban poor.

In order to address this problem of low income housing, the government has recently did it compulsory for private developers to provide 20% plots (up to 126.3 sq. meter) for low income groups under the Punjab private housing and land subdivision rules 2010. Fifteen numbers of schemes have already been given approval by FDA under “Punjab Private housing schemes and land subdivision rules 2010 (PHS &LS Rules 2010)”.

2. SCOPE OF STUDY

The study deals with the low income plots provision in the schemes approved under 2010 Rules (when requirement of 20% plot up to 126.3 was enforced). The study also identifies a way forward for further investigation by the urban planners/researchers in the field of low income housing for the urban poor through private sector involvement.

In this context, following **Research Questions** are addressed:

- How many low income plots and of which sizes have been provided in the private housing schemes approved under 2005 rules and under 2010 rules in particular?
- At what prices such plots are available in the market, whether such plots are affordable by low income groups and whether such plots have been bought by low income groups?
- What specific measures have been adopted by the

A. Rehman (corresponding author) Doctoral Candidate, Urban and Regional Planning, School of Civil and Environmental Engineering (SCEE), National University of Science & Technology, Islamabad, Pakistan. Tel: +92 3009777997; Email: urbanplanner24@gmail.com.

FDA to ensure that those 20% plots really be utilize by low income groups?

- How the developers see the condition of providing 20% plots for low income people in new projects?
- What the stakeholders (Govt. officials, Developer and residents of schemes) think about the condition of provision of 20% plots for low income groups in private housing schemes and what other options are available with the government to meet the demand for low income housing in future?

3. RESEARCH OBJECTIVES

This study aims to review the effectiveness of “Punjab Private Housing Schemes and Land Subdivision Rules 2010” for the provision of low income housing. The specific objectives of this research are as follows:

1. To examine the rate of provision of different plot sizes and share of low income plots in private housing schemes approved by FDA.
2. To determine the extent to which low income plots provided for in private housing schemes under 2010 rules have been targeted to low income groups.
3. To find out the views of concerned stakeholders regarding the Punjab private housing schemes and subdivision rules 2010 in view of low income housing.
4. To propose measures to ensure that how private sector can play an effective role in the provision of low income housing.

4. METHODOLOGY

The preliminary step of this study is literature review. After it we collected the secondary data and the major source of this data was Faisalabad Development Authority. Then as per scope of the study there were three stakeholders mainly involved in this study i.e. Govt official, developers of these schemes and residents of these schemes up to 126.3 sq. meter. After collection of data we analyzed it on the basis of views of different stakeholders, compared this data (2010 rule) with the previous schemes data (2005) approved. At the end we draw conclusions and on the basis of it we gave recommendation how to ensure availability of low income plots in real terms for the low income people.

Three main stakeholders for primary data were:

- Concerned officials of FDA/ CDGF/TMA
- Developers of the schemes (approved under Rules 2010, *ibid*)
- Residents/Buyers/occupants of the Low income plots of said schemes

Primary data was collected by interviewing concerned officials of Faisalabad Development Authority (Director town planning and 2 no’s of Deputy director town planning) and other relevant agencies/departments like City District Government, Town /Tehsil Municipal Administration (4 nos of Town officer planning and one District officer Spatial Planning). Interviews were also conducted with developers of selected case study in private housing schemes. During the study, the researcher strived to determine the criteria (if any)

adopted by FDA to ensure provision of 20% plots to the low income groups by the private developers. Alongside, effort was also made to know that what sort of procedure has been adopted by the FDA during approval of these schemes, or what measures have been applied to persuade the private developers so that the provision of low income plots to the real end users is guaranteed as per the 2010 rules. By conducting interviews with the FDA staff, the researcher managed to answer all the above questions.

The researcher also conducted interviews with all the 15 private developers whom were custodian of the schemes approved under “Punjab Private Housing Schemes and Land Subdivision Rules 2010” with the view to assess the allotment procedure and the basis of fixing the price of a plot (including payment plan), to know about the criteria they have adopted for selecting the urban poor suitable for low income plots, to know about the socio economic condition of the purchasers of smaller sized plots (20% plots), and to find out about the measures they might have adopted to reach out to the target group.

The researcher also conducted interviews with selected number residents of up to 126.3 sq. meter houses in the selected private housing schemes which were approved under 2010 rules. The purpose was to authenticate the socio economic condition of the people who are occupying these low income plots. A sample was taken as explained in table 5 and the residents were selected randomly for the interviews.

Sample was collected from the different income zones using the following formula having accuracy ninety percent:

$$\text{Sample Size Formula} = n = N / (1 + Ne^2)$$

Table 1: Sample size which we collected in different 2 zones

Income zones	Total Count	Sample Collected
Group A (High income)	161	60
Group B (Middle income)	34	34
Group C (Low income)	6	6

Note: Full sample from group B and C are taken in order enhance accuracy, because minimum samples are very low (e = margin of error, 0.1 percent)

Table 2: Numbers of collected plots of 1263 sq. meters and less.

Price Zone	Name of scheme	No. of colonized plots	No. of colonized plots of 126.3 sq. meters and less	Price per 25 sq. meters (in millions)	
High Price	Eden garden executive	140	68	0.45	
	Eden valley ph2	170	72	0.4	
	Rs. 0.3 to 0.45 Millions	Imail city	15	6	0.35
	Model city extension	85	15	0.35	
Medium Price	Umar garden	Nil	Nil	0.4	
	City villas	Nil	Nil	0.3	
	Nazim abad city	98	25	0.3	
Rs. 0.2 to 0.3 Millions	Motorway valley	5	3	0.25	
	Gulberg valley	14	5	0.3	
	Eden life alfa farms	Nil	Nil	0.3	
Low Price	Jawad town	Nil	Nil	0.2	
	Maran town	Nil	Nil	0.2	
	M. Ali housing scheme	Nil	Nil	0.2	
Up to Rs. 0.2 Millions	Rahman town	Nil	Nil	0.2	
	Rahman village(ext)	15	6	0.2	

: Field survey, 2015

The private housing schemes rules 2005 were silent

about the provision of low income plots. The matter was addressed in “Punjab Private Housing Schemes and Land Subdivision Rules 2010” by providing mandatory 20 % plots (up to 126.3 sq. meter). However, these plots remained unapproachable for low income in schemes approved under *ibid* rules. The research work has been done in order to evaluate the functionality of 20 % (up to 126.3 sq. meter) plots in real terms.

Defining affordable housing

Household income is considered as the primary factor for affordable housing. Percentage income of household is seen as the most usual method for the housing costs i.e **USA and Canada** use guidelines that say housing costs not crossing 30% of household income as housing affordability criteria. These laws include owner insurance, taxation system and amenities costs. Thus, housing price is considered as unreasonable if the monthly cost surpass 30-35% of the household income [2]

- Malaysia

Low income housing in Malaysia worries both the central and provincial administrations. Firstly, central bodies set strategies and tactics, marks, outline certifying and implementation rules and lead monetary organizations. Secondly, provincial and local establishments do corporeal planning and housing reserves. Local establishments need all housing enlargements to have their strategies and service networks permitted. 800,000 houses were premeditated for building under 7th Malaysian Plan but constructed only 350,000; the accomplishment is comparatively low in private and public sectors. However, building of medium and high-cost accommodation by private sector has attained 187% and 435% respectively of the aimed units. This condition produced the excess of lodging stock for both groups in 1997-2000. [3]

Definition of low income

As per “PPHS&LS Rules 2010,s definition of low income, person as one earning salary of Rs 15,000 or less per month.

Role of government in provision of low income housing

Usually poor people cannot meet their household need on the open market. Therefore, government plays a strong role in the housing delivery system, even in developed countries.

In general, Government can play four types of roles in housing delivery market:

- a) An allocate role: to intervening in the allocate function of the market to improve efficiency.
- b) A distributive role: as we know market-based distribution usually may not achieve equity, so in order to achieve distribution of outcomes in align form, government may use equity principles.
- c) A stabilization role: Stabilization of market can be done through different initiatives and policies by the government.

5. PRIVATE SECTOR APPROACH TO AFFORDABLE HOUSING

Previous periods have seen marvelous changes in housing strategies in emerging countries. Beforehand, it was expected that administrations had to play the crucial role in the delivery of accommodation, and access to enhanced accommodation, predominantly for the poor, was its duty.

The Communal accommodation schemes regularly confronted a great letdown. The foremost criticizer was that the housing didn’t aim for the underserved inhabitants. Because of inadequate assets with government sector, it became problematic for administration in many nations to endure the expansion of other housing schemes. In 1970s, the public housing schemes were substituted by slum improvement developments and sites and services schemes.

The Government sector failed to perform well in three areas in many nations. First, public participation had been a big disappointment; it had been incompetent and ill-conceived. Administrations were abusing their influences and assets as the public housing was planned and situated ill, it did not deliver access to low-income persons and didn’t deliver any apparatus in making their expenditures more supple and easy. Second, straight government participation in housing manufacture had been insignificant in difference with the housing supplied by the informal sector. The government role was inadequate in delivering of affordable accommodation. Lastly, administration contribution in markets was not productive. The guidelines are impractical and too expensive and the straight bureaucratic immersion in low-cost housing is severe. In many republics the building guidelines for land-use and expansion are the chief obstacles to effective housing provision. [4]

Introduction of Punjab private housing schemes rules

The urban areas develop through largely unplanned way. But, when it is time to provide basics services, then, growth of planned housing schemes has benefit of both mitigating the housing shortage as well as ensuring physical and social infrastructure. FDA regulates all sorts of development activities within the controlled area of Faisalabad. [5]

- Punjab private site development schemes (Regulation) Rules, 2005

In order to streamline the work, and to upgrade the provided infrastructure facilities, Punjab government promulgated above said rules under which the planning standards of scheme were given. But there was nothing for low income people in these rules. Therefore all the schemes which got approved by FDA and developed under these were for high or high middle income because they provided bigger size plots more than 126.3 sq. meters as per their discretion.

- Punjab Private Housing Scheme and Land Sub-Division Rules 2010

In order to address the shortcoming of the 2005 rules and by exercising of powers conferred by section 192 of the Punjab Development of Cities Act, 1976(XIX of 1976),

the Government of the Punjab made these rules. In these rules: government defined low income as Under clause 10(2)(j) where 20 % of the plots in a housing scheme shall be allocated for plots up to 126.3 sq. meter's for low income group

- *Development and Monitoring*

In the 2010rules, there is no mechanism defined on how these low income plots would actually be occupied by the real end user. Moreover no method of verification of incomes of these buyers is defined. Furthermore, FDA has also not adopted any mechanism in this regard. The notion was based on a mere assumption that 20% plots up to 126.3481would be occupied by low income only by the provision put in place.

- *Housing schemes approved under "PPHS & LS rules, 2010" By Fda*

After amendments in 2010 Rules, development authorities are solely entitled for the process/ approval of Private housing scheme in whole district. Previously, a town whose boundary came outside the FDA limits was also exercising this power. All the data of the housing schemes approved under 2010 Rules is compiled in the preview of low income plots. As per FDA, total 15 No of scheme have been approved under Punjab Private Housing Scheme rules, 2010.as shown in table 3.5. Table 3.6 compares the data on schemes approved under PPHS&LS Rules 2010 with that of number of schemes approved under "Punjab private housing and site development schemes 2005".

Table 3: Comparison of provision of low income plots under 2005 and 2010 rules

Sr. No.	Category	During 2005-2010 under 2005 Rules In 19 PHSs	Percentage w.r.t. to total no. of plots	During 2010-2015 Under PHS&LS Rules 2010 in 15 PHSs	Percentage w.r.t. to total no. of plots
1	Total no. of plots	6653	-	5379	-
2	No. of 126.3 sq meters plots	1063	16	1460	24.8
3	No. of 114 sq meters plots	Nil	-	67	1.1
4	No. of 101 sq meters plots	283	4.2	169	2.8
5	No. of 76 sq. meters plots	92	1.4	46	1
6	No. of 63 sq. meters plots	Nil	-	767	13
Overall Percentage of low income plots w.r.t total no. of plots			21.6		42.6

isalabad Development Authority

It is clear from the above tables that:

- The average provision of low income plots (up to 126.3 sq. meter) under 2005 Rules during 2005-10 has been 22 % (as required under 2010 Rules)
- The developer generally preferred to provide plots of more 126.3 sq. meter as compared to plots of less than 126.3 sq. meter in size, and
- After 2010 Rules, overall provision of low income plots (up to 126.3 sq. meters) has increased but in the form of 126.3 sq. meter plot not under 126.3 sq. meter plot category.

In particular, data about detail of the schemes where colonization started and development work completed under these rules was been collected and analyzed. Secondary data in this regard was collected from the

FDA and city district government Faisalabad.

Table 4: Comparison between total numbers of 1263 sq. meters plots and less than 2163 sq. meters plots

Sr. No.	Name of scheme	Total no of plots	No. of 126.3 sq. meters plots	No. of less than 126.3 sq. meters plots				Total 126.3 sq. meters and <126.3 sq. meters plots (Percentage w.r.t to total no. Of plots)
				114 sq. meter	101 sq. meter	76 sq. meter	63 sq. meter	
1	Eden garden	180	98	-	-	-	-	98 (55)
2	City villas	610	32	23	2	-	-	25 (20)
3	Eden valley ph2	483	238	-	-	-	-	322 (67)
4	Aflah farms	382	89	-	-	-	-	89 (23)
5	Gulberg valley	310	117	-	26	-	-	143 (46)
6	Ismail city	554	133	19	-	8	-	160 (29)
7	Jawad town	900	65	-	-	-	767	830 (96)
8	Mannan town	406	113	-	-	38	-	151 (37)
9	Model city(ext)	431	215	-	-	-	-	215 (49)
10	Motorway valley	338	38	7	-	-	-	45 (23)
11	M. ali housing	438	160	-	18	-	-	178 (52)
12	Nazimabad city	390	15	-	123	-	-	138 (35)
13	Rehman town	140	33	-	-	-	-	33 (23)
14	Rehman village(ext)	232	94	18	-	-	-	112 (54)
15	Unsar garden	85	22	-	-	-	-	22 (27)
Total		5879	1460	67	169	46	767	1049 2871 (44)

Source: Faisalabad Development Authority

Table 5: Comparison of 1263 sq. meters or less than 2163 sq. meters plot against total low income plots

Sr. No.	Name of scheme	Percentage of Low Income Plots Provided Against 20 % Requirement)	Percentage of 126.3 sq. meters Plots Against Total Low Income Plots Provided	Percentage of 126.3 sq. meters Plots Against Total Low Income Plots Provided
1	Eden garden	55	100	0
2	City villas	20	57	43
3	Eden valley ph2	67	100	0
4	Aflah farms	23	100	0
5	Gulberg valley	49	82	18
6	Ismail city	29	83	17
7	Jawad town	96	8	92
8	Mannan town	20	57	43
9	Model city(ext)	49	100	0
10	Motorway valley	23	85	15
11	M. ali housing	52	90	10
12	Nazimabad city	35	11	89
13	Rehman town	23	100	0
14	Rehman village(ext)	54	84	16
15	Unsar garden	27	100	0

Source: Faisalabad Development Authority

Views of concerned officials of Fda/City district government / town municipal administration

- *Definition of low income*

As per the survey results, most of the officials of the CDGF /FDA and TMA agreed with the PHS Rules 2010's definition of low income person as one earning salary of Rs. 15,000 or less per month. They also defined low income in terms of affording plots of 76 sq. meter with the price of 60-80 thousand per 25.2 sq meter. Other criterion such as living standard may also be used to define a low income family group.

- *Issues concerning size of plot affordable to low income with respect to location*

Interviews with concerned officials revealed that all the officials of the concerned agencies agreed to the extent of provision and fulfillment of 20% plots for low income in private housing schemes. However, they disagreed that the plots of 126.3 sq. meter in the schemes falling in the jurisdiction of FDA meet the affordability criteria of low income groups. According to them, PPHS & LS Rules 2010 state that the 20% quota of plots is reserved for low income people but no mechanism for follow up has been explained in the Rules as to how actually these plots would be occupied by the target group. Officials were of the view that the provision of the plots of 126.3 sq. meter for low income group does not reflect the actual affordability status of the subject group. They also told that, there are locations within

FDA jurisdiction where private housing schemes, if developed, can still offer plots affordable to low income people. For example, along Samundri Road near Dijkot, Satiana Road outward bye-Pass near Awanwala, Jaranwala Road near 209/RB Phatak, Narwala Road near Sultan Town Sadhar bye-pass, Chakera road near chakera village and jhumra road near gatti grid power, because all these localities are relatively away from city center and located at less developed area.

- Views about condition to provide 20% small sized plots in a scheme

As per officials, the condition for private developer to provide 20% small sized plots in a scheme is not enough to meet low income housing need. The notion could be substantiated by the fact that most of the plots reserved for low income group are often purchased by middle and high middle income people. According to them, the minimum size of the plots reserved for low income group should be 76 sq. meter having 10-15% in total provision. Furthermore, it was revealed during the interviews with concerned officials that no incentives have been offered to developers for providing upto 126.3 sq. meter plots more than the reserved share of 20%. The incentive can be provided by reducing the road width from 30' to 20'-25' to lower down the charm for middle and higher middle income groups. The approval fee may also be subsidized or exempted from such blocks reserved for low income or government may provide land on subsidized rates.

- Views Regarding "Punjab Private Housing Scheme and Land Subdivision Rules 2010"

According to FDA officials, fifteen private housing schemes have been approved under the PPHS& LS Rules 2010 to date. Upon the question of implementing the 2010 Rules in letter and spirit with respect to fulfilling the housing needs of low income groups, the officials agreed that little has been achieved in implementing the said Rules. The major cause attributed to this dismal objectivity is the absence of follow up mechanisms. All agreed to the need of making changes in 2010 Rules and to define follow up mechanism for ensuring that these plots reach to the prescribed end users.

It is interesting to note that no concerns have been reported from private developers regarding the provisions of 2010 Rules pertaining to low income groups, because it suits them to provide these plots from business point of view. The officials were even of the view that 2010 Rules have positive effect on development of private housing schemes, standard of living. Because of the implementation of these 2010 Rules, people are getting provision of utility and public services at the door step.

- Views concerning attitude of developers toward provision of low income plots

All the officials agreed that private developers feel no hesitation in providing 20% plots of 126.3 sq meter size in their schemes because they are bound to follow the prevailing Rules as it is also encouraging in terms of market trends and demand. However, it is revealed from the analysis that private developers feel hesitation in

providing 20% plots of less than 126.3 sq. meter like 3 or 2.126.3 sq. meter in their schemes as it will increase their development cost. In addition, they feel that the plot prices as well as overall environment of scheme will be disturbed from the perspective of market demand.

- Views regarding enforcement of specific conditions in Rules related to 20% low income plots

Interviews with concerned officials also revealed that concerned agencies have failed to ensure that low income plots of 76 -126.3 sq. meter as provided in the private scheme to meet 20% condition are sold out only to low income people. This is happening, because in the 2010 Rules, there is no enforcement mechanism. Moreover, during research it was also observed that the condition regarding further selling the low income plot after 5 years expiry can help bringing the prices of low income plots under control. However no such condition is being followed in reality.

Private developer's also hesitate to recover the payment in respect of plots reserved for low income people in equal monthly installments over a period of one year because procedure for the same has not been defined. And authority is bound to follow the rules. It is saddening to know that the concerned organizations have no record of the socio-economic status of people who have bought 20% plots reserved for low income people in already approved private housing schemes because rules are silent about it.

- Views on constructed houses on 76 -126.3 sq. meter plots

It was noticed during the field visits that no developer provided constructed 76 -126.3 sq. meter houses. In one or two schemes, independent investors have provided few strips of model houses but solely for profit. As far as building plan is concerned, all the developers or individual owner/investor obtained approval of house plans of model houses from concerned Department.

All the interviewed officials agreed that these model houses are not affordable to low income people because these have been provided just to kick start the business and to excel the market demand. Selling constructed houses on 76 - 126.3 sq. meter plots has contributed to further increase in the prices of plots in general in private housing schemes because it increases the value of land as well. No mechanism regarding type of construction/minimum total covered area (to make it less attractive for high or middle income groups) has been defined in the 2010 rules. Table 4.1 presents data on views of concerned officials regarding suggestions for mechanism to ensure low income plots really go to low income groups.

Views of developers of private housing schemes

- Definition of low income

During the survey, it was noticed that 8 out of 15 developers categorically disagreed with the 2010 Rules regarding low income definition. 3 out of 15 were ignorant of this clause in terms of monetary value defined in the rules and 4 responded as "yes" as one earning salary of Rs. 15,000 or less per month.

Table 6: Difference of opinion / views

Sr No	Views/Opinion	Frequency
1	Agreed	4
2	Disagreed	8
3	Indifferent	3
Total		15

Source: Field survey, 2015

Table 7: Reasons for disagreeing with definition of Low Income

Sr.No	Reasons	Cumulative Response	Percentage of Response
1	Ra. 15000 per month income is too less these days	7	58
2	It's hard to manage even bread and butter with this much income for a poor family	5	42
Total		12	100

Source: Field survey, 2015

- Views Regarding Punjab Private Housing Scheme Rules 2010

Developers agreed with the condition of provision of 20% small size plots as per 2010 Rules because it matches land market demand and trends. Similarly the developers agreed that by implementing the 2010 Rules in letter and spirit, the housing needs of low income groups can be fulfilled. However some developers showed partial concern regarding it, stating that these rules are unable to address the needs of low income people effectively.

- Views concerning plots up to 126.3 sq. meter

According to the interviewed developers, higher demand is of 126.3 sq. meter plots as compared to 76 sq. meter plots. This view point was supported by the fact that almost all the developers provided more than 20 % of low income plots in their recent housing schemes approved under 2010 rules. The reasons they offered for providing 126.3 sq. meter plots in greater numbers than the required percentage are presented in the following table.

Table 8: Reasons for providing low income plots over and above 20% requirement under P PHS&LS Rules 2010

Sr.No	Reasons	Cumulative Response	Percentage of Response
1	Easy to sell as compared to bigger size plot, and it generate pay back capital earlier	13	33%
2	More Profitable relative to bigger sized plot	7	18%
3	Helps boost the overall pace of sale/purchase of plots in the scheme	5	13%
4	It meets the market demand	8	20%
5	It gets quickly colonized as compared to bigger sized plot	6	16%
Total		39	100%

Source: Field survey, 2015

As far as prices of the plots are concerned, every developer gave different view point. For example, it depends upon the location of the scheme, quality of development work, and the market trend. It was also revealed that there is no difference in price or discounted rate for low income plots of 76 -126.3 sq. meters, as compared with other bigger sized residential plots offered by the developer in a scheme. All the low income plots are being sold on market rates. It was also noticed that in few schemes generally the price of 126.3 sq. meter plots is slightly higher than the other bigger size plots in the schemes. This phenomenon is usually due to the higher demands for 126.3 sq. meter plots, as these are mostly occupied by the middle or higher middle income

groups. Furthermore, there is no bar on developer either on part of FDA or any requirement under the 2010 Rules regarding fixing the price for plots of various sizes.

Table 9: Have you provided less than 1263 sq. meters plots as compared with 1263 sq. meters plots in your scheme to meet 20% requirement

Opinion	Frequency
Yes	7
No	8

Source: Filed survey, 2005

Table 10: Reasons for not providing less than 1263 sq. meters plots for low income more as compared to 1360 sq. feet plots to meet 20% requirement under PPHS&LS Rules 2010

Sr No	Why/ Reasons	Cumulative Response	Percentage of Response
1	It is less profitable, not as per market trends	8	21
2	Less than 126.3 sq. meters plots cause negative impact on sale/purchase of plots in scheme	8	21
3	Increase development cost	6	16
4	It is not mandatory to provide less than 126.3 sq. meters sized plots and in this context law is flexible	5	13
5	Low quality house construction on such plots by poor create poor outlook of scheme	5	13
6	Such sized plots take much longer to be colonized relative to 3M sized plot because poor delay in construction	6	16
Total		38	100

Source: Field survey, 2015

Developers agreed with the condition of provision of 20% small size plots as per 2010 Rules because it matches land market demand and trends. Similarly the developers agreed that by implementing the 2010 Rules in letter and spirit, the housing needs of low income groups can be fulfilled. However some developers showed partial concern regarding it, stating that these rules are unable to address the needs of low income people effectively.

Table 11: Reasons for satisfaction with provision of 20% low income plots requirement in 2010 Rules

Sr No	Satisfied Reasons	Cumulative Response	Percentage of Response
1	Easy to sell such plots relative to bigger sized plots, and help getting quick return on investment	13	36
2	More Profitable relative to plots of other sizes	7	20
3	Give boost to sale/purchase of plots in scheme overall	5	14
4	It matches with purchasing power of people	8	22
5	Quickly colonized relative to bigger sized plots	6	17
Total		39	100

Source: Field survey, 2015

Views regarding enforcement of specific conditions in Rules related to 20% low income plots

All the developers said that they have not adopted any mechanism to ensure that low income plots (up to 126.3 sq. meter) provided in the private scheme to meet 20% condition are sold out only to low income people, because they are disinterested in it, and also because the 2010 rules are silent about it. In reply to a question, whether they adopted any mechanism to ensure that the condition regarding not to sell the low income plot before 5 years expiry is being followed, all the developer said, it is government's role to mortgage these plots for 5 years or to ban sale purchase of such plots in the revenue record. Therefore, they showed no interest in implementing any such condition on their part.

General views of residents

The survey was conducted for interviewing the households living in the private housing schemes approved under the 2010 Rules. To select the schemes a reconnaissance and colonization survey was conducted to know the ground reality. 8 out of 15 schemes were new and recently approved and that's why their colonization was almost zero. And in many schemes, development work was undergoing or had just completed. It was revealed that all the new houses were approved by the respective authority and built with minor deviation from the plan. However their constructed heights/stories were as per byelaws (i.e. 38 feet height, three stories). Similarly, most of residents shifted in these schemes about one or two years ago, and thus not enough time has passed since the approval of their respective house plans. Most of the residents shifted there (e.g. new Nazimabad city) from the adjoining established built up areas which were less developed in terms of infrastructural facilities (Area around clock tower). Few residents were also living there on rental basis.

- Socio-economic profile

To know about socio economic profile, the version of almost every household was similar. The household size was around 6-7 having 1- 2 earning member.

Table 12: Total no of households

Number of Household	No of Respondents		
	High	Middle	Low
1	45	22	4
2	13	11	2
3 or More	2	1	0
Total	60	34	6

Source: Field survey, 2015

Table 13: Monthly income of selected residents of PHSs with respect to land price zones

Monthly income	No of Respondents		
	High	Middle	Low
Up- to 10000	1	2	1
10000-15000	3	3	1
15000-20000	7	4	2
20000-30000	11	9	2
30000-50000	28	14	-
50000-100000	6	2	-
Above 100000	4	-	-
Total	60	34	6

Source: Field survey, 2015

Almost majority of the households were reluctant to reveal their monthly income and expenditure. The residents of Eden Garden and Nizimabad city were in good economic position in terms of household assets (i.e. Possessing A.C, cars, landline telephone connection, and other services)

Table 14: In which form you made the payment at the time of purchasing the plot constructed house?

Nature of Payment	No of respondents		
	High	Middle	Low
In lump sum	36	29	5
In installments '2-3-phases	4	5	1
Total	60	34	6

Source: Field survey, 2015

-Views on definition of low income

Most of the residents were ignorant of this definition,

but after the briefing, they agreed with the definition of the PHS&LS Rules 2010 i.e. a low income person is one earning salary of Rs. 15,000 or less per month. However, some were of the view that considering salaries only will not help in determining low income group and other things like living standard and availability of other social services should also be considered to make a multi-dimensional criteria rather than a linear one.

Table 15: Opinion regarding definition of low income (earning Rs. 15,000/months)

Opinion	No of Respondents		
	High	Middle	Low
Agree	29	22	5
Disagree	26	10	1
Indifferent	5	2	-
Total	60	34	6

Source: Field survey, 2015

Table 16: Opinion regarding low income in terms of monetary value

Range	No of Respondents		
	High	Middle	Low
up to 15000Rs	19	10	2
up to 20000Rs	27	15	3
up to 30000Rs or more	14	9	1
Total	60	34	6

Source: Field survey, 2015

Table 17: Opinion regarding low income in terms of Affordable plot size

Affordable plot size	No of Respondents		
	High	Middle	Low
63 sq. meter	9	4	1
76 sq. meter	36	20	4
101 sq. meter	9	5	1
126.3 sq. meter	6	5	0
Total	60	34	6

Source: Field survey, 2015

Table 18: Opinion regarding per 25 sq. meters price of plot affordable by low income groups

Affordable Price/ 25sq. meters	No of Respondents		
	High	Middle	Low
40000 - 60000	16	11	2
60000 - 80000	24	14	3
80000 - 100000	9	6	1
100000- 120000	8	3	-
120000 and above	3	-	-
Total	60	34	6

Source: Field survey, 2015

Table 19: Opinion regarding 1263 sq. meters plots, whether these are affordable to low income people or not?

Opinion	No of Respondents		
	High	Middle	Low
Agreed	12	7	2
Disagreed	48	27	4
Total	60	34	6

Source: Field survey, 2015

6. CONCLUSIONS

Analysis of the data presented in previous chapters has led to draw the following conclusions:

- The average provision of low income plots (up to 126.3 sq. meter) in a housing scheme under 2005 Rules during the era 2005-10 were 22 %, which is more than the requirement of the rules 2010(20 %). This shows that in 2010 rules, no rational attention was given to the low income groups and plot size limits and percentages were

fixed mechanically

- The analysis of data shows that the developers generally preferred to provide more number of 126.3 plots rather than plots of less than 126.3 sq. meter in schemes approved under 2005 Rules (when there was no requirement of specific size for low income)

- All the schemes approved so far under Punjab Private Housing Schemes and Land Subdivision Rules 2010 in Faisalabad have met the condition of 20% (up to 126.3 sq. meters) for low income people.

- Generally, developers have provided low income plots over and above the required number (20% of total plots up to 126.3 sq. meters) because of greater market demand.

- A comparison of data on provision of low income plots before (2005 Rules) and after 2010 Rules shows a positive impact since it ensured enhanced supply of low income plots. But no significant change in previous trend to provide less than 126.3 sq. meter plots has been noticed after the promulgation of 2010 Rules.

- Developers are reluctant to provide plots of less than 126.3 sq. meters to meet 20% requirement because these are considered less profitable, and not suitable as per market trends. Since they think that it will denigrate their trademark whereas the fact remains that plots of 2.5 to 76 sq. meters are most likely to be affordable to low income groups.

- No mechanism has been defined in byelaws or prescribed by concerned agencies or being followed by developers to ensure that low income plots would go in the hands of low income people. Furthermore, there is no provision in the 2010 Rules about ensuring differences in prices of low income versus high income plots.

- Majority of residents living in houses constructed on low income plots belong to middle or higher middle income groups.

- Stakeholders generally disagree with the definition of low income as given in 2010 Rules, but agreed that less than 76 sq. meter plots are possibly be affordable to low income groups. Furthermore, if the schemes are developed at locations where high or middle income people have low interest, it can help provision of plots to low income people

7. RECOMMENDATIONS

In view of the conclusions drawn above, the following recommendations are made:

- Since up to 76 sq. meter sized plots are suitable for low income instead of 126.3 sq. meters, this category may be included specifically in rules and 10-15 % plots (up to 76 sq. meters) may be fixed for low income.

- In order to ensure that up to 76 sq. meter plots are less attractive to middle income groups, the road width of the blocks comprising such plots should be fixed 20

feet, along with provision to increase in coverage and FAR of plot size.

- Low income plots may be handed over to controlling authority i.e. FDA to allot these plots to deserving low income people verified by social welfare department, union council and Baitulmaal. FDA may collect the money from the allottees in installments may be over a period of 5 – 7 year and same may be handed over to developer.

- Half of the prescribed low income plots may be allotted on quota basis (widow, destitute, poor) and these plots may be marked on the lay out plan and may be allotted jointly by a team of officials from FDA, Baitulmaal, and Revenue Department.

- Developers may be given incentives like fee exemption in approval fee, tax rebates on profit etc. for providing most of up to 76 sq. meter plots.

- First transfer may be done subject to the completion certificate issued by competent authority (like in Punjab Housing and Town planning Agency) and building period fee may be increased after 5 year proportionately.

- Approval of building plan should also be done by the same authority granting approval of schemes (so as to stop irregularities not only about approval of house plans but concerning schemes plan).

- FDA should launch housing schemes under public private partnership mainly for low income people at locations where land values are still comparatively low, and are less attractive for the Middle or high income people.(e.g. chakera road, millat road, jhumra road, near Gatti, jhang road, near sadhar by pass, satiana road near khanuana).

REFERENCES

- [1] City Government Faisalabad. Accessed online at <http://www.faisalabad.gov.pk/Home/CityProfileDetail/3>
- [2] Wikipedia, Affordable Housing Accessed online at https://en.wikipedia.org/wiki/Affordable_housing
- [3] Shuid. S. (2003), Low Medium Cost Housing In Malaysia: Issues And Challenges, Department of Urban and Regional Planning Kulliyah of Architecture and Environmental Design International Islamic University Malaysia. Available from http://www.iut.nu/Malaysia_low%20cost%20housing.pdf.
- [4] Gupta, K.R. (ed) (2005), Urban Development debates in the new millennium: Studies in revised theories and redefined praxes: Atlantic Publisher.
- [5] Siddiq. M. (1994). Evaluation of approved private sites and services schemes in Faisalabad. Master's Thesis.City and Regional Planning, University of Engineering and Technology, Lahore.