



RESEARCH PAPER

Beneficiary Expectation from Low-Income Housing Projects: A Post-Occupancy Evaluation Study from Punjab, Pakistan

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ABSTRACT

The Pakistani government has been promoting affordable housing projects for low-income households for the last thirty years. It is important to appraise the low-income housing projects from the perceptions of beneficiaries being the ultimate users of such facilities in urban settings. This paper presents an analytical study on the experiences of beneficiaries from the application process to possession of housing units in two different models of affordable housing in the Punjab region, Pakistan. It is challenging to link their experiences as post occupancy evaluation (POE) regarding the application process, living experience, and governance of such housing projects. Analysis was done using inductive reasoning by data collection through focus group discussions. The findings show and confirm that quality of life in a low-income housing environment is a combination of multiple factors which influence the mind of households from the inception of projects till the possession and continue in the post-occupancy phase as well. The funding and execution of projects need to consider the end user demand by the inclusion of targeted beneficiaries in the planning, design, and regulation of the housing projects to ensure the resident's housing satisfaction in terms of provision of all allied facilities, infrastructure, experience, and quality of living.

Keywords: Beneficiaries, Low-Income Housing, Pakistan, Post Occupancy Evaluation, Punjab

Introduction

Low-income households strive to obtain the necessary resources for state-provided housing, and it has been the focus of many evaluation-focused studies (Husock, 2000; Rigatti, 2000). Concerted efforts from the public and private sectors are required to keep pace with the growing demand for urban housing, especially for low-income groups (Sivam & Karuppanan, 2002). Yau (2006) argued that indefensible buildings with poor workmanship and low-quality materials lead to building deterioration and poor aesthetical performance. Pakistan is driven by underlying complex frameworks of social life and the mindsets of the beneficiaries, making it difficult to understand the delivery of affordable housing (Malik & Roosli, 2022). The government of Pakistan is unable to meet housing requirements due to rapid urbanization and uncontrolled population growth over the past few decades. Available affordable housing developments either are too expensive for low-income households or are built on the periphery of the major cities (Jalal, 2019). The underperforming housing sector of Pakistan has produced speculation among the public that the state government has launched affordable housing programs only to showcase social empathy at a grassroots level rather than to improve the livelihoods of low-income groups (Malik et al, 2020). To keep pace with rapidly increasing urban growth, Zafar, Waheed, & Javaid, (2019) stressed that government must immediately prefer affordable housing projects to be located near work locations of low-income people to stop the emergence of squatter settlements in the future. This study presents the comparative analysis of low-income housing projects in urban Punjab, from two different cities i.e., Lahore as the capital and Faisalabad as the secondary city. The nature of the project varies in the housing provision model, one uses the conventional model (the government owns the land and private companies build it) and the other is the cross-subsidy model. The objective

is to determine the gaps in success factors of low-income housing projects that refrain from setting the sustainable model for implementing affordable projects for low-income groups in Pakistan. Also, post-occupancy studies of housing projects have limited scope in Punjab. The objective is to determine a significant framework from the beneficiary perceptions leading to sustainable low-income housing meeting its end users' expectations and satisfaction. Following, the study framework could be implemented in other developing countries as well. The combination of POE covering the social, economic, physical, and environmental domains could assess more complex realities about the existing and ideally expected residential units from the housing providers.

Literature Review

Socio-economic policy objectives could be easily achieved by the provision of decent and quality affordable housing as a fundamental need for all human beings (Shaikh, 2016; Anacker, 2019). A well-design housing project includes all functional, aesthetic, social, and economic aspects, giving the beneficiaries more than what has been requested with limited resources (Ilesanmi, 2010). This is because residential buildings are planned and constructed based on specifications set by government authorities, involving professionals and experts from diverse areas. Those experts are supposed to know more about end-user needs and expectations, but mostly it has been seen that those standards and specifications are not true reflections of changing needs and expectations of beneficiaries (Ziama, & Li, 2018). User satisfaction can be enhanced by doing extensive POE studies by exploring the beneficiaries' experiences through exploring and understanding user needs, hopes, and aspirations.

POE is defined as a systematic process for the assessment of housing effectiveness by determining user satisfaction after the beneficiaries have adjusted to the building (Preiser et al. 2015). A broad range of diverse indicators is included in conducting POE studies including user satisfaction, building performance, and energy consumption patterns (RIBA, 2017 a, b). The operational performance of buildings is a measure of multiple factors including feedback from the project team for planning and construction stages; end-user experience after occupancy on finishes and functional performance; technical feedback for building systems; and overview of data through integration from the above-mentioned evaluation phases (Roberts et al, 2019). POE surveys can provide important lessons in determining user satisfaction regarding their living experiences in low-income housing projects by study of key parameters. Such lessons can help the governments in developing countries solve the existing problems lying in the planning process of affordable housing programs even getting funds from international donors (Sinha et al. 2017). To achieve urban sustainability, it is important to plan and run affordable housing programs in a successful manner, especially in developing countries.

Many multi-dimensional sets of indicators have been used to assess affordable housing and its sustainability (Sharafeddin, Arocho, & Anderson, 2019). Indicators of POE have been associated with the sustainability of affordable housing projects for low-income groups in the context of social, economic, and environmental contexts (Blair et al. 2004, Ibem & Azuh, 2011; Pullen et al. 2010). Previous studies like Sharafeddin, A., Arocho, & Anderson, 2019) referred to studying the beneficiary perceptions from sustainability viewpoints covering social, environmental, and economic aspects. Sense of belonging on the community level, social connections, safety and security, public transport, and access to quality education are associated as indicators of social sustainability. Indicators for economic sustainability include income levels, efficient housing with convenience to get employment opportunities for residents, and housing maintenance costs. While environmental sustainability relates to the indoor environment of housing units, construction quality, green public spaces, and flexible and durable layout planning. Most of these indicators were studied and analyzed from the experiences of beneficiaries in this study.

Material and Methods

This study employs Focus group discussions as key the methodology of qualitative research. FGDs are guided and monitored by a researcher along with a moderator/facilitator to hold a group discussion on a particular topic for research purposes. Suggested criteria for using focus groups include a dedicated objective to explore a topic or to clarify, extend, qualify, or challenge data being studied through other methods (Gill et al, 2008). FGDs with the low-income community were conducted as an acknowledgment of the fact that most of the existing perceptions behind low-income housing projects are based on the viewpoints of market players, state departments, and authorities. Therefore, in the present study, the focus was kept on integrating beneficiaries' perceptions of such housing projects through their detailed perceptions regarding the experience of getting a low-income residential unit.

It is important to discover beneficiaries' perceptions regarding the low-income housing unit for documenting the pros and cons of the whole process from application to possession. The following key considerations provide insights into the selection process of two low-income housing projects (Table 1) to be investigated based on the:

- Housing unit size (3 Marla)
- Projects executed after in last decade (2010-2020)
- Variety in project ownership (public/private/social enterprise)
- Eligibility criteria (monthly installment)
- The location parameters to avoid differences in site locations of the project, i.e., within the city's periphery.

Table 1
Short Profile of Selected Public & Private Low-income Housing Projects

Low-Income Housing Schemes	Income criteria for Eligibility	Down Payment	House Category
Safia Homes (Social Enterprise) 2016-ongoing	Rs.10,000 – Rs 100,000 /month.	100, 000	3.6 Mala House
Ashiana Quaid Lahore (Public Sector) 2010-2016	Rs.20,000/month.	25 % percent of the total price	2 Marla & 3 Marla Houses

Note: The financial figures are mentioned in Pakistani Rupees (PKR)

Ashiana-e-Quaid Housing Project (AHP), Lahore, is the most prominent affordable housing project initiated by the Punjab Land Development Company (PLDC) in 2011 as a public sector project for low-income groups. This project underwent a lot of public criticism due to corruption and poor delivery of low-income housing units. A social enterprise named Ansaar Management Company (AMC), as an active stakeholder, launched Safia Homes in 2016, a low-income housing project in Faisalabad based on a cross-subsidy model. The distinctive characteristic of this project is the provision of a mortgage facility by Housing Building Finance Corporation (HBFC) to the beneficiaries as a financial partner of AMC. Safia Homes is offering low-cost houses of size 3.5 Marlas in different covered area ratios. After paying the down payment, immediate possession is another distinct feature of Safia Homes, followed by easy monthly installments. FGDs with beneficiaries of both selected low-income housing projects would help in picturing the context of low-income housing from an end-user perspective in terms of application eligibility and post-occupancy experience.

To maintain the confidentiality of involved participants, their identity was renamed as P1/P2 in both selected projects resulting in AHP-P1 for Lahore and SH-P1 for Faisalabad respectively. Participants' demographics were recorded in addition to questions asked in the engagement, exploration, and conclusion sections of the FGD questionnaire. The FGDs were first conducted with a public low-income housing project AHP in Lahore. It was done

intentionally to understand the main issues of public service delivery since categories revealed from the first phase of interviews placed government authorities to play a vital role in low-income housing provision. FGD with AHP beneficiaries was conducted in Feb 2020 during the second phase of the primary data collection. due to the restriction imposed by COVID 19 pandemic, the online mode was selected for conducting the 2nd FGD.

Results and Discussion

FGDs were conducted with AHP and Safia Homes residents to identify the operational loopholes from the perspective of beneficiaries. It was challenging to link their experiences regarding the application, project governance, and post-occupancy responses. The views and experiences of beneficiaries of low-income housing projects are discussed below.

Application Process- Perceptions and Experiences

Table 2
Application-Perceptions & Experiences

Properties	Scopes
Eligibility criteria & payment plan	Domicile restriction, salary, and financial analysis, monthly installment, down payment, housing unit cost
Application process	Income verification, dealing with Officials, rent-seeking culture, the legal guarantee
Motivation for Applying	Affordability, proximity to employment, shifting from another city, family size
Possession & Ownership	delayed construction, property transfer letter, speedy possession

Eligibility Criteria and Payment Plan

In the case of AHP, beneficiaries believed that eligibility criteria were not proper, referring to open domicile across Punjab. AHP-P2 shared that “due to inclusion of application from whole Punjab, people in Lahore near the project site didn’t get enough chance to apply.” AHP-P5 added that “the distribution of beneficiaries into 90% applications from Lahore and 10% from other cities of Punjab could be more suitable in this context.”

In terms of monthly income and loan payment period, beneficiaries felt that AHP wasn’t designed for low-income groups. AHP-P3 expressed that “the financial analysis conducted before project planning and execution didn’t prove to be realistic as the low-income groups couldn’t afford a house worth 1.4 million PKR.” AHP beneficiaries referred to LDA (Lahore Development Authority) by-laws in this regard. AHP-P4 shared that “according to LDA rules, low-income households earning PKR 25,000 per month, can’t manage to afford the down payment and installments for housing unit cost besides other mandatory family expenses.” AHP-P3 also shared similar thoughts over this matter.

All participants for AHP FGDs stressed that monthly installment was difficult for us to arrange and manage, while the mixed response was recorded in Safia homes (SH). SH-P1 disclosed that “it was easy and affordable to pay PKR 15,600 monthly”, and other participants agreed with this view too. While inquiring about down payment & housing costs, SH participants mentioned that “the plot size of the housing unit is 3.5 Marla and its costs are 1.65 million PKR hence not too much costly or economical.”

Application Process and dealing with Officials

AHP beneficiaries faced difficulties during the income verification process, which took around 6-8 months. AHP-P3 mentioned that “income verification was the most difficult

experience for me because my wife applied for AHP from Faisalabad and departmental procedure took one year to verify the authenticity of my application documents.” Other AHP participants also shared similar experiences regarding the application process. AHP-P4 shared that “I also faced difficulties in the verification process due to poor handling of applicant documentation by government authorities.” Dealing with PLDC officials was an again troublesome process for AHP beneficiaries. AHP-P2 shared that “officials didn’t provide a clear statement about the application status leaving us in desperate situations.” Furthermore, participants revealed insufficient trust in government officials and expressed that “most of the officials involved in the verification process were always asking bribe from us.” It confirms well the narratives of interviewees’ experiences regarding corruption culture in government authorities.

In the case of Safia Homes (SH), the experiences were different from the AHP beneficiaries. SH-P2 mentioned that shared that “the project team verified my income salary slips and identity documents efficiently for the application process.” One bad experience was noted by SH-P2, who didn’t own a bank account at the time of application. He shared his experience that “in my case, I had to provide a witness as a legal guarantee about my income.” Such issues of ‘undocumented economy’ were also highlighted as a significant constraint for the limited ability of low-income groups to avail mortgages for such housing projects by stakeholder interviewees.

AHP beneficiaries mentioned the constant change in the top management of PLDC, which again corresponded well with the stakeholder experience in government authorities. AHP-P4 said that “previously CEO and General Manager both were on additional charges and projects can’t be delivered under the supervision of higher officials with additional charges in Pakistan.” In the case of SAFIA homes, most participants praised the cooperative attitude of on-duty officials. SH-P3 shared that “it was a good and easy process even for less-educated applicants and sales managers cooperated with all applicants.”

Motivation for Applying

Financial affordability was the main feature that attracts the public to low-income housing projects. The participants were asked about their reason for applying for both projects, and multiple responses were recorded. In the case of AHP, one of the beneficiaries (AHP-P2) shared that “when this project was announced, the best thing I found about was the affordability factor in comparison to other ongoing housing projects.” Research participants of Safia Homes also showed the same thoughts in FGD. SH-P3 described that “affordability attracted us because PKR 14,000 per month was a manageable installment to get an owned house in current circumstances. Proximity to the workplace was identified in the case of AHP as a potential reason to apply for the project. AHP-P2 shared that “it’s near to my business, and I liked the project location too due to its connectivity with other parts of Lahore.”

In addition to this, shifting to Lahore from another city also bounced the urge to avail housing units at affordable rates. AHP-P4 shared that “at that time, I recently shifted from Harappa to Lahore for employment and wanted to live in an owned house rather than in a rented house.” It was also one of the reasons for SH beneficiaries. SH-P3 shared that “I had to shift my family from Karachi to Faisalabad where I was already working, Safia Homes was found to be a suitable housing scheme within reach of monthly income.” The increase in family size made SH-P1 opt for a housing unit in Safia Homes. He shared that “the society is near to my workplace as well as my family size increased; these were the potential reasons for applying here.”

Possession and Ownership

Interviewees of state stakeholders mentioned that due to political influence, the AHP project was delayed. Beneficiaries also discussed the issue that “the possession time too much extended due to delayed execution of the project.” AHP-P4 revealed that the “initial commitment was to give possession to beneficiaries within two years of down payment, but PLDC delivered the housing units after six years as houses were not constructed timely.” This issue of delayed possession was agreed upon by all FGD participants of AHP.

The experience was different from Safia Homes’ approach of providing possession after the down payment. SH-P2 shared that “I got possession within 25 days and was allotted a house in F block, which was the project’s initial development with only 5 or 6 constructed houses.” SH-P1 explained that “if the application process is smooth without any objections, then it is possible to get a house in a day just like in my case.” All participants admired the AMC mechanism of possession on down payment.

The issuance of a transfer letter of the housing unit brings relief to the beneficiary. In the case of AHP, due to the delayed distribution of this legal document, beneficiaries are still suffering. AHP-P4 shared that “according to PLDC terms and conditions, we were expected to receive the transfer letter in our names within five years, but this process has not been initiated yet.” Other participants (AHP-P2 and AHP-P5) also agreed and stressed by stating that “we didn’t get the registry of housing unit land and are not yet declared as owners of the housing unit we are living in.” This issue was not highlighted in the case of Safia Homes. One of the SH participants shared that “the housing unit will be transferred to us after completing the installment plan.”

Post-Occupancy Responses

Table 3
Post Occupancy Responses

Properties	Scopes
Comparison with previous living	Monthly, rent, physical environment, ownership status
House Plan	Site selection, built-up area, plot size, layout, outdoor space
Infrastructure and social facilities	Promises of facilities, natural gas unavailability, parks, hospital
Construction Quality	building materials, ceiling height, wall finishes

Comparison with Previous Living

The FGD participants of AHP and SH have lived in low-income housing schemes for more than three years. The relief from monthly rent emerged as a fundamental reason for to shift in current residential units in both cases. AHP-P3 shared that “the first thing while comparing previous and present lifestyle was the getting liberty from paying monthly rent.” Other AHP participants also added that “the main difference is that now we live in the owned house.”. Beneficiaries of Safia Homes also expressed similar thoughts as SH-P2 stated that “the only difference is the ownership status of the housing unit.”

Location was also highlighted as the main difference in the case of AHP as participants collectively mentioned that “proximity to Ring Road and posh housing society like Defence Housing Authority-DHA (Phase VIII) leaves a good mark on its location and accessibility from other parts of Lahore.” Residents admired the social environment in the case of Safia Homes. SH-P2 expressed that “every block in the society is like a family and parks provide a secure environment for children to play” (Figure 1). SH-P3 also shared that

“the community environment is excellent since it has a proper underground sewerage system with adequate provision of roads and parks.”



Figure 1: View of society park in Safia Homes, Faisalabad

House Plan and Covered Areas

Covered area & plot area ratios play an important role in housing unit layout planning. Initially, AHP was planned for 5 Marla Houses; however, it constructed 3 and 2 Marla housing units due to issues in site finalization. Such abrupt change in project planning was highlighted by AHP-P2 sharing that “housing unit prices even with small plot sizes were kept as the same decided price. It ultimately disappointed the beneficiaries planning for 5 Marla house.” In SAFIA homes, the size of plot area size was kept identical for all housing units. SH-P1 shared that “currently 100 houses are being constructed and all have the same plot size, i.e., 3.5 Marla.”

The design of the housing unit was not much appreciated by AHP as one of the participants shared that “the layout is congested and doesn’t reflect the housing needs of low-income groups as many of them don’t own cars.” AHP-P2 highlighted the wastage of space for the car park in 3 Marla. He argued that “car parking has wasted the outdoor space which could be better utilized by including it as part of covered indoor space” (Figure 2). As a collective opinion, AHP participants agreed that the housing units had not been planned well by efficient use of indoor and outdoor spaces.”



Figure 2: View of Parking space, covered by one of the participants in Ashiana Housing Project, Lahore (left: outside; right: inside view)

In the case of Safia Homes, three options of design were available over the same plot size. SH-P1 shared that “options vary based on rooms; however, the single-story housing unit was comprised of one, two, or three rooms. “Another perception was shared in terms of open space as in the case of Safia Homes. SH-P3 shared that “the front and back passages of housing unit are left six sq ft from the boundary wall and reducing it to 3ft could have enlarged the room sizes” (Figure 3). The placement of the kitchen within the housing unit was discussed in the case of Safia Homes. SH-P2 expressed that the “central location of the kitchen heats the bedrooms in the summer season, causing indoor environment quite uncomfortable while cooking the food” (Figure 4).



Figure 3: Kitchen placement in the center within the layout of a housing unit in Safia Homes, Faisalabad



Figure 4: View of sets from the front (left) and back (right) for housing units in Safia Homes, Faisalabad

Infrastructure and Social Facilities

The existing infrastructure was found to be limited in both projects. AHP-P3 and AHP-P4 shared that “for AHP, even former government of PMLN being the project initiator didn’t do any development project and promised facilities of infrastructure are not there.” AHP-P5 further mentioned that the “voltage of electric connectivity fluctuates every time causing the transformer to burn out once a month.” FGDs participants highlighted the non-availability of natural gas in both projects. AHP-P1 mentioned that “we use natural gas cylinders for cooking, and refilling these is itself a messing job.” In the case of Safia Homes, beneficiaries said that “major facilities like water and electricity are available, but there is a lack of natural gas connection.” Poor response to the Safia Homes project besides the house possession over down payment could be related to this issue. In this regard, SH-P3 shared that “post-occupancy experience made people realize that the facility of natural gas is a must for convenient living.” The social environment with the provision of parks is important for the well-being of low-income housing residents. AHP-P4 mentioned that “there are only two main parks with limited furniture and swings while the other small parks are poorly maintained” (Figure 5). However, the opposite response was observed in the case of Safia Homes as beneficiaries were satisfied with the management of parks and mentioned that “here, every block has its park of 1 Kanal which is sufficient for households of each block” (Figure 6).



Figure 5: View of Community park in Ashiana Housing Project (AHP), Lahore



Figure 6: View of Community park in Safia Homes, Faisalabad

In AHP, the water facility was disturbed due to the improper working of installed water tanks. AHP-P4 mentioned that “there are only two water tanks, out of which only one is operational and WASA sealed the other one due to non-payment of taxes since 1st July 2018.” In social amenities, AHP participants mentioned that promised facilities like banks, post office branches, and water filtration plants were not provided as per the society map. The hospital facility was also not observed in the case of Safia Homes. SH-P2 mentioned that “in time of medical emergency, residents have to travel long distances due to far-off location from the city centers around 19-22 Km from the city-center of Faisalabad.”

Construction Quality

The living experience of beneficiaries doesn't show the sincere efforts of the government authorities for AHP execution in terms of construction quality. AHP-P5 shared that “the walls are poorly constructed with less quantity of cement, and the soul pours out while hammering the wall” (Figure 7). Other participants also agreed to this and offered the researcher to touch the wall to experience.

Beneficiaries got the idea of poor construction during the site visit days of AHP construction. AHP-P5 shared that “we observed dry construction due to poor site supervision, no wonder why we have so many cracks on walls and ceilings.” In the case of Safia Homes, construction quality was also not found to be satisfactory. SH-P3 highlighted that “the low height of the ceiling shows the cost-cutting attitude of project owners towards the housing unit.” SH-P2 further added that “precast steel beams were used instead of reinforced concrete in ceilings, minimizing the room height and strength of the structure in the housing unit.”



Figure 7: Cracks on the wall in one of the houses, Ashiana Housing Project, Lahore

Regulatory framework

Table 4 Regulatory Framework

Properties	Scopes
Role of Site officers and community members	The staff of site office, delayed response to complaints, middle-man role, staff, elected community representative
Perceptions about state departments	Lack of planning and vision, intention to win elections, political projects, political victimization
Selling or Renting the houses	profit-making, agreement violation, false narratives

Role of Site Office and Community Members

In the case of both public and social enterprise low-income housing, site offices are putting up efforts for governing low-income projects to keep connections with community representatives and beneficiaries. AHP-P4 mentioned the staff in case of AHP as follows:

- One senior community member,
- Two-three clerks,
- seven gardeners and
- five sweepers and
- Four persons who collect the wastage are on a contract basis they give 45000 rupees to them,
- eight security guards and
- two office assistants.

In the case of AHP, community representatives were nominated through elections among the residents. AHP-P4 revealed that “I am serving this job since 2016 and communicated actively with the site office to resolve the community issues.” In SAFIA homes, there are eight blocks, and every block has its own BDC (Block Development Committee) as shared by SH-P2.

However, in both cases, participants felt that immediate actions are not being taken after making complaints at the site office. AHP-P3 revealed that “the officials take a long time to respond to our visits and phone calls for community-related issues.” In the case of Safia Homes, one of the participants shared that “even though community representatives are selected through own will, they are not much active in their assigned duties.”

In the case of AHP, the site office is working as the middleman between beneficiaries and PLDC. AHP-P5 shared that “the site office manages the communication between us and PLDC; also issues of electricity and water bills are supplied through PLDC.” For AHP, community charges are borne by residents to manage the expenses of cleaning and security services. AHP-P4 explained that “the community charges are 500/month for 3 Marlas and 400/month for 2 Marlas to pay the service charges including the salary of sweepers, security guards, streetlight bills, tube well expenses and salary of Masjid Imam.”

Perceptions about Government Departments

This property is mainly linked with AHP beneficiaries' experiences due to its affiliation with the government department, i.e., PLDC. Beneficiaries of AHP revealed the associated issues of governance with the constrained capacity of the government sector, which was highlighted as a prominent barrier to collaboration mentioned by interviewees. AHP-P3 expressed that “government housing departments lack planning for dealing with issues of housing provision for low-income groups.”

The political motive is the main factor for announcing such initiatives for low-income housing provision. AHP-P5 shared that “AHP was the strategic move by PMLN to win the 2013 national elections, no doubt it was a relief for low-income groups like us, but poor governance of project led middle and even high-income groups to take advantage of AHP.” Another perspective was put by AHP-P2 that “if PLDC under PMLN leadership intended to make a difference for low-income communities, then the present condition of AHP was much better with proper facilities.”

Insufficient trust in government authorities has left the low-income groups with no hope. AHP-P1 shared that “in 2011, within one year of project initiation selective applicants got the constructed houses to attract the voters for 2013 elections while many of us visited

PLDC officials for almost six years continuously to get house possession.” AHP beneficiaries also highlighted political victimization in terms of poor ownership of previous housing initiatives by the current government. AHP-P4 stated that “the insecurity of giving credit to other political leaders has negatively impacted the successful delivery of previous government projects.”

Property Transactions

Property transactions within the housing sector must come under a regulatory framework, specifically for low-income housing projects. It is essential to keep a check on the creditability of residents living there in the capacity of low-income groups. AHP-P4 expressed that “currently, there are 174 plots vacant in AHP, with 40% of households living from the start, and 60% are either new buyers or rented the houses.” These current facts could be linked to the profit-making attitude even among the low-income groups preferring investment over adequate shelter. AHP-P3 shared that “applicants living in cities other than Lahore were found selling their housing units to earn a profit.”

Property transaction within five years from the date of possession is considered a violation of the PLDC rules. AHP-P2 shared that “beneficiaries were not allowed to sell or rent the house within five years of allotment; however, both things have happened in the past.” This culture was also observed in the case of Safia Homes. SH-P3 highlighted that “allottees were found to own houses in other cities and rented the allotted house within Safia Homes while disguising residents as their relatives to not be caught by the management.”

Conclusion

This study extends the POE framework by assessing the beneficiary experience from the application process including eligibility criteria to quality of the project, payment plan, motivation for applying, dealing with officials, the process of possession; comparison with previous housing, layout planning, infrastructure, and construction quality; and, regulatory factors like role of site officers, perceptions about government, property transactions. These findings confirm that low-income housing projects are not only about building units but in fact also involve project planning, governance, financial aspects, and layout designs of units. The post-occupancy responses of beneficiaries evaluated the low-income housing projects and revealed essential insights for guiding future housing projects. Beneficiaries from both case studies stressed that government authorities must show interest and the right intentions to work in the low-income housing sector. The planning process must be made more transparent and fairer. The beneficiary satisfaction felt more inclined towards civil society projects i.e. Safia Homes as compared to AHP. This indicates that a user-centered approach is more beneficial for the welfare of society. However, beneficiaries of both projects found the cruciality in the application process against eligibility criteria. Further studies of POE and sustainable low-income housing models are necessary to cope with stressing the issue of the provision of adequate housing in urban areas. Questions should be asked and answered. Why don't government projects include beneficiaries in the planning process? Who sets the eligibility criteria for such projects? Do low-income groups forced to compromise on less than desired living conditions? The findings presented here should be included as major contributions towards finalizing the agenda and planning framework on a national level while devising affordable housing programs through local or international funding.

Recommendations

In AHP and Safia Homes, residents felt that the state is the key player, and state housing authorities must actively perform their role. Properties and scopes for this category are mentioned in Table 6.

Table 5
Beneficiaries' Suggestions for low-income housing provision

Properties	Scopes
Immediate steps	Facilities Provision, right people for the right job, collaborative approach, supporting PLDC model, discourage political agenda
Project planning	Targeting the beneficiaries, possession after down payment, longer tenure of mortgage, efficient layout, government employees, initiatives by private companies
Project execution	Infrastructure through Respective Institutes, good construction quality

Immediate Steps

Beneficiaries of AHP stressed that government interest is a must for the sustainable running of low-income housing projects. AHP-P4 suggested that "state departments under Government of Punjab can provide the natural gas facility, for the demand notice due from PLDC, by making payment of 60 million PKR." Being experienced in dealing with government officials made beneficiaries of AHP suggest the right people for successful project execution. AHP-P2 suggested that the "right people should be appointed with knowledge and professional ethics to deal with low-income housing applicants."

A collaborative approach must be adopted to deal with the challenges of the housing shortage. SH-P3 suggested that "under ongoing Naya Pakistan Housing Program NPHP, the government should collaborate with AMC for better financial planning and layout design of houses." SH-P1 also advised that "the government authorities must consider practicing such initiatives to provide low-income housing effectively."

To get through the complexities of planning, financing, and developing low-income housing projects, a few interviewees suggested following the existing model like AHP. The beneficiaries of AHP also supported this and recommended empowering the PLDC to provide low-income housing. AHP-P1 suggested that "the current government must support previous housing initiatives, by maintaining fair accountability and transparency, as it better knows the mechanism of delivery." Another participant, AHP-P4, suggested that "empowerment of PLDC, irrespective of which political party is ruling the country, would discourage the culture of political victimization and corruption in government housing departments."

Project Planning

Project planning of low-income housing includes eligibility criteria, income verification, and targeting the deserving households as potential beneficiaries. SH-P2 shared that "project planners of low-income housing must provide houses to those people either living on rent or in slums." AHP beneficiaries suffered financial stress due to the late possession of allotted housing units. To overcome this shortcoming in future low-income projects, AHP-P5 suggested that "houses must be allotted for immediate possession without any prior down payment and monthly installments similar to rent charges must be taken from beneficiaries to cover the housing unit cost." It is because low-income groups cannot afford the down payment due to limited finances. AHP-P2 also supported this suggestion that "at least, making down payment in low-income housing projects must ensure the immediate shifting to the house."

Projects must be planned in such a way that the payment plan can be expanded up to longer spans, like 15 years or 20 years. AHP-P3 suggested that "the duration of paying the installments must be increased to 20 years for the support of low-income groups." In both

AHP and Safia Homes, beneficiaries felt that housing must be provided to low-income groups through adequate space and efficient layouts.

Since housing projects for poor and low-income groups are minimal in number across Pakistan, it made beneficiaries think about the housing provided by employers. SH-P1 recommended that “government departments and authorities should provide housing to the employees by providing a 50% subsidy of the housing unit cost.” Regarding the private sector, SH-P1 further suggested that “the big private companies should start housing projects for their employees and must bear 70% of the cost to facilitate the low-income categories.”

Project Execution

Project execution involves the development of infrastructure and the construction of housing units. The operational mechanism of basic infrastructural facilities is crucial for successful housing projects. AHP-P5 suggested that “the respective local authorities should maintain electricity and water, for instance, WAPDA for electricity and WASA for water facility for low-income housing projects.” AHP-P4 recommended that “middle management by the PLDC site office should be discouraged for the smooth operation of such facilities.” The beneficiaries of Safia Homes also shared some suggestions for better project execution and the role of government authorities. SH-P3 suggested that “state housing departments must provide the house with good construction quality with much affordable price to low-income groups besides considering the project location before construction.”

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