

Housing experience of South African Low-income Beneficiaries

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Since the inception of the South Africa Government Housing Subsidy Scheme to solve the countries housing problem for the disadvantaged and low income groups, there is limited information available to ascertain the beneficiaries experience since they have been living in the subsidized housing units. This paper presents an evaluation of the post occupancy experience of Housing Subsidy beneficiaries in the Gauteng province of South Africa. It is an evaluation of the occupant's experience since the inception of the policy to date, which is born out of the lack of POE monitoring. The paper present finding on the Socio-economic/demographic profile of the occupants since the housing units were allocated to them. Also, an evaluation of the right to housing is done, to ascertain if the right to housing as contained in the South Africa Constitution is being realized through the subsidized housing units. Others includes the level of beneficiaries' satisfaction/dissatisfaction, beneficiaries' home usage and the effect of the housing subsidy scheme on the present demand of housing in the country, since the government has approved housing subsidies for 3.1 million households and constructed over one and a half million housing units. Descriptive statistics were carried out on the data obtained through the use of occupant survey. Findings from the survey revealed that the original intended use of the houses by the government (private residential usage) is what the subsidized houses are being used for. The result of the socio-demographic profiles of the respondents revealed that the needs of the marginalized and the disadvantaged groups are being met, as all respondents were South Africa citizens. Also, beneficiaries were satisfied with their overall housing situation, but had complaints about certain aspects of the housing unit. However, the beneficiaries felt that most of their housing expectations were not met. In contrast, beneficiaries' indicated that the subsidized houses had changed their lives and given them more comfort than previously experienced. POE studies help to avoid mistake previously made, save money, ensure proper construction of houses, and create a feedback system between dwellers and the Department of Human Settlement. The paper contributes to this body of knowledge. It is recommended that a wider systematic coverage of the subject through investigative and diagnostic POE and occupants need assessment should be carried in housing subsidy schemes in South Africa.

Key words: Post occupancy evaluation, Housing satisfaction, Housing Subsidy, Low-income,

Introduction

The South Africa Government housing vision, as stated in the National Housing Code (2001), advocates "sustainable housing and sustainable urban environment" because housing is a major component of the urban environment and better designed houses contribute to the physiological and psychological well-being of the inhabitants (Ogunfiditimi, 2007). However, the problem has always lies in the formation of housing processes that must ensure the delivery of "sustainable and affordable housing" (Kangwa, 2002). Sustainable housing are houses that are planned, designed and built to be more socially, economically and environmentally sustainable. Sustainable houses are built with people in mind.

The ability to pay for housing in South is severely limited amongst most families in the country because of the high unemployment rate. South Africa's unemployment rate rose to 25,3% in the third quarter of 2010 as opposed to 24,0% that was previously recorded in 2009 (www.polity.org.za). Also, a total of 171,000 people living in South Africa lost their jobs between the last and third quarter of 2010. As of today, the population of unemployed people seeking employment has increased from 4,184-million to 4,30-million (www.polity.org.za). Consequently, because of the previous statistics of unemployment in the country, the government adopted a strategy to provide assistance to households that are unable to satisfy their housing need independently. These are households that earn between R0 and R3,500 monthly. One of the housing strategies as contained in the National Housing Policy Framework is to provide subsidy assistance to the low-income groups, thus enabling them to become home owners and to improve their quality of life. The Housing Subsidy Scheme (HSS) is the primary housing assistance measure, which, from 15 March 1994, replaced all previous government subsidy programmes. Citizens with a household income of not more than R3,500 per month, who have not owned fixed residential property previously, and who satisfy a range of other criteria, can only apply for the subsidy, and use it to access housing. Where beneficiaries have only received serviced sites under the previous dispensation and hold ownership rights to such sites, they only qualify for a consolidation subsidy as stated on the National Housing Code (2003). The housing subsidy scheme helps household's access housing with a secure tenure, at an affordable cost with a standard that satisfies the minimum health and safety requirements.

Nevertheless, there have not been detailed studies undertaken to evaluate whether the expectations and needs of the beneficiaries have been met after the subsidized houses were allocated to them. Also, no evaluation has been done to ascertain what the beneficiaries are doing with the houses. By conducting a POE the Department of Human Settlement will be informed of the levels of satisfaction of the occupants with the houses. This includes whether the houses are up to standard, if the houses have improved their lives, if the houses are being upgraded and what the beneficiaries do with the houses. As projects are being planned by the Department of Human Settlement to eradicate the huge housing backlog and demand, database is being updated; information from POE will help avoid mistakes previously made. The paper starts with an overview of literature on the housing subsidy scheme in South Africa and on post occupancy evaluation. Also, the results of the analysis and findings of the research are presented. The empirical discussions first explore the Socio- economic/demographic profiles of the occupants since the housing units were allocated to them. Secondly an evaluation of the right to housing is done, to ascertain if the right to housing as contained in the South Africa Constitution is being realized through the subsidized housing units. Thirdly, the level of beneficiaries' satisfaction / dissatisfaction is presented, what beneficiaries actually uses the housing units for, and lastly to find out if the approved subsidized housing units have any effect on the present demand of housing in the country. Finally, the paper draws some conclusions and recommendations for the future.

South Africa Housing Subsidy Scheme

It has never proved easy to help the poor and the disadvantaged group through housing subsidies, particularly in developing countries. Today, very few governments are prepared to offer housing subsidies to the poor unless they are delivered as up-front, targeted capital subsidies. However, the lack of resources has forced each government into making difficult decisions about the size and the numbers of subsidies to be offered. Dependent on those decisions, has come a series of implementation problems relating to the quality of construction, the location of the new housing solutions, the use of credit and how to allocate subsidies between so many would be beneficiaries. However, housing delivery for the low income group in South Africa is reliant on this process. The HSS is a model of housing delivery for the disadvantaged and poor persons, which was adopted in 1994 by the Department of Human Settlement. HSS is given to first-time home -owners, who must then obtain homes through the programmes set by the department. The HSS programmes are only meant for subsidizing housing for poor people who earn between R 0 and R3 500.00, as a total family income per month (Department of Housing, 2000). Beneficiaries accesses the subsidies either through a housing project providing homes for ownership, an initiative providing rental accommodation, or by means of individual applications to the Provincial Housing Boards to buy individual housing units. Types of subsidy

available include; Project Linked Subsidies, Consolidation Subsidies, Relocation Assistance, Rural Subsidies, Individual Subsidies, Institutional Subsidies and People's Housing Process. Few of the problems encountered in the implementation of the HSS programme is that the houses provided are too small, with a maximum size of 40 square meters and are of low quality. Also, the houses are built on small yards (plots), which do not provide for extension of such houses in future.

Post Occupancy Evaluation Studies

According to Zimring and Rosenheck (2001) POE initially developed quickly as a result of the growth of environment and behavior research—social scientists, designers and planners who were interested in understanding the experience of building users and in representing the “non-paying” client (Zeisel, 1975). Early POEs were primarily conducted by academicians focusing on the settings that were accessible to them, such as housing, college dorms and residential institutions (Presier, 1994). Zimring and Rosenheck further emphasized that during the 1980s, many large public agencies established more structured processes to organize information and decisions in their building delivery processes. As practices such as facilities programming became regularized and were accepted as routine, many agencies added building evaluation as a further step in gathering and managing information (Kantrowitz & Farbstein, 1996).

The term “post-occupancy” evaluation was intended to reflect that assessment takes place after the client has taken occupancy of a building. This was in direct contrast to some design competitions, where completed buildings were disqualified from consideration, or other kinds of assessment such as “value engineering” that reviewed plans before construction. Over the years many theorists and practitioners have grown uncomfortable with the term “POE”. The literal meaning of the term seems to suggest that it occurs after people leave the building and it seems to emphasize that evaluation is done at a single point in the process (Zimring & Rosenheck, 2001). Friedmann *et al.* (1978; cited in Zimring and Rosenheck, 2001) proposed the term “environmental design evaluation.” Researchers such as Vischer (1996) and other practitioners have suggested terms such as “environmental audits” or “building-in-use assessment”. More recently, “building evaluation” and “building performance evaluation” have been proposed (Zimring & Rosenheck, 2001). Despite the diversity of the practice, the term “post-occupancy evaluation” remains common for historical reasons. POE is the general term for a broad range of activities aimed at understanding how buildings perform once they are built and how satisfied building users are with the environment that has been created.

There is no industry accepted definition of POE and there are many different terms in use when referring to POE, such as environmental design audits, building-in-use evaluations, post-occupancy assessment, facility assessment and building performance evaluations. However, according to Weiss (1997), POE is the systematic assessment of the process of delivering buildings or other designed settings or of the performance of those settings as they are actually used, or both, as compared to a set of implicit or explicit standards, with the intention of improving the process or settings. POE is invaluable for existing as well as future projects; it ensures that completed buildings operate efficiently throughout its expected life span, and serves as a crucial lesson learned from feedback cycle for future buildings. The effectiveness of POE feedback cycle depends on its key procedural components namely the processes, the participants, and the documentation and dissemination instruments and technology (Mastor *et al.*, 2010).

Beneficiaries input are three-fold in POE; they provide information and feedback to the architect, housing policy makers and the construction company responsible for the design of the building environment. This can lead to improved building design and can influence and change the roles of the professionals involved in a building projects so that flaws in design or construction related mistakes are not repeated. Carmody (2002) posits that POE consists of collecting information in several forms, including the use of data, occupant's satisfaction data and interviews with key design construction and operation personnel, but in this study only the occupants of the building are interviewed. This is because POE uses direct experiences of occupants of an environment as the fundamental

principle to evaluate the intended use of a building. In the context of the present study, the evaluation of the beneficiaries housing satisfaction will enable the housing subsidy programme to tell its story and to prove the worth it was designed for. With this in mind, the methodology used in carrying out the research is discussed below.

Survey methodology

A structured occupant survey questionnaire was used to conduct interviews with beneficiaries at four already existing Reconstruction and Development Programme (RDP) housing subsidy locations in Johannesburg, Gauteng Province of South Africa. These locations had all benefited from the government housing subsidy scheme. The questionnaire was administered to the head of households or their spouses. One household per house was engaged in the interview/questionnaire administration. Beneficiaries were randomly selected from all four locations visited; these were interviewed based on the fact that they have been resident in the areas for more than a month. All households from each location had an equal chance to be drawn and to occur in the sample. All completed and allocated subsidized housing units in all four locations was chosen as the sample frame. A total of 30 households were chosen in each location for the research, making the overall sample size to be 120 households. This was achieved as follows: each location was divided into 10 regions using the streets; systematic sampling was then applied through the selection of every 49th house in each region; for easy identification of the 49th house, house numbers were used to calculate the number of the next 49th house; in each location, 30 households (residents) were selected for the research. This process was essential to obtain true representativeness of the entire sample. Out of the 120 questionnaires sent out, 78 were received back representing 65% response rate.

Findings and discussion

Socio-demographic profile

The survey result revealed that the majority of the respondents were women representing 65.4% while 34.6% were men. Although the sample was randomly selected, the result showed that there is a predominance of women as owners of housing units. This was in line with the promotion of the housing needs of marginalized and previously disadvantaged women. Also, a total percentage of 51.2% respondents are either married or living together with a spouse. However, 42.3% of the beneficiaries' were never married, but they have dependents which enabled them to meet the qualifying criteria to be allocated a house.

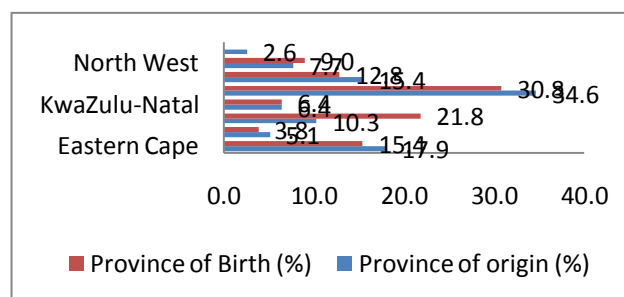


Figure 1: Provinces beneficiaries' originally came from.

The survey as showed in figure 1 revealed that all beneficiaries were South African citizens; because all respondents were born in South Africa. This was in line with the basic requirement of the South African government to qualify as a beneficiary for a housing subsidy. It further shows the government responsibility in providing housing for its citizens. This made through the housing clause on the freedom charter, that "there shall be houses, security and comfort for all... all South Africa citizens shall have the right to be decently housed and to bring up their families in comfort and security". Also, 34.6% of the respondents are originally from the Limpopo Province, while only 10.3%

came from Gauteng Province. This shows why the Gauteng Province has always had the highest number of housing backlog in the country, revealing that most beneficiaries who had been given houses and others on the housing waiting list might not necessarily be from Gauteng province.

Socio-Economic profile

Survey on the socio-economics profile, revealed that 37.2% of the respondents are unemployed / looking for work. The largest proportion had only achieved Grade 11 or lower (Std 9 or lower - final year of secondary education). The fact they have only achieved Grade 11 or lower (Std 9 or lower) might contribute to them being unemployed. This showed that more people are unemployed in the Gauteng Province. However, 28.2% were employed, and of the total percentage employed, 37.3% are women, while 29.6% are men. Further result showed that a combined percentage total of 89.4% have their monthly household income between R0 - R3,500 per month, which was in line with the Human Settlement Department qualification policy. Only a combined total of 10.6% earned above the R3,500 mark, and were not supposed to be allocated a subsidized housing unit because they do not meet the qualifying criteria.

Beneficiaries Home usage

The occupancy survey result also revealed that 96.2% of the respondents use their houses (solely) for private residential function (only). When further asked if the home is used for other things apart from the primary home usage, 91.0% asserted that they do not use it for other things. However, 9.0% did indicated that apart from the primary home use, they also use it for other things such as, tuck shop, day care centers, salon businesses, internet café and business centres, selling of beer and to carry out other personal works. Further findings revealed that 94.9% of the respondents have not used their houses for any sort of financial security since it was allocated to them. Only 3.8% have used their houses for financial security. Since beneficiaries use's their housing unit basically for private residential function only, they were further asked the part of the house mostly used. Respondents representing 50.7% revealed that they use the kitchen mostly. When respondents were asked why this part of the houses is used mostly, 60.0% said they use the area mostly because the house is not partitioned internally; it is an open hall, so it forms part of their daily lives.

Beneficiaries' Ownership information

The survey results pertaining to beneficiaries' ownership of the units shows that 76.9% respondent are the original owners of the houses; while 23.1% indicated they are not the original owners. When respondents were further asked if they bought the house or they are renting or it was allocated to them by the Government; 96.0% of the respondents indicated that they were allocated the houses by the government, 3.0% were renting, while 1.0% bought the subsidized houses from the original owners. The response indicates that the progressive realization of housing for the lower income and disadvantaged groups is being met. Although the reason why the original owners sold their units is not the focus of this study, but from the previous question— on the provinces of birth and origin, it can be concluded that those that sold their houses are beneficiaries who are not from the Gauteng Province, since the majority of the respondents are not originally from Gauteng.

Moreover, when respondents that were originally allocated houses were asked what type of accommodation they were living in before the units were allocated them, 81.0% respondents revealed that they were living in shacks; 17.0% were living in informal settlement, while 2.0% were homeless before the allocation. The findings thus revealed that the progressive realization of the right to adequate housing as contained in the South Africa Constitution is being achieved. Also, in line with the housing strategies as contained in the Housing Policy Framework; to prioritize the housing needs of lower income and disadvantage groups, the result reveals that the government is giving assistance to the low-income groups and the homeless enabling them to become homeowners and improving their quality of life. Lastly, when beneficiaries were asked the impact of the allocated housing units to them, 29.6% indicated that it has met their shelter need, while 16.6% said it has met their privacy need compared to their previous accommodation, 9.1% indicated that it has met their investment need as they have now been able to

use the money they would have used for paying rent for other investment.

Respondents levels of housing satisfaction

Beneficiaries were asked to state what they were satisfied with in the housing units based on a list of elements in the unit. The mean item score was used to explain the level of satisfaction of the beneficiaries. Therefore, beneficiaries were asked to rate the satisfaction of various aspects to determine the level of satisfaction with regards to the unit and the overall housing satisfaction.

Table 1

Perceived Level of unit satisfaction according to beneficiaries

Building elements	N	M	SD
Position of unit	76	1.95	.908
Position of windows	77	1.96	.697
Number of doors	77	1.96	.880
Position of doors	77	1.99	.786
Position of bedrooms	75	2.04	.861
Safety around the unit	76	2.32	.752
Kitchen bathroom/toilet	73	2.34	.870
Position of lounge	75	2.37	.969
Privacy in the unit	75	2.49	.876
Noise level around the unit	75	2.51	.685
Layout of the unit	76	2.51	.702
Safety in the unit	74	2.51	.925
Noise levels in the unit	75	2.53	.704
Size of unit	77	2.62	.960
Position of kitchen	73	2.63	.979
Climate conditions of unit	75	2.64	.895
Exterior finishes	74	2.73	.816
Space in unit	76	2.74	.885
Number of rooms	76	2.78	.759
Ventilation in the unit	75	2.80	.838
Interior finishes	76	2.95	.893

Table 1 shows the distribution of the mean item score of beneficiaries' level of satisfaction based on the building elements. The numbers of the respondents who are satisfied with each of the building elements are indicated starting with the highest. This implies that the criteria having the least mean will have the highest level of satisfaction, while the criteria with the highest mean will have the highest level of dissatisfaction. According to the beneficiaries, the position of the unit (1.95) and position of windows (1.96) were rated as very satisfactory followed by the number of doors in the unit (1.96). However, space in the unit (2.74), exterior finishes (2.73) and interior finishes (2.95) were rated as very dissatisfactory. From physical observation, the units were neither painted nor plastered. The interior observations revealed that the walls of most housing units were cracked. Generally, lack of interior and exterior finishes in the housing units influenced the satisfaction levels of the respondents. With regards to the space in the unit, respondents indicated that the units were too small, that there was little space for movement after putting their furniture and most were not partitioned and could not take all their furniture. Also, the ventilation in the unit (2.80) was very dissatisfactory, because the units were not hot inside in winter and cold in summer. Respondents expected a housing unit that would protect them from the elements and especially the harsh, cold winter.

Table 2

Level of housing satisfaction according to beneficiaries expectations

Areas of expectations	Expectation After allocation		Expectation Before allocation	
	Yes	No	Yes	No
Improved living conditions from shacks	68 (87.18)	10 (12.82)	77 (98.72)	1 (1.28)
More comfort than previous living environment	65 (83.33)	13 (16.67)	77 (98.72)	1 (1.28)
Good sanitary systems	44 (56.41)	34 (43.59)	76 (97.44)	2 (2.56)
Clean environment	40 (53.33)	38 (50.67)	75 (96.15)	3 (3.85)
Bigger plots	36 (46.15)	42 (53.85)	64 (82.05)	14 (17.95)
Adequate hot and cold water	34 (43.59)	44 (56.41)	70 (89.74)	8 (10.26)
More consultation with the municipality	27 (36.99)	51 (69.86)	72 (92.31)	6 (7.69)
Free services	18 (23.08)	60 (76.92)	58 (74.36)	20 (25.64)
Structure with quality finishes	12 (15.38)	66 (84.62)	73 (98.72)	5 (1.28)
Bigger units	10 (12.82)	68 (87.18)	66 (84.62)	12 (15.38)

Note: Figures in parentheses are in percentages

From table 2, beneficiaries' expectation for bigger housing units (84.62%) and free services (74.36%) were not met. Respondents (98.72%) indicated that their expectation of a housing unit with improved living condition from shacks was met representing 87.18% of the expectation met; likewise, 83.33% said they now have more comfort than their previous living environment. Beneficiaries had expected more consultation with the government prior to them being shortlisted to receive houses, but the survey result showed that the expectation was not met (69.86%). This was in contrast with the Department of Human Settlement goal that provincial and local sphere of government should consult meaningfully with individuals and community to receive housing, in order to facilitate the active participation of all relevant stakeholders in housing development. From the above, it can therefore be concluded that the Department of Human Settlement did not succeed in meeting the housing needs of the occupants, but from the basic expectation of an improved living conditions from shack and more comfort than previous living, it can be said that beneficiaries are thus satisfied with the overall housing condition even though most of their expectations were not met.

Conclusion

The paper set out to evaluate the post occupancy experience of Housing Subsidy beneficiaries in South Africa; which is born out of the lack of POE monitoring since the provision of housing in the new South Africa state. Literature review showed that the South Africa government has vigorously ensured that houses were provided to advance the lives of its citizens through the initiation and implementation of Housing Subsidy Scheme. Thus, fulfilling the citizen's housing right as contain in the constitution. Findings from the study revealed that the original intended use of the houses by the government is what the subsidized houses are being used for. There are some exceptions where together with the original private residential usage; it is also used for other things mostly businesses. Further findings from the research revealed that the progressive realization of the right to adequate housing as contained in the South Africa constitution is being met by the government, as all beneficiaries that were allocated houses are South Africa citizens who mostly were living in shacks or slum housing condition.

Despite the majority of the respondents' expectation not being met, beneficiaries were satisfied with the privacy and improved living conditions in the housing units compared to where they were previously living. The Department of Human Settlement objective of the broader housing vision in promoting social cohesion and improving quality of life for the poor is being achieved as findings has shown. Since POE studies have the capability to provide behavioural and environmental information that can be used to formulate idea design and manage guidelines and housing standards for new subsidized housing development to be developed in Gauteng, the Gauteng Department of

Human Settlement should conduct more POE on housing subsidy beneficiaries' experience. By conducting more POE, the Department of Human Settlement will be informed of the determinants of housing satisfaction of the occupants.

Recommendations

The following are therefore recommended in order to improve the delivery of housing to the low-income and disadvantaged group in the Gauteng province of South Africa:

- It is recommended that the government should provide as wide a choice of housing and tenure options as is reasonably possible. This can be achieved through the rental housing option. Findings showed that the majority of the beneficiaries are originally from the Limpopo province;
- The Department of Human Settlement and administrator of subsidized housing units in Gauteng should conduct a complete and thorough needs assessment of the beneficiaries of a proposed housing subsidy development;
- It is also recommended that informal economic activities should be supported in housing projects as more housing subsidy beneficiaries depend on informal economic activity as source of income. Possible ways of doing this include: designing of houses that are suitable for home-based enterprises; provision of appropriate public spaces for informal markets;
- Finally, the Department of Human Settlement should move beyond the progressive realization of the right to adequate housing as contained in the South Africa Constitution, to the use of the housing to improve the lives of the citizens. Finding revealed that most respondents are unemployed / looking for work and the largest proportion had only achieved Grade 11 or lower (Standard 9 or lower - final year of secondary education).

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