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Developing sustainable housing for low income class in Western Cape province: Quality checks on South African government low-cost housing

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ABSTRACT

Purpose: There is high demand for housing in developing countries and South Africa is not an exception. This has resulted in severe social and economic pressure over the past few decades and has given rise to the concentration of the most deprived households in the urban neighbourhoods; called “informal settlements”. Government on its part has made funds available through budgets to meet the demand for housing. Thus, it is imperative that government funded housing is produced at a quality that satisfies the present requirement of the population without compromising the ability of the future dwellers to meet their housing demands. The study is conceptualised to identify the satisfaction level of current inhabitants of the low-cost housing constructed through the government funded housing programme with a view to establish a framework for ongoing research to develop sustainable housing that is affordable to all income classes, contemplating future generation needs.

Design/methodology/approach: Literature search on the subject matter was conducted and quantitative research approach was used for data gathering and analysed using frequency analysis on SPSS version 22.

Finding: The results of analysis reveal that the quality of houses provided falls below the minimum expected quality.

Originality/Value: The paper provides investigatory results of perceptions of occupants in government funded housing estates.

Keywords: Building quality, Government, Housing, Sustainable, Western Cape

1 INTRODUCTION

There is huge demand for housing in developing countries and South Africa is not an exception (UN-Habitat, 2012; Shackleton, *et al.*, 2014). This has resulted in severe social and economic pressures over the past few decades and has given rise to the concentration of the most deprived households in the worst urban neighbourhoods, referred to as “informal settlements”. Huchzermeyer (2009) defined informal settlements as “residential areas where a group of housing units has been constructed on land to which the occupants have no legal claim, or which they occupy illegally or unplanned settlements and areas where housing is not in compliance with current planning and building regulations (unauthorised housing)”. However, in an attempt to confront this problem, government responded to the housing demand by provision of funds through national budgets to meet the demand for housing. The government has had several policies on housing; the White Paper on Housing (1994) prioritised the needs of the historically disadvantaged South Africans, and committed to deliver 1-million houses in five years. The Republic of South Africa Constitution (1996) emphasises government’s commitment to provide housing for the poor. The Social Housing Policy for South Africa (2003) stressed the government’s readiness to create sustainable human settlements by providing good quality housing and an environment responsive to the demand of the target community.

Nonetheless, previous researcher’s and commissioned reports have established that, a large part of the South African population resides in “informal settlements” around city peripheries (Goebel, 2007). These informal settlements which are scattered around the cities are the consequence of the inequalities of the past, which the current democratic dispensation has to address (Goebel, 2007). Low-cost housing is housing that is provided generally from the government, non-government organisations, and private developers for low-income households. This is housing funded by government or subsidised by the State, known as “Reconstruction and Development Programme” (RDP) housing. RDP housing was constructed to replace informal houses (shacks) some of which were built without proper foundations and floors (Lizarralde and Root, 2007). However, Pakhati (2012) emphasised that the government Low-Cost houses are characterised by bad quality materials and workmanship, which has received wide criticism from the public. Pakhati (2012) stressed further that the government and its agents are careless with regard to the tax-payers complaints, instead keeping allocating funds for restoration of badly constructed houses. It is imperative that Government funded housing is produced at a quality that satisfies the present populace without compromising the ability of future requirements. These facts generate the need for sustainable housing research to evaluate the perception of the occupants on the quality of house constructed by Western Cape Provincial Government.

1.1 An overview of good quality housing.

Housing is a key for healthy and attractive communities (UN-Habitat, 2012). Good quality housing should be available, high-quality, economical to maintain, aesthetically designed, and comfortable, to better suit the needs of the owners. Furthermore housing premises, must be set-out according to the conditions of the locality in which the building is sited and should meet

the established technical and hygienic requirements (Maliene and Malys, 2009). The quantity, quality and location of housing are major factors in determining the extent people live 'healthy' and the significant contribution dwellers could provide to a wider society (Maliene and Malys, 2009).

Low-Cost housing according to Tam (2011), entails using a construction method and resources that are least expensive and this also entails efficient budgeting. Tam (2011) explains further that low-cost housing is expected to be constructed through enhanced management of construction resources (cost, materials, plant and labour), proficient use of local materials as well as skills and innovative technology. It is however, not houses that are constructed using inferior quality building materials, rather a system that employs the use of alternative building materials. Noteworthy, in South Africa, before a building can be considered a home for living, the building must be constructed in accordance to the South African Building Standard (SABS) and South African National Standard (SANS-10400). Hence, low-cost houses are built within the minimum requirements of the SABS and SANS-10400 regulations.

The South African Building Standards (SABS) and the National Building Regulations are to ensure that the building is constructed to meet the minimum legislative requirements and standards and to the satisfaction of the local authority (The Council of The South African Bureau of Standards, 199; Schefferlie, 2012).

2 RESEARCH METHODOLOGY AND DESIGN

This study is conceptualised to identify whether inhabitants are satisfied with the houses produced through the government funded housing programme with a view to establish a framework for ongoing research to develop sustainable housing that is affordable to all income classes. A literature review was conducted to provide the theoretical background for the study and quantitative research techniques were used to obtain the data. The study populations were the occupants of some RDP estates within the city of Cape Town. A total of 60 close ended questionnaires were randomly distributed in 3-selected RDP estates (20 questionnaires in each of the estate). Twenty eight questionnaires were returned, of which 19 were found suitable for analysis, which represents 32% of the total questionnaires distributed. The research instrument was subdivided into two sections; section A was to obtain information on respondents' biographical data and section B was to gather information regarding the occupant satisfaction on the quality of their house.

The questionnaires were collated and analysed, using frequency analysis techniques which is part of the Statistical Package for Social Scientist (SPSS) version 22.

3 RESULTS AND DISCUSSIONS

The analysed data reveals the following: Table 1 shows the profile of respondents that participated in the study in terms of their age and gender. The results showed that 52% of the respondents are above 36-years of age, 32% and 16% are between the age range of 26-35 and 18-25 years respectively. The results on gender classification showed that 68% and 32%

of the respondents were male and female respectively. Thus, as over 80% of the respondents are of older than 26-years, this signifies that the responses were from a sample of people whose judgement could be relied upon.

Table 1: Profile of the respondents

Respondent		Frequency	Percentage	Valid percentage	Cumulative percentage
Age range	18 -25	3	15.8	15.8	15.8
	26 - 35	3	15.8	15.8	31.6
	36 - 45	5	26.3	26.3	57.9
	46 - 55	5	26.3	26.3	84.2
	56 - 65	1	5.3	5.3	89.5
	66 - 75	1	5.3	5.3	94.7
	Above 75	1	5.3	5.3	100
	Total	19	100	100	
Gender	Male	13	68.4	68.4	68.4
	Female	6	31.6	31.6	100
	Total	19	100	100	

Table 2 shows the respondent's responses on perception of the quality of government funded houses. The results reveal that 42% of the respondents were not satisfied with the quality of houses, 21% of the respondents were neutral, and 37% were satisfied with the quality of the houses. From these results however, it can be inferred that occupants of government funded houses are not satisfied with the housing quality.

Results of analysis on 'willingness of occupants to sell off their house at a cheap price' (Table 2) shows that, 68% of the respondents express their readiness to sell-off the house at a low price, 5% of the respondent were neutral, while 27% of the respondents stated that they cannot even sell their house at low prices. These results further reveal the level of dissatisfaction of occupants on the quality of government funded houses.

Results of 'occupant's perception in the improvement of quality in future government funded houses', shows that 85% of the respondents are of the view that quality of future government funded houses must be improved, while 11% of the respondents were of the view that the present quality of government funded houses could be maintained and 5% were neutral.

Table 2: Occupants perception on quality of government funded housing

Questions	Measurement	Frequency	Percent	Valid percent	cumulative Percent
	scale				
Occupant's satisfaction with quality of building	Strongly Disagree	2	10.5	10.5	10.5
	Disagree	6	31.6	31.6	42.1
	Neutral	4	21.1	21.1	63.2
	Agree	4	21.1	21.1	84.2
	Strongly Agree	3	15.8	15.8	100
	Total	19	100	100	

Willingness of RDP house beneficiaries to sell the house at cheap price	Strongly Disagree	3	15.8	15.8	15.8
	Disagree	2	10.5	10.5	26.3
	Neutral	1	5.3	5.3	31.6
	Agree	11	57.9	57.9	89.5
	Strongly Agree	2	10.5	10.5	100
	Total	19	100	100	
Occupant's perception on improvement in quality of future RDP houses.	Strongly Disagree	1	5.3	5.3	5.3
	Disagree	1	5.3	5.3	10.5
	Neutral	1	5.3	5.3	15.8
	Agree	2	10.5	10.5	26.3
	Strongly Agree	14	73.7	73.7	100
	Total	19	100	100	

The results of the analysis of Table 3 shows that 47% of the respondents were of the view that government funded houses suffer some form of deterioration, while 32% disagree with the question and 21% of the respondents were neutral.

On whether the satisfaction level of occupants will increase if the houses are well maintained, 68% of the respondents were supportive of the opinion while 26% were neutral and 5% disagreed.

Table 3: Respondents perception on maintenance issues

Questions	Measurement	Frequency	Percent	Valid percent	cumulative Percent
	scale				
There has been minor deterioration on the building	Strongly Disagree	1	5.3	5.3	5.3
	Disagree	5	26.3	26.3	31.6
	Neutral	4	21.1	21.1	52.6
	Agree	9	47.4	47.4	100
	Strongly Agree	0	0	0	
	Total	19	100	100	
Satisfactory level of govt funded houses will increase if it was better preserved.	Strongly Disagree	1	5.3	5.3	5.3
	Disagree	0	0	0	5.3
	Neutral	5	26.3	26.3	31.6
	Agree	8	42.1	42.1	73.7
	Strongly Agree	5	26.3	26.3	100
	Total	19	100	100	

The results presented in table 4 show the occupants' perception on availability of basic services provided by government in the estate. It is evident from the results that 60% of the respondents agreed that sufficient services are available, while 21% disagreed and 21% of the respondents are neutral.

Table 4: Results of occupants' perception on availability of basic services

Questions	Measurement scale	Frequency	Percent	Valid percent	cumulative Percent
There are sufficient services in the neighbourhood	Strongly Disagree	0	0	0	0
	Disagree	4	21.1	21.1	21.1
	Neutral	4	21.1	21.1	42.1
	Agree	8	42.1	42.1	84.2
	Strongly Agree	3	15.8	15.8	100
	Total	19	100	100	

4 CONCLUSION

The national demand for affordable housing has necessitated the need to adopt 'sustainable construction' practices in the delivery of housing to enhance the acceptability of government housing by the target population. This paper has reviewed the expected quality standard of housing in the Western Cape based on the expectations of the populace with regards to the quality of houses provided through government housing schemes in the past as evident from the results of an exploratory survey reported in this paper. The results show clearly that government funded low-cost/subsidised houses must be constructed to meet the minimum quality standard in order to meet minimum end-user requirements without jeopardising the need of the future user to achieve sustainable housing conditions.

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