HOUSING DELIVERY: MAKING SENSE OF THE DEMAND FOR STATE-SUBSIDISED HOUSING IN SOUTH AFRICA

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ABSTRACT

One of the challenges plaguing the government of South Africa (post-1994) is the dire shortage of adequate housing compared to the demand thereof. South Africa's constitution enjoins the state to ensure that everyone has access to adequate housing. To this end, the state is obligated to take reasonable legislative and other measures to achieve the progressive realisation of the right to adequate housing. Since 1994, South Africa has delivered about 4.5 million subsidized houses to the poor, and low to moderate income households through its National Housing Subsidy programme. This delivery benefitted more than twenty millions people with secured homes. Despite this significant achievement, the unmet demand for housing is rising, such that more than 2 million South Africans still live in squalor conditions in the nation's informal settlements, and in backyards of other people's homes.

This study seeks to identify factors that contribute to the high demand for state subsidized housing in South Africa. To this end, a Questionnaire Survey was used to establish the perceptions of relevant Middle to Senior Managers, Professionals and Practitioners in the housing sector, about the reasons behind the high demand for state-subsidised housing in South Africa. Factor analysis revealed three underlying factor clusters of issues that are behind the high demand for state-subsidised housing. The factor clusters are the following, in order of their significance: (i) *socio-economic issues, (ii) the current rate of housing delivery that is below the demand rate, and (iii) unintended consequences of the current housing policy.* This systematic approach to understanding the reasons behind the high demand for state-subsidised housing is crucial and logical to enable the development and implementation of informed solutions for effective housing delivery.

Key words: Adequate housing, sustainable delivery, housing demand, housing delivery programme, South Africa.

1.   Introduction

South Africa's government is constitutionally mandated to ensure that everyone has access to adequate housing (Section 26 of the Constitution, 1997), and that the state has an obligation to take reasonable legislative and other measures to achieve the progressive realisation of this right to housing. However, the constitution does not outline these reasonable measures, and so the government's role in fulfilling the right to housing is subject to different interpretations and expectations (Project Preparation Trust & Urban Landmark (2012). The government of South Africa has thus far delivered about 4.5 million subsidized houses to low to medium-income households through the current housing delivery model introduced since the dawn of democracy in South Africa in 1994. However, despite this significant achievement, the unmet demand for housing is rising, such that more than 2 million households are estimated to have inadequate housing.

The housing backlog rose from about 1.2 million in 1994 to about 2 million households in 2017, and the number of informal settlements across the country has gone up from 300 in 1994 to more than 2 700 in 2017. South Africa is experiencing a number of what is dubbed 'service delivery unrests' from communities in need of adequate housing amongst other basic services.

Given the high demand mentioned above, there are concerns within government, civil society and the private sector as to the 'un-sustainability' of the current housing delivery programme, not only in respect of its affordability to the fiscus but also in respect of the nature of the socio-economic benefits and leverages which are being achieved.

In 2011, the then Minister of Human settlements, Tokyo Sexwale, indicated that *"the solution to this housing deficit is not going to be through providing free houses, because the government cannot afford the current delivery model, there has to be a cut-off date for free housing".* He further went on to say that *"the government cannot cut off the poor in the current national economic environment, characterized by poor growth"* (DHS, 2011). Similarly, in 2017, the current Minister of Human settlements, Lindiwe Sisulu, commenting on the high demand for the state to provide housing, lamented that *"nothing is more difficult than having to deal with the moving target of housing our people, against a background of heightened expectation and anger. The agitated expectative state of mind, although very legitimate, makes it very difficult to have meaningful dialogue with our people as no further explanations are acceptable now, and yet the hard truth is, no matter the circumstances, the reality of our situation needs to be understood by all of us, because it needs all of us to work together for a meaningful solution"* (DHS, 2017). It is therefore imperative that the reasons behind the high demand for state subsidised housing is identified to inform the review of the current mode of housing delivery in South Africa.

2.   The Global housing challenge

Housing is a global problem which affects the developing and trauma stricken world, as well as the developed and industrialized world (Okenyika, 2014). It is a problem that spans the need for basic shelter in developing countries, to the lack of sustainable, affordable housing in industrialized countries (Fisher, 2002). Housing is one of the basic human rights and a prerequisite for exercising other human rights such as health, education, employment and citizenship. Adequate housing also helps to reduce violence, crime and insecurity (Lux, 2003). It is estimated that currently more than 50 percent of the world's population lives in cities and that this number is estimated to reach 60 percent in 2030, and the majority of these people will be in the developing countries (Potsiou, 2010; Sheuya*et al,* 2008). It is also estimated that the world's one billion people in urban areas live in slums, and that 43 percent of the urban population in developing countries live in slums. The estimation is that around 2 billion people worldwide will be leaving in slums by 2030 (Nebutola, 2004; Kothari, 2003; Sheuya *et al,* 2008). According to UN-HABITAT (2009), this proportion is high in Sub-Saharan Africa, where slum-dwellers make up 72 percent of the urban population, and in Southern Asia, where slums-dwellers represent 59 percent. Approximately one third of the urban population in developing countries do not have access to adequate housing, and lack access to safe water and sanitation. These people live in overcrowded and unserviced slums, often situated on marginal and dangerous land. They lack access to public clean water, and have to pay a premium to private providers. Their waste not only remains untreated, it surrounds them and their daily activities and affects their health, especially their children's (UN-HABITAT, 2010).

To complicate the housing problem worldwide, housing is one of the concepts where various researchers and authors could not agree on a universal definition (Sheuya, Patel, Howden-Chapman, 2008; Zami & Lee, 2010). The lack of a universal definition is attributed to the diversity and plurality of actors in the housing delivery systems of both developed and developing world, comprised of architects, engineers, academicians, builders, economists, the building and materials industry, contractors, private sector investors, mortgage institutions etc. (Sheuya, Howden-Chapman, 2008). A review of definitions of housing as defined by Wardi, 1994; Leckie, 1992; Burns & Grebler, 1977; Correa, 1976; & Turner, 1976, suggests that various authors define housing in terms of (1) its underlying purposes, (2) its characteristics, (3) its affordability, (4) the process of acquiring it, (5) its benefits, and (6) its adequacy. It is clear that housing is more than just shelter. Housing in developing countries is described as one of the world's most unsolvable crisis (UN-Habitat, 2006).

Adequate housing was recognized as part of the right to an adequate standard of living in the 1948 Universal Declaration of Human Rights and in the 1966 International Covenant on Economic, Social and Cultural Rights. Other international human rights treaties have since recognized or referred to the right to adequate housing or some elements of it, such as the protection of one's home and privacy. Adequate housing must meet the following minimum conditions:-security of tenure, availability of services, materials, facilities and infrastructure, affordability, habitability, accessibility, location, and cultural adequacy (UN-Habitat. 2009). This has assisted in the attempt to have a universal definition of what housing is all about.

Based on this definition, several countries' constitutions protect the right to adequate housing, or outline the state's general responsibility to ensure adequate housing and living conditions for their citizens. Some countries' legal courts have also adjudicated cases related to the enjoyment of adequate housing or lack thereof. These disputes relate for instance to forced evictions, tenant protection, discrimination in the housing sphere or access to basic housing-related services. Numerous conferences, declarations and plans of action, such as the Vancouver Declaration on Human Settlements (1976), Agenda 21 (1992), the Istanbul Declaration on Human Settlements (1996), the Habitat Agenda (1996) and the Millennium Declaration and Millennium Development Goals (2000) have also helped clarify various aspects of the right to adequate housing and have reaffirmed states' commitments to its realization (UN-Habitat. 2009).

The understanding of an individual, professional, or institution of the housing definition, influences the success, failure and nature of any kind of housing development, because taking housing purely as a physical form is inappropriate, as this can lead to housing that is out of context regardless of whether it is physically sound or not (Zami & Lee, 2010; Maclennan & O'Sullivan, 2012). Likewise, Olweny (1996) suggests that when low-cost housing is located on the periphery of urban areas, away from transportation and employment opportunities, or where housing is located next to rubbish dumping sites, etc., such houses would not meet the environmental and social criteria even if such housing is of proper physical quality. The above definition of adequate housing is therefore critical in influencing the actions of governments, institutions and individuals. Similarly, how individuals and governments view informal settlements, determine the strategies that they will employ in their attempt to deal with the poor's housing challenge, for instance those who viewed informal settlements as a solution by the poor to their housing problems, urged governments to support these self-help initiatives of the poor, whereas those who viewed informal settlements as a problem, employed strategies to eradicate them (UN-Habitat, 2006).

In their endeavor to ensure the realization of adequate housing for their citizens, governments in both developed and developing worlds adopted various housing delivery models and approaches, for their citizens to have access to adequate housing through a number of housing tenure options. Housing tenure describes the legal status or the condition under which people have the right to occupy their accommodation (Shelter, 2009). The most common tenure systems used by governments were home ownership (both private and shared ownership) and rental (both private and public rental). Domestic properties or homes were either owned outright or secured on a mortgage, or rented from local authorities, housing associations, registered social landlords, private owners, or they may be subject to a shared ownership agreement (Bengtsson, 2004; Williams, 2009). According to the UN-Habitat (2004) the last few decades have seen most governments actively promoting homeownership. They favoured this form of tenure because they believed that building homes would create jobs, stimulate the economy and to foster social and political stability. In the process, governments persuaded millions of their citizens to become owners. This has fuelled the perception or misconception that adequate housing is limited to housing ownership only. Though rental housing became one of the tenure options governments encourages in order to enhance the delivery of housing, the following myths about home ownership v/s rental, need to be dispelled for people to find rental housing appealing (UN-HABITAT (2004): (1) that everyone owns their houses in rich countries; (2) that everyone wants to be a homeowner; (3) that homeownership offers people a better life; (4) that nobody invests in rental housing; (5) that renting is inequitable; (6) that governments should prohibit poor quality rental housing; and (7) that mobility is bad for one".

Housing delivery models implemented by various countries can mainly be categorized into the following two broad models, namely, where governments provide housing to the public, and where governments leave housing development to the market. Below are some of the consequences of each of these housing delivery models as experienced by governments and their citizens:

Provision of housing by the state: Governments who intervened in housing, by directly supplying housing to the people through huge bureaucratic institutions, moved away from providing housing subsidies and free housing as it became evident that their national budgets were shrinking annually, and that smaller proportions of their budgets were devoted to housing provision, while the demand for housing continues to outstrip the supply (Ward, 1992). The skyrocketing of governments' deficits to unprecedented levels that confronted governments resulted in the questioning of the efficacy of state interventions and the sustainability thereof, particularly in welfare services with high expenditure like housing. The solution was to reduce the involvement of the state in the housing markets (Boelhouwer, 1990; Dodson, 2006).

Similarly, those who implemented housing delivery models geared at constructing and financing finished houses directly for low-income households, could not solve the housing problem as a whole as they offered a limited number of quality homes to very few families, leaving most poor households without assistance (Okonwo, 1996; Greene and Rojas, 2008). Low-cost housing programmes, such as sites-and-services, which offered only serviced sites in order to increase the coverage of government-financed programmes, have also proven inadequate to solve the problems of all households in need. Even housing financing institutions sponsored by the government and funded by employment taxes and providing subsidized loans, have been unsustainable (Greene and Rojas, 2008).

Governments intervene in housing provision to ensure equitable access to housing, and to ensure access to adequate housing by all. While providing housing directly to people is in itself not a negative approach, one of the common misconceptions about the right to adequate housing is that some believe that the right to adequate housing requires the State to build housing for the entire population (UN-HABITAT, 2009). According to Evans (2007) even a rights-based approach to development rejects the notion that people living in poverty can only meet their basic needs as passive recipients of charity. People should be the active subjects of their own development, as they seek to realise their rights. The role of development actors, including the state, should *inter-alia* seek to build people's capabilities to realise their rights. But too often public housing policies and private sector practices do not take into account the ability of low-income groups to earn, save, borrow and invest in housing. They do not consider the fact that, by using what means and strategies are available to them, the urban poor have built their homes and made vast additions to their cities (Gattoni, 2009).

Some of governments like the South African government, after about 20 years of providing free housing to the poor and low-income households (about 4.3 million houses) reckons that providing free housing to the low income earners has, as an unintended consequence, produced a dependent and inactive citizenry, and households and communities that have become passive recipients of government delivery (RSA National development Plan, 2012). Putting the blame on governments, Stiglitz (2013) posits that many of the poor people, who have become so dependent on government benefits, are there because of government's failure to (1) provide skills that would have made them productive for them to earn adequate living, (2) protect them from banks from taking advantage of them, and (3) manage the economy in such a way that sustains full employment. The literature reviewed has clearly indicated that besides creating a culture of over-dependency on government (Narayan, 1995; Van Heck, 2003), governments have found public housing, as the only model to provide adequate housing, to be unsustainable.

Provision of housing by the market: With the belief that properly regulated and liberated from all forms of interventions, the market represents the optimal mechanism for economic development, and a belief that ultimately all housing needs could be met by the market, some governments decided to 'roll-back' the state and retreated from housing in favour of living housing development to the markets (Lee & Zhu, 2006). Their retreat resulted in the following unintended consequences:

- Poor social integration: - because of neo-liberal housing policies' emphasis on economic and monetary aspects of housing, the goals of governments to protect people's lives to maintain social integration and to legitimize themselves, were negated;
- An increase in inequality: – because the market favoured the rich, the gap between the haves and have-nots increased tremendously (Saad-Filho & Johnston, 2005); and
- Housing affordability problem: – the challenge of inadequate number of houses has been replaced by the problem of housing affordability, hence the need for housing subsidies (Kemp, 2007).

This has created another need for government to intervene in housing provision. O'Sullivan & Gibb (2003) suggest that when governments try to extricate themselves from doing anything about housing, they are always compelled to take up the burden again – usually after scandals and disasters.

Given that the number of slum dwellers is estimated to be about 1, 4 billion people worldwide by 2020, it is obvious that even with the best intentions of the international community, more than 90% of the estimated slum dwellers are expected to remain in housing that is over-crowded, unsafe, temporary, unhygienic, and very probably illegal even after 2020 (UN-Habitat, 2004).

The following are some of the reasons behind the causes of housing challenges worldwide: rapid urbanisation against insufficient capacities of government and local authorities to manage this growth in a sustainable way (Akrofi, 2006; Ooi & Phua, 2007; Potsiou, 2010); wars, disasters and other negative government policies and practices (UNHRC, 2010); population growth linked to poor planning and lack of capacities by governments (Karantonis, 2008; UN-HABITAT, 2011); economic Growth which is not linked to urban growth and housing (Ooi & Phua, 2007; Sheuya, Patel, and Howden-Chapman, 2008); and changes in household formation and composition (NZIER, 2009). As countries grow and urbanise, the equitable and efficient delivery of adequate housing are critical elements of successful urbanization (Malpezzi, 2014). Okeyinka (2014) posits that urbanization in the developing world is in sharp

contrast to the developed world urbanization process in that unlike in the developed world, urbanization always breeds pseudo-urban economies that breed widespread poverty amongst the fast growing urban populations, and massive housing shortages and qualitative deficiencies.

3.   RESEARCH METHODOLOGY

3.1   Data Collection

To identify factors that contribute to the high demand for state subsidized housing in South Africa, twelve variables identified as possible reasons were adopted for this study. A survey questionnaire was developed and administered after a pilot study. See Annexure A for Survey questionnaire with possible reasons. Respondents were invited to indicate the degree to which each variable has been responsible for the high demand, on a five-point Likert rating scale (not at all responsible = 1, a little responsible = 2, moderately responsible = 3, largely responsible = 4, and completely responsible = 5.)

Housing delivery in South Africa is a concurrent function of the three spheres of government, namely national, provincial and local governments. Housing delivery is the responsibility of the National Department of human settlement (NDHS), nine Provincial Departments of human settlements (PDHS) and Municipalities accredited to deliver housing in line with South Africa's Housing Act (1997) and the housing policy. Together, these entities are responsible for the following key functions in the housing delivery value chain: housing policy development, housing programmes development, planning for housing, and housing programme and project implementation, and beneficiary management.

For the present study, the National Department of human settlement (NDHS) and its entities, the Gauteng Provincial department of human settlements (PDHS), and the three accredited metropolitan municipalities in the province of Gauteng (City of Tshwane, City of Johannesburg, and Ekurhuleni Metropolitan municipalities), were targeted to represent the above-mentioned government entities, who are responsible for housing delivery.

The Gauteng Provincial Department was selected to represent the other eight provincial Departments, because it receives from the national department the highest share of the human settlements development grant each year (more than 25%) since it has the highest demand for housing compared with the other provinces. The three Metropolitan Municipalities were selected to be part of the study population because they are a typical representation of

housing development at the local sphere of government. The national DHS was included as part of the study population because it plays an important role in the housing delivery value chain, including policy development.

For this study, the unit of measurement/analysis was the officials responsible for the key housing delivery functions in the abovementioned entities, i.e. housing policy development, housing planning, programme and project implementation, monitoring and evaluation and beneficiary management.

Three hundred and fifteen (315) structured questionnaires were administered to senior managers, middle managers, project managers, built environment professionals and housing practitioners responsible for the abovementioned key functions in the housing delivery value chain in South Africa. Two hundred and ten (210) completed questionnaires were received representing a 67% response rate.

Table 1: Completed survey questionnaires received

Institutions	Completed Questionnaires
National Department of Human Settlements and its entities	80
Gauteng Provincial Departments of Human Settlements	52
Metropolitan municipalities (Tshwane, Ekurhuleni, Johannesburg)	78
Total completed questionnaires received per entity	**210**

3.2 Data Analysis

Data collected were analysed using both descriptive statistics and inferrential statistics. Descriptive statistical analysis was undertaken through the computation of frequencies, including the means, variances and standard deviations and summary statistics. Exploratory factor analysis (EFA) was conducted to identify variables that could be measuring aspects of the same underlying dimension in order to cluster related variables into a more easily understood framework.

4. RESULTS

4.1 Frequencies and Summary Statistics

Frequencies were used to determine variables considered by the respondents as attributable to the dependent variables over others. The ranking of each variable was tabulated to help

provide a clearer picture of consensus reached by the respondents. Based on the five-point Likert rating scale, a success variable is deemed critical or important if it has a mean value of 3.5 and above. Where two or more variables have the same value or mean, the variable with the lowest standard deviation was assigned the highest important ranking.

Table 2 below indicates the factors that contribute to the high demand for state-subsidised housing in South Africa in terms of respondents' responses on a five-point Likert rating scale of 1 (not at all responsible) to 5 (completely responsible). The values of the means of the twelve variables are all above 3.5. This means that there is consistency in agreement among respondents. The ranking also indicates that the 'high level of poverty in South Africa' emerged as the most important reason for the high demand for subsidised housing in South Africa, while the 'need for housing by immigrants from neighbouring countries' emerged as the least-important reason.

Table 2: Drivers for the demand for state subsidised housing in South Africa

Description of drivers for the demand for state-subsidised housing	1 Not at all responsible (%)	2 A little responsible (%)	3 Moderately responsible (%)	4 Largely responsible (%)	5 Completely responsible (%)	Mean	SD	Rank
High levels of poverty	0.0	1.0	4,3	24.8	70.0	4.64	0.613	1
Rapid urbanisation (e.g., migration to the cities from rural areas)	0.0	0.0	3.8	31.9	64.3	4.60	0.563	2
The legacy of discriminatory policies (e.g., apartheid, Land Act)	1.0	3.3	9.0	14.3	72.4	4.54	0.864	3
High levels of unemployment	0.0	0.0	7.1	36.7	56.2	4.49	0.628	4
Culture of dependency on the state among some communities	0.0	1.9	11.0	33.0	54.1	4.39	0.759	5
Expectation created by public service office bearers that housing will be provided to people by the state	1.4	3.8	11.4	21.4	61.9	4.39	0.933	6
Low economic growth	0.0	1.0	5.2	57.1	36.7	4.30	0.610	7
Population growth	0.5	0.5	11.4	61.9	25.7	4.12	0.649	8
Lack of affordable housing in the market	1.0	3.3	14.3	65.7	15.7	3.92	0.718	9
Lack of access to affordable housing finance	0.0	3.3	11.9	75.2	9.5	3.91	0.584	10
Lack of access to well-located/suitable land	0.5	4.3	37.8	50.2	7.2	3.59	0.709	11
Need for housing by immigrants from neighbouring countries	0.0	13.9	30.6	45.5	10.0	3.52	0.855	12

4.2   Results of Exploratory factor analysis (EFA)

4.2.1   Background to factor analysis

Factor analysis was conducted to identify variables that could be measuring aspects of the same underlying dimension in order to cluster related variables into a more easily understood framework. Factor analysis is a data reduction technique which takes a large set of variables and looks for a way the data may be reduced or summarised using a smaller set of factors or components (Pallant, 2007, Child, 2006). Factor analysis operates on the notion that measurable and observable variables can be reduced to fewer latent variables that share a common variance and are unobservable, which is known as reducing dimensionality (Bartholomew, Knott, & Moustaki, 2011). It has traditionally been used to explore the possible underlying factor structure of a set of measured variables without imposing any preconceived structure on the outcome (Child, 2006).

To determine whether data is suitable for factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity based on the method used by Farrington (2009), were used. According to Tabachnick and Fidell (2007), the KMO should range from 0 to 1 and a minimum value of 0.60, and the Bartlett's test of sphericity should be significant (P < .05) for factor analysis to be considered appropriate.

For the purpose of this study, data with KMO's of ≥0.60 and the Bartlett test of sphericity significant at (p< .05) was considered factor-analysable. Furthermore, Factor extraction was carried out to determine the smallest number of factors that can be used to best represent the interrelations among the set of analysed variables, through the principal component analysis approach. The Kaizer's criterion also known as the eigenvalue rule was used to determine factors to be retained for further investigation. The eigenvalue of a factor represents the amount of the total variance explained by the factor (Pallant, 2007). Only factors with an eigenvalue of 1.0 or more should be retained for further analysis and all factors with eigenvalues of less than 1 should be considered insignificant and therefore should be excluded (Hair *et al.*, 1998; Pallant, 2007). Over and above the eigenvalue approach, Cartell's scree test was also used to determine factors to be retained. Internal consistency (Cronbach's alpha) was calculated in order to assess the reliability of all variables (Tavakol & Dennick 2011).

4.2.1 Factors that contribute to the high demand for state subsidized housing

Factor analysis was employed to establish which of the twelve variables identified by respondents as factors that contribute to the high demand for state subsidized housing in South Africa, could be measuring aspects of the same underlying dimension. The Kaizer–Meyer–Olkin (KMO) measure of sampling adequacy achieved a high value of 0.76, which is above the 0.60 minimum value required. The Bartlett test of sphericity was also significant at P < 0.00, suggesting that the population matrix was not an identity matrix. The average

communality of the variables after extraction was above 0.5. Thus, the necessary tests in respect of the adequacy of the sample size were favourable for the factor analysis to proceed. Internal consistency (Cronbach's alpha) was calculated in order to assess the reliability of all variables (Tavakol & Dennick, 2011).

The data was further subjected to principal component analysis (with varimax rotation) to determine the smallest number of factors that can be used to best represent the interrelations among the twelve variables. In extracting the number of underlying factors or dimensions, only factors with eigenvalues of above 1.0 were selected. Three components with eigenvalues greater than 1.0 were extracted using the factor loading of 0.50 as the cut-off point. Factor loading expresses the relationship of each variable to the underlying factor. As shown in Table 3 below, the total variance explained by each component extracted is as follows: component 1 (30.910 %), component 2 (12.781%), and component 3 (10.348%). Thus, the final statistics of the principal component analysis and the components extracted accounted for approximately 54% of the total cumulative variance.

Table 3: Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.709	30.910	30.910	3.709	30.910	30.910	2.442	20.351	20.351
2	1.534	12.781	43.691	1.534	12.781	43.691	2.222	18.517	38.869
3	1.242	10.348	54.038	1.242	10.348	54.038	1.820	15.170	54.038
4	0.924	7.697	61.736						
5	0.830	6.917	68.653						
6	0.770	6.415	75.068						
7	0.679	5.655	80.723						
8	0.596	4.966	85.689						
9	0.559	4.656	90.346						
10	0.455	3.794	94.140						
11	0.408	3.401	97.540						
12	0.295	2.460	100.000						

Based on an examination of the inherent relationships among the variables under each component (factor), the following interpretation was made, with the naming of the factors derived from the components using the variables with the highest loading factor:

Factor one (F1): Socio economic issues

There were five items measuring factor one (F1). The result of F1 is reported in Table 4. The corrected item-total correlation was greater than the suggested cut-off value of 0.30,

suggesting that the items were good measures of the element. The Cronbach's alpha was greater than 0.60 at 0.682, indicating acceptable internal reliability (Nanually & Bernstein, 1994). All the five items (DSH6, DSH7, DSH2, DSH1 & DSH5) are expected to measure factors that determine the high demand for housing in South Africa loaded together on this factor. The factor loadings for all items were greater than 0.416 reported in Table 4, which were greater than the recommended value of 0.40 as suggested by Field (2005) and Hair et al. (1998).

Table 4: Factor 1: Socio-economic issues

Item	Question	Factor loading	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
DSH6	Low economic growth	0.773	0.591	0.559
DSH7	High levels of poverty	0.724	0.419	0.640
DSH2	High levels of unemployment	0.617	0.427	0.637
DSH1	Rapid urbanization	0.553	0.382	0.654
DSH5	Lack of access to affordable housing finance	0.416	0.369	0.660

Factor two (F2): Demand for housing exceeds supply

There were four items measuring factor two (F2). The result of F2 is reported in Table 5. The corrected item-total correlation was greater than the suggested cut-off value of 0.30, suggesting that the items were good measures of the element. The Cronbach's alpha was greater than 0.60 at 0.652, indicating acceptable internal reliability (Nanually & Bernstein, 1994). All the four items (DSH9, DSH8, DSH4, & DSH10) are expected to measure factors that determine the high demand for housing in South Africa loaded together on this factor. The factor loadings for all items were greater than 0.599 reported in Table 5, which were greater than the recommended value of 0.40 as suggested by Field (2005) and Hair et al. (1998).

Table 5: Factor 2: Demand exceeds supply

Item	Question	Factor loading	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
DSH9	Need for housing by immigrants from neighbouring countries	0.822	0.503	0.532
DSH8	Lack of access to well-located/suitable land	0.619	0.421	0.591
DSH4	Population growth	0.609	0.429	0.589
DSH10	Lack of affordable housing in the market	0.599	0.387	0.613

Factor three (F3): Unintended consequences of the current housing policy

There were three items measuring factor three (F3). The result of F3 is reported in Table 6. The corrected item-total correlation was greater than the suggested cut-off value of 0.30, suggesting that the items were good measures of the element. The Cronbach's alpha was

greater than 0.60 at 0.642, indicating acceptable internal reliability (Nanually & Bernstein, 1994). All the three items (DSH12, DSH11 & DSH3) are expected to measure factors that determine the high demand for housing in South Africa loaded together on this factor. The factor loadings for all items were greater than 0.542 reported in Table 6, which were greater than the recommended value of 0.40 as suggested by Field (2005) and Hair et al. (1998).

Table 6: Factor 3: Unintended consequences of the current housing policy

Item	Question	Factor loading	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
DSH12	Culture of dependency on the state among some communities	0.800	0.460	0.542
DSH11	Expectation created by public service office bearers that housing will be provided to people by the state	0.742	0.534	0.420
DSH3	The legacy of discriminatory policies (e.g. Apartheid, Land Act etc.)	0.542	0.378	0.645

5. DISCUSSION OF RESULTS

A descriptive assessment of factors that contribute to the high demand for state-subsidised housing revealed that 94.7 per cent of respondents ranked *'high levels of poverty'* as the highest-ranked contributor to the high demand for state-subsidised housing. Of the respondents, 96.2 per cent ranked *'rapid urbanisation'* as the second highest-ranked contributor. Of the respondents, 86.7 per cent ranked the *'legacy of past discriminatory policies'* as the third highest-ranked contributor. Of the respondents 92.9 per cent ranked *'high levels of unemployment'* as the fourth highest-ranked contributor to the high demand for state-subsidised housing. The findings support previous research which advanced that rapid urbanisation against insufficient capacities of government and local authorities to manage this growth in a sustainable way (Akrofi, 2006; Ooi & Phua, 2007; Tesfaye, 2001; Potsiou, 2010; Malpezzi, 2014; Okeyinka, 2014), wars, disasters and other negative government policies and practices (UNHRC, 2010) contributed to the high demand for housing.

Further findings revealed that 87.1 per cent of the respondents ranked a *'culture of dependency on the state'* among some communities as the fifth highest-ranked contributor to the high demand for state-subsidised housing. Of the respondents, 83.3 per cent ranked *'expectation created by public service office bearers that the state would provide people with housing'* the sixth highest-ranked contributor. Of the respondents, 93.8 per cent ranked '*low economic growth*' as the seventh highest-ranked contributor. Of the respondents, 87.6 per cent ranked *'population growth'* as the eighth highest-ranked contributor. Of the respondents,

81.4 per cent ranked '*lack of affordable housing in the market*' as the ninth highest-ranked contributor. Of the respondents, 84.8 per cent ranked '*lack of access to affordable housing finance*' as the tenth highest-ranked contributor to the high demand for state subsidised housing. The findings also support previous research which advanced that population growth linked to poor planning and lack of capacities by governments (Karantonis, 2008; UN-Habitat, 2011; Otis, 2011); economic growth that is not linked to urban growth and housing (Ooi & Phua, 2007; Sheuya, Patel & Howden-Chapman, 2008); lack of housing finance accessible to the poor and low-income earners (O'Sullivan & Gibb, 2003; Lee & Zhu, 2006), misconception that the right to adequate housing requires the state to build housing for the entire population (UN-Habitat, 2009; Evans, 2007) contribute to the high demand for housing.

6.   CONCLUSION

In order to develop solutions to the housing problem that is overwhelming nations, it is important that there is an appreciation of the reasons behind the housing problem and the demand thereof. Findings revealed that reasons behind the high demand for state-subsidised housing in South Africa were clustered into three clusters/factors. The three clusters are (i) socio-economic issues, (ii) demand for housing that exceeds supply, and (iii) unintended consequences of the current housing policy.

Socio-economic factors include low economic growth, high levels of poverty, high levels of unemployment, rapid urbanisation and lack of access to affordable housing finance. The factors clustered under the 'demand for housing that exceeds supply' are the need for housing by immigrants from neighbouring countries, lack of access to well-located or suitable land, high population growth and lack of affordable housing in the market. Lastly, the factors clustered as unintended consequences of the current housing policy are the culture of dependency on the state among some communities, the expectation created by public office bearers that the state will provide people with housing (free of charge) and the legacy of past discriminatory policies (e.g., the Native Land Act of 1913, and apartheid laws promulgated by the National Party from 1949).

It is therefore critical that South Africa and other countries particularly developing nations, target the improvement of their nations' economic growths, poverty alleviation and the creation of employment opportunities as levers to enable individuals to satisfy their housing needs themselves, and not to only depend on the state for housing. Growing the economy will have a multiplier effect since it will create employment that will provide income to individuals and households, thereby reducing poverty and enabling households and individuals to access housing finance.

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