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SLUM DEVELOPEMENT CHALLENGES IN MEQHELENG, FREE STATE, SOUTH AFRICA

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The literature shows that urban sprawl and rapidity in slum development is a concern in the developing world, including sub-Sahara Africa. The purpose of this paper is to report on the rapid growth of slums so as to provide an understanding of the associated problems, and how these issues should inform strategies for combating the downsides of slums. To provide more insights around slums, a case study design was used to explore issues noted from the review literature. The study was guided by the examination of socio-economic impact of slums located in Meqheleng in the Free State province of South Africa. From face-to-face interviews and observations, it was discerned that social exclusion and poor infrastructure are major issues in the studied slums and these gaps have huge impact on liveability in the area. These observations are evident in poor access roads, unaffordable public transportation systems and poor housing conditions. In effect, there is a major scope for both infrastructure and social re-engineering in the case slums.

Keywords: Building, Habitat, Infrastructure, People, Urbanization, South Africa.

1 INTRODUCTION

In the last century, rapid urbanisation has stood out among socio-economic changes in the society. Urbanisation is on the upward trajectory as more individuals move into the city from rural areas so as to find employments and better opportunities in life. In the next 30 years, the urban populace in the developing world is anticipated to be around 4 billion at a growth of 70 million people yearly (Cohen, 2006). There is however planning gaps concerning the chances of accommodating new urban residents in cities. Rapid urbanisation thus represents a pipeline for the mushrooming of slums, where accesses to basic needs of humanity are essentially absent. The popular explanation for urbanisation and population growth has been migration in recent decades. Because of issues associated with migration, the United Nation (UN), Non-Governmental Organisations (NGOs) and other stakeholders have made enormous efforts to improve the living and economic conditions of slum dwellers. Estimates states that governments have exceeded the Millennium Development Goal (MDG) target of improving the lives of 100 million slum dwellers by 2020 by at least a multiple of two (UN Habitat, 2010a; 2010b). However, this improvement is highly bent towards the more advanced emerging economies, as slums and associated problems are still major source of worries in developing countries of which South Africa is a prime example.

In South Africa, the motto 'Urban areas Without Slums' inspired and legitimized a specific focus on eradicating informal settlements. Huchzermeyer (2004) notes that the South African promotes a "commitment" to accomplish 'slum'- or 'shack'-free urban areas by 2014. Although this eradication effort was not achieved, the government has articulated its worries over informal settlements consistently due to socio-physical problems.

2 PROBLEM DESCRIPTION AND RESEARCH QUESTION

The existence of slums is a reality. More than 1 billion people live in indecent area without access to basic needs; adequate sanitation, improved water supply, durable housing, adequate living space and secure tenure (Bredenoord and van Lindert, 2010). Lack of one of these basic needs has direct consequences on the physical and psychological wellbeing of urban communities. Diarrhoea, cholera and other water borne diseases form major problems affecting slum dwellers. According to UN-Habitat (2010a), the number of slum dwellers continues to grow at the rate of 10% every year globally. This statistic shows the increase of the problem, except a model of urban development that will reverse the trend is implemented. This discussion raises a question that requires answers. This paper thus attempts to answer “what are the socio-physical issues in slums in a South African community”? The aim of the study was to examine slum growth and the development challenges it presents to urban policy and planning in Free State province of South Africa. Geographically, the research covers the growth of slums in which the case in the Free State province of South Africa is examined. In particular, the research was narrowed one specific slum community of Meqheleng, which falls under Setsoto Municipality in Free State. In terms of contents the study covers the socio economics characteristics, household’s characteristics, housing conditions, access to basic household services, slum control efforts in selected communities and the challenges associated with slum control.

2.1 Slum, Squatter and Shantytown Explained

The UN Habitat has defined a slum as an area of poor quality housing that is typically found in the inner city in rich countries and in other parts of cities in poor countries. The common features in a slum comprise lack of basic local authority services seen through access to clean water supply, proper sanitation and water disposal systems. The absence of these basic amenities is made worse by inadequate and under-maintained infrastructure, dilapidated structures, poor structural quality of houses, and insecure resident land tenure system. While the quality of houses and shelters are always compromised by the use of cheap substandard and flammable materials, the plight of slum dwellers is made worse by life threatening contagious diseases. This description of slums places more emphasis on housing quality for the determination of whether or not a community is a slum. It further provides a distinction between slum locations both in the developed and the developing countries, to say that in rich countries, slums are located in the centre of the city, while in poor countries, slums can spring up anywhere. According to UN Habitat (2010a), slums sprout and continue for a combination of demographic, social, economic, and political reasons. Common causes include rapid rural-to-urban migration, poor planning, economic stagnation and depression, poverty,

high unemployment, informal economy, colonialism and segregation, politics, natural disasters and social conflicts.

Similar to slums is another phenomenon referred to as squatter camp / settlement. A squatter settlement can be defined as a residential area, which has developed without legal claims to the land and/or permission from the concerned authorities to build; as a result of their illegal or semi-legal status, infrastructure and services are usually inadequate. Squatters mostly develop as a result of homelessness and the lack of jobs among rural-urban migrants. They settle on any unoccupied space available without the notice of the local authorities, and within a short time, they multiply in numbers so it becomes difficult to evict them (Asamoah, 2010). The endemic physical and social problems of slums are also manifest in squatter camps.

In the case of a Shantytown, the UN-Habitat (2009) defines it as a group of unplanned shelters constructed from cheap or waste materials such as cardboard, wood and clothing. The UN-Habitat notes that shantytowns are commonly located on the outskirts of cities in poor countries, or within large cities, derelict land or near rubbish tips. They are also found in densely populated areas, which lack basic services such as running water, sanitation, and electricity (UN-Habitat, 2008). The shanty dwellers are considered legal occupants and are not afraid of expulsion; therefore, for planning purposes enough data can be collected from them. This explains why tenure security is very crucial in dealing with slums in the cities.

2.2 Research Rationale

Many urban areas are developing rapidly and therefore slum increase need to be addressed. If local municipality could provide adequate shelter in developing countries, slums could be alleviated. Lack of planning in the development of slum settlement is the reason for absence of waste disposal facilities and proper infrastructure. Infrastructure is essential to both economic and social development. Development of transport and communication in infrastructure enhances the mobility of people and information through reduction in cost and time. However, slums and squatter camps have highest concentration of the under privileged people with inadequate rights to basic needs. Such under privileged urban dwellers migrant to the cities in search of better income, but they become trapped in slums where they are exposed to diseases due to lack of safe drinking water, sanitation and water disposal systems.

Armed conflicts can exacerbates slum condition in a variety of ways. They can lead to the destruction of urban infrastructure including housing; increase the population of urban areas as panic drives rural dwellers flee to the city as in case of Kinshasa in Democratic Republic of Congo (Bloom et al., 2008). Such situations overstretch existing infrastructure and create slum like conditions by diverting scarce resources from the provision of infrastructure to spending on warfare.

3 METHODOLOGY

The case study design was used in the research. A case study involves an observation of a single group or event at a single point in time for instance, a community after an urban renewal programme (Thomas, 2011). A case study was used to carry at the research because phenomenon under investigation is a contemporary one and the study is based on a real life situation (Ritchie et al., 2014). In addition, the study brings an investigator and the invested case into direct contact. This leads to a better conversance with a community to questions and issues raised in the cause of the investigations.

The information needed for this study incorporates the populace and the number of families in the chosen slum communities of Meqheleng. Furthermore information on socio-economic characteristics, household characteristics, housing conditions and access to basic utility services in the slum areas were needed for the study. The populace and the number of households in the chosen slum groups were gathered from the information on the socio-economic attributes of slum inhabitants were accessible at the household level.

Apart from interviews, the data collection instruments that were used as a part of this research incorporate the utilization of structured questionnaire, direct observation, a smart phone and a pocket note pad. These instruments were used to encourage the information collection as and when the need for their use arises. The structured questionnaires were used for collection of household data in the selected slum community, under this a set of open and close ended questions were set and administered through a random sampling technique targeting a household head in every fifth house of sampled slum community. The difficulty met was the unwillingness on the part of some respondents to provide the required information for fear of the outcome of the research. Time was therefore spent explaining the purpose of the research.

A direct observation was also used as a tool of collecting data from slum dwellers in the selected community. This was possible due to the household survey that was conducted in the selected community. The process offered the opportunity for the observed community in terms of their housing and environmental conditions. A smart phone was used to take photographs of some scene that were considered important to the study. Finally cell phones calls were made to some respondents for further clarification of the already provided information. The interviews that were conducted provided additional information on the observations and a total number of 31 interviews were conducted with household heads in Meqheleng in the month of August 2014. In terms of physical description, Megheleng (Ficksburg) is a town situated at the foot of the 1750m high Imperani Mountain in Free State province, South Africa. It is an important agricultural region of the Free State where crops, such as maize and asparagus are grown. Meqheleng has a population of 35397 and 55% is female. A concise description of the slums that form the focus of this study shows that:

- Boitumelo is located about 4km east of the central business district (CBD) of the town. It covers an area of about 0.51 sq.km. It has a population of about 1532 according to the 2011 census figures of South Africa with 384 households (STATSSA, 2011). The people of Boitumelo have access to clinics, hospital

and educational facilities that include one high school and two primary schools. To clarify the observations, five semi-structured interviews were conducted in the slum.

- Zone8 is located in about 4.2km east of the CBD of the Ficksburg. It covers an area of about 0.13 sq.km. It has a population of about 10529 and 2832 households (STATSSA, 2011). Children can access educational facilities both within and outside the community. The community has a clinic. To clarify the observations, eight semi-structured interviews were conducted in the slum.
- Marallaneng is located in about 2.5km east of the CBD. It has a population of about 727 and 132 households (STATSSA, 2011). It occupies an area of about 0.09 sq. km. The community has a cluster of basic schools, and there is a one hospital in Marallaneng. To clarify the observations, ten semi-structured interviews were conducted in the slum.
- Masaleng is located in about 3.5km east of the CBD off the Ficksburgs. It covers an area of about1.93 sq.km, with a population of about 2194 and 549 households (STATSSA, 2011). It has a cluster of schools, which include one high school. To clarify the observations, eight semi-structured interviews were conducted in the slum.

4 DISCUSSION OF RESULTS

Slum development in the studied communities manifests itself in the physical and socio-economic terms. Physically, slum development in these communities manifests through poor sanitation, sub-standard buildings, under maintained roads and poor utility services provision as shown in Table 1. The study identified that the residents of the slums are mainly migrants. This realisation is highlighted in the demographic data of the interviewees who happen to have very low educational qualifications and employable skills. It was revealed that 80% of the interviewees in the four communities were migrants. Further investigations show that 12% of these migrated from the rural parts of the Lesotho, 20% from the farms around Free State while 48% migrated from the other parts of the country. The remaining 20% of the respondents hailed from the slum communities. This means that the migrants far exceed the natives in the slum communities

Table 1. Manifestations of slums in the sampled communities

Area	Observations
Boitumelo	Poor sanitation, large households, lack of municipal services, inadequate clean water, poor roads, substandard houses
Zone 8	Poor sanitation, poor roads, poor utility services, large households, inadequate clean water, substandard houses
Marallaneng	Poor sanitation, inadequate clean water, substandard house
Masaleng	Poor sanitation, inadequate clean water, substandard houses

The information that is highlighted in Table 1 is further explained in relevant sub sections.

4.1 Household characteristics

The study identified that the slum households are relatively large in sizes. About 29% of the interviewees have six people in a household, 25% have five members, 17% have seven members, 15% have four members, and 8% have eight members while 6% have three members. In addition, the research that about 73% of the households in the slum communities live in single rooms, 25% live in two rooms, while the remaining 2% live in three rooms. The characteristics of the households in the selected slum communities point to a housing shortage combined with large household sizes in the slum areas. The environment is therefore overcrowded and can be cited as a probable cause of the environmental degradation in the selected slum communities.

4.2 Provision of Utilities

The fieldwork of the study indicates that electricity supply in the slum communities is not reliable, though the study reveals 70% coverage in the slum communities. It was also identified that only 26% of the inhabitants enjoy regular flow of electricity. For 41% the electricity supply is bad, while 33% consider it as worse. This situation is attributable to the nature of dwellings in the slum communities. Many houses are illegally located and for that matter, they cannot properly wired and are illegally looped to one source instead of each house connecting from separate sources.

In terms of water supply, the study reveals that almost half of the slum dwellers in the communities have irregular water supply in their houses. An estimated 20% of the population in the slums have even a worse situation where water does not flow in their houses at all. The irregular supply of water to the slum communities may be a result of the nature of housing in the slum communities, which makes it difficult for all parts of the communities to be served. The availability of portable water surely have impact on the level of sanitation in a community. In this study, more than 25% of the interviewees were of the view that sanitation in their communities is bad. Another more than 50% consider it to be worse in their communities. This is attributable to the overcrowding, which contributes to too much waste generation and the haphazard siting of houses that makes waste collection very difficult in the communities. In general, the slum communities in the area are underserved with water and sanitation services. This stems from the disclosure through the study that 54% of the inhabitants of the slum communities have difficulty in accessing water, and 91% of the interviewees considered sanitation as either bad or worse in their communities.

4.3 Access Roads and Housing Conditions

The study revealed that 45% of the local roads in the slum communities are good, which means that they are tarred, have smooth surfaces and are broad enough for both vehicular and pedestrian use, while 55% of the local roads in the selected communities are either bad or worse. This is so because some of the roads are narrow due to encroachment, others have developed potholes due to neglect while the rest are unpaved.

The findings relative to housing appear to be worse than the one for roads. The study identified mud, bricks, scrap materials and locks as the main materials used in building the walls of houses in the studied slum communities. Minor portions of houses were built with blocks, which are considered to be durable housing materials. However, significant portion of the houses were built with non-durable materials such as mud and scrap materials. It was thus revealed that the use of non-durable materials for construction of houses is popular in the slum communities. This is attributable to the fact that as squatters, they need to assure their landlords that their stay on the land is temporary in order to avoid eviction. As a result of the fact that slum communities start as temporary settlements the structures are not durable. The houses mostly lack strong foundations and the walls are non-durable and weak. Those that have foundations still have them exposed due to erosion and other forms of environmental degradation. The houses are also built on land acquired in questionable circumstances. Give that acquiring land is tedious and involve the payment of levies, which most slum dwellers are not able to pay, land are often acquired without official endorsements in the slums. The legal occupants of their houses in the slums are in the minority and among this minority; most of them have illegal extensions that contravene planning regulations. A major effect of insecure acquisition of land is the inaccessibility of mortgage facilities, which would have impacted significantly on the quality of houses in the communities.

Figure 1: An example of state of sanitation in the slums - Toilet

To be succinct, this study determines that:

- Slum dwellers are mainly rural-urban migrants. The study identified 80% of the slum dwellers in the selected communities as rural- urban migrants. This suggests that most rural- urban migrants who enter the city end up in slums.
- Rapid urbanisation is not managed properly as migrant workers without an affordable place to stay end up in slums in the area of the study. In other words,

it appears that rapid urbanization drives economic growth and causes people to seek working and investment opportunities in urban areas.

- Social exclusion and poor infrastructure influences the adaptive behaviours and conditions of slum dwellers. Poor families that cannot afford transportation, or those who simply lack any form of affordable public transportation, generally end up in slums located within walking distance or close enough to their place of their formal or informal employment.
- Slum communities are overcrowded as shown in this study. This is so because the study identified that the average household size in the slum communities is 6 persons per household. The implication for the built environment is in tandem with the need for increased number of durable affordable low-income housing. Such housing should be supported with needed water and transport infrastructure.
- Electricity supply in the slum communities is unreliable. This is because the study identified that only 20% of the dwellers enjoy regular electricity, 34% enjoy erratic supply of electricity while the remaining 46% have no access to electricity as they are not connected to the national grid at the time of this study.
- Some immigrants regard unoccupied land as land without owners and therefore occupy it. Informal land tenure also includes occupation of land belonging to someone else. A sizable proportion of the occupants agreed that they moved in and occupied the space without the consent of landowners (self-acquisition). This is prevalent in Zone 8; this portion of the site belongs to the government, and areas along the Boitumelo. Some transfers of land from previous occupants were also observed. The present occupants claimed that they acquired the occupied and developed land from their relatives who were original occupants that had already left the neighbourhood to relocate to other parts of the metropolis.

This study confirms the argument advanced by Cohen (2006). Cohen noted that while much of the current sustainable cities debate focuses on the formidable problems for established urban areas, the majority of all urban dwellers continue to reside in far smaller urban settlements of which slums is a major sub set in developing countries. Many governmental agencies have not adequately recognized the deteriorating living conditions of the urban poor that are clearly uncovered in this study. The need to act now is timely as Cohen in 2006 already predicted that the challenges of achieving sustainable urban development will be particularly formidable in Africa. A prediction that is a reality based on the findings of this study and similar studies, which include Goebel (2007), Trefon, (2011), and Pieterse (2006).

5 CONCLUSION

Growing urban poverty is a major problem facing the developing world of which South Africa is not excluded. This phenomenon is real in slums and it has implications for the development of infrastructure in communities. In particular, the study has established that slums in Meqheleng are associated with rural- urban

migration, which is fuelling urbanization. Similar to any area in the developing world, urbanization in Meqheleng has led to the growth of slums. Increasing urban population has resulted in the shortage of housing. This coupled with the authorities' inability to provide affordable housing for the low-income urban dwellers has resulted in the creation of slums in the cities as part of the urbanization process. Given that the tide of rural-urban migration is not set to either slow down or stop any time soon, there is an urgent need to address proliferation of slums now. For instance, slum controls in Meqheleng require a holistic and an integrated planning approach that would reduce rural poverty and improve urban livelihoods. The findings of this single case study necessitate the need to attend to the quality of the houses in slums, in conjunction with improved access to basic amenities of electricity and roads. The host municipal authority should take keen interest in slum control in order to reduce social vices in the communities and this can be kick started with regular maintenance / upgrading of building, infrastructure and facilities in the slums. To make a success of this suggestion, principles of community participation should be promoted in all interventions proposed by the government.

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