Urban Development Planning for Sustainability: Urbanization and Informal Settlements in a Democratic South Africa

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Abstract

The purpose of this paper is to provide an analysis of the relationship between urbanization and informal settlements, in order to demonstrate how their amalgamation adversely affects urban development. Empirically, urban development in the developing countries has been facing a variety of challenges. Inherently, the post-1994 era of democratic South Africa has witnessed the emancipation and intensification of contemporary issues within urban development and these include massive urbanization levels and the rise of informal settlements in the cities. The co-existence of the two phenomena impedes adequate urban development. As urbanization takes its course, the resultant is the proliferation of informal settlements. Consequently, encapsulated within the informal settlements, is the upsurge of poverty levels and social-ills such as unemployment, crime. poor service delivery and health hazards such that residents are susceptible to poor conditions of living. Despite all the government's efforts to address this pestilent socio-economic issue, through development programs and policies that seek to promote equitable urban development. High urbanization levels and informal settlements remain a peril to urban development. It is in this context that this paper argues that unplanned urbanization and uncapped informal settlements are practically hindrances to effective urban development in South Africa. Furthermore, the paper contends that, in this era of promoting sustainable development, there is need for a paradiam shift from a mere generic urban planning and development approach, to a rather more proficient type, which entails planning for urban sustainability. Thus, the paper concludes that failure to curb urbanization levels and the rise of informal settlements in South Africa's cities is an indication of nominal urban planning and development systems.

1. Introduction

South Africa witnessed the dawn of its democratic dispensation in 1994. As the country gained momentum in its freedom discourse, the government declared the institution of the Reconstruction and Development Program (RDP) (Wats, 2003). RDP can basically be considered as the ice-breaker to a mammoth of many developmental policies that were implemented to tackle the disparities that are a legacy of the apartheid era. Amongst such policies are the Growth, Employment and Redistribution (GEAR), Accelerated Shared Growth Initiative for South Africa (ASGISA), the New Development Path and the latest National Development Plan (Nthema and Lochner, 2013). All the afore-mentioned developmental policies were implemented respectively, with a vision of bringing about socio-economic development, equitable service delivery and development for all (both rural and urban). Additionally, in terms of urban development, the National Urban Development Framework of 2009 was introduced to promote equitable development in South African cities. However, in the face of such policies, the government has been facing a daunting challenge of high rates of urbanization and the rise of informal settlements (Abbott, 2002). Consequently, the amalgamation of the two phenomena explicitly hinders effective urban development (Teets, 2012). As urbanization increases, the resultant is the proliferation of informal settlements. Such socio-economic ills include amongst others, increased poverty levels, unemployment, crime, poor service delivery and health hazards (Chung and Hill, 2002).

This paper argues that uncapped urbanization and the upsurge of informal settlements, coupled with the housing backlogs facing South Africa, perhaps, call for a shift from the master planning and urban development approach to a more proactive, proficient and strategic planning paradigm. Drawing from the need to deal with informal settlements, the then Minister of Housing in 2004, stressed the importance of government interventions to improve the living conditions in informal settlements (Ackelman and Anderson, 2008). From this discourse, two areas were identified to be requiring improvements and these are: lack of infrastructure and ineffective governance. This further prompted for the South

African housing program to aim at improving the lives of 2.2 million households by the year 2014 (Richards, Leary and Mutsonziwa, 2007).

2. Urban Development Planning Approaches and the Dynamics of Urbanization and Informal Settlements

Historically, the industrial revolution in Europe during the 18th century and the industrialization period of America during the 19th century gave birth to urbanization (Eduardo, 2011). The period witnessed the emancipation of urbanization as industries and factories created employment opportunities in urban areas. In Rana's interpretation (2013), urbanization trends correlate with the proliferation of informal settlements which is directly attached to urban sprawl. Huchzermeyer and Karam (2006) define informal settlements as settlements of the urban poor developed through the unauthorized occupation of land. Furthermore, informal settlements are regarded as unhealthy and overcrowded blights on the urban landscape. According to Ziblim's understanding (2013), there is an undesirable association between the three components which are: urbanization, unemployment and informal settlements. Brunt and Penelosa (2012) support that view by highlighting the connection between the three components and further explain that the unemployed populations that move to urban areas in search of jobs tend to fail to secure employment and they cannot afford basic accommodation. Thus, they eventually resort to informal settlements. Having considered the dearth of the problem, the international community unified its efforts and the United Nations (UN) Millennium Development Goals through goal 7, target 11, also embraced the issue of informal settlements aiming at significantly improving the lives of at least 100 million slum dwellers by 2020 (UN, 2006).

There has been an inconclusive debate on whether urbanization can be perceived as a positive or negative scenario within the context of urban development. Hence, urbanization optimists have their own constructive view and they argue that it is a resemblance of economic, cultural and social development (Fekade, 2000; Akhmat and Khan, 2011; Brunt and Penelosa, 2012). Whereas, urbanization pessimists argue that it triggers informal settlements which are a synopsis of urban poverty envisaged in the living conditions therein (Butuala and Vankooyen, 2010; Eduardo, 2011; Rana, 2013). One can then contend that perhaps the rise of informal settlements in urban areas can be attributed to the lack of pro-poor strategies that can positively influence urban planning and development policies. Essentially, urban development planning entails the; creation of livable cities; facilitation of infrastructure and service provision; equating urban development with social and economic development and; maintaining good quality of community life (NUDF, 2009). Therefore urban planning and decision-making for the sustainability of development calls for the consideration of socio-economic needs of the urbanites. Generally, there are 7 types of urban planning approaches which draw from the spatial data and they are further described below (table 1).

Table 1: Types and descriptions of urban plans

Type of urban plan	Description
Master plan	These are spatial or physical plans that depict on a map and form an urban area at a future point in time when the plan is realized, also known as end-state plans or blueprint plans, also known as the comprehensive city plan in China or the general plan specifically for land zoning systems.
Comprehensive plan	Reflects the belief that the planning system should plan towns or parts of them in detail. In the past, this plan entailed the clearance of the existing city for the new comprehensive plan to take effect.
Layout plan or local plan	These are the physical plans often at a local level scale, depicting details on roads, public spaces and boundaries.
Destination plan	A plan for a specific area where substantial change is anticipated, usually on the basis of a wider strategic plan/structure/scheme.
Strategic spatial plan	A broader-level-selective spatial plan, usually showing, in a more conceptual way, the desired future direction of urban development. Particular decision-making processes accompany the production of a strategic plan, also known as structure plan or directive/development plan
Lad use zoning	Detailed physical plans or maps showing how individual land parcels are to be used, and assigning to the land owner, certain legal rights and the conditions pertaining to the use and development of the land. This type of plan aligns to the master plan.
Regulatory planning	Refers to the rights and conditions set in the zoning plan, along with legal rights pertaining to the process of allocating or changing land-use rights, buildings and space use.

Source: adopted and adapted from UNHSP 2009

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Master planning has been evolving for the past 100 years and some countries still utilize the old initial model, though some have adopted even more innovative approaches in recent decades (Advaryu, 2010). The new urban planning approaches are premised on spatial planning, for integrating the public sector functions and planning for new and sustainable spatial forms such as compact cities and new urbanism (UNHSP 2009). On logical grounds, critics of the master plan argue that the plan has failed to accommodate the needs of inhabitants of informal settlements, mainly because the plan is rigid and cannot adjust to meet the evolving dynamics of urban development (Watson, 2009). Therefore, the paper argues that, unlike the old master planning approach to urban development which is fixed and end-state oriented, the new approaches foster a proactive course that entails planning for the present and future urban concerns such as city global positioning, environmental issues, sustainable development, social inclusion and achieving urban-related MDGS (Teets, 2012).

3. South Africa's Socio-Economic Profile

In order to gain an in-depth understanding of the socio-economic dynamics underpinning the successes and flaws of efforts geared at promoting development for all in the post 1994 era, an assessment of South Africa's profile is deemed indispensable. To ascertain the socio-economic profile of the country, CIA (2013) reports that South Africa is classified as an upper middle-income country with a total Gross Domestic Product (GDP) of US\$ 592 billion and per capita GDP of US\$1,160. Subsequently South Africa was ranked 109 out of 229 countries in terms of per capita GDP. On the contrary, such massive economic growth is despondently unable to compliment substantial economic development. It is rather disconsolate to note that despite having achieved such overwhelming progress in economic growth, South Africa's greatest developmental challenge remains of reducing the levels poverty and inequality existing amongst its populations. In 2005, South Africa was placed 2nd, coming after Lesotho, out of 136 countries in the world with regard to inequality in the distribution of family income (Ziblim, 2013). Consequently, more than 30% of South Africa's population were then estimated to be living below the poverty line and such inequalities tend to lead to the proliferation of informal settlements. South Africa, being a middle-income country as observed earlier, conversely suffers from a myriad of developmental challenges, ranging from poverty and inequality, rapid urbanization to service delivery backlogs and the upsurge of informal settlements (CIA, 2013). Most compelling evidence shows that the poverty levels in rural areas prompt people to migrate to urban areas in the hope of securing better living conditions and economic opportunities (Ziblim, 2013). Although this may be true, in reality, the migrants often find themselves trapped in worse-off conditions that are the extreme opposite of their initial expectations. All things considered, the migrants fail to acquire employment and basic accommodation. As a result, rural poverty is then indirectly transposed into the informal settlements and in the same way, it manifests as urban poverty. Lekonyane and Disoloane (2013) describe this process as the "urbanization of poverty". Consequently, the poverty stricken informal settlement inhabitants cannot either participate or influence any developmental issues affecting them. Which ultimately leads to a deduction that, poverty and lack of access to resources negatively complement each other. Therefore, such a status quo is not conducive for urban development.

4. South Africa's Legal Framework on Informal Settlements and Urban Development

This section provides an analysis of the legal framework that has guidelines in dealing with the informal settlements, urbanization and urban development in South Africa. The policies will be analyzed in a manner that comprehensively substantiate the argument that urbanization and informal settlements have a negative effect on urban planning and development processes.

Section 26 of the Constitution of the Republic of South Africa, (RSA, 1996), in terms of housing, states that:

"(1) everyone has the right to have access to adequate housing. (2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realization of this right. (3) No one may be evicted from their home, or have their home demolished, without an order of court made after considering all the relevant circumstances. No legislation may permit arbitrary evictions".

The National Urban Development Framework (NUDF) (RSA,2009) provides six guiding principles that are aimed at maintaining effective urban development in South Africa and these are: **Focused national attention on urban challenges**; This principle invokes for focus of national efforts on urban challenges which include urbanization and informal settlements, amongst others. It greatly encourages prioritizing economic growth together with poverty alleviation. However meeting the target of inclusively alleviating poverty in urban areas is compromised by the proliferation of

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informal settlements which are naturally havens of poverty, due to the fact that the majority of the inhabitants are not employed. Inherently, maintaining equitable urban development becomes a challenge in the existence of informal settlements. Furthermore, pro-poor strategies for urban development are over-powered by the high levels of urbanization. Hence, the failure to cope up with the urbanization trends ultimately results in compromised urban plans for the provision of services such as housing, infrastructure and public amenities. Commitment to inclusive pro-poor urban development; this principle beseeches that the urban development process ought to be inclusive and pro-poor. As mentioned above, pro-poor urban development strategies fail to deliver as they are rendered weak by the ever-increasing rural-urban migration populations that are absorbed in informal settlements. There seems to be substantial reason to argue that the issue of concern could not necessarily be urban planning strategies but rather, putting more emphasis on rural development. It could be that if rural areas are well developed, rural-urban migration can subsequently be reduced. Furthermore, urban planning and development strategies could then ultimately be effective without any hindrances. Proactive management of urbanization.; a strong proactive approach to managing urbanization needs to be adopted into the foreseeable future, given the continuing trend of significant migration to the cities. Considering the trends at which urbanization levels are escalating ever since the year 1994, the proactive management of urbanization would be ideal. Integrated approach to urban and rural areas; Urban and rural areas form part of single interdependent system that needs to be managed in an integrated and holistic manner. Regional inter-governmental co-operation; Increased cooperation and accountability across jurisdictional boundaries is required to address the economic, social and ecological challenges facing urban areas and their functional hinterlands. Differentiated support; a differentiated policy and strategic approach is required for different kinds of urban spaces that acknowledges the widely varying challenges and capacities of different types of settlement (Cities Network, 2009).

The Housing Act RSA; 107 (RSA, 1997) positions that all the tiers of government have a mandate of ensuring that citizens have access to safe housing with sustainable services. Furthermore, the local government should according to sec 9:

" (1) Every municipality must, as part of the municipality's process of integrated development planning, take all reasonable and necessary steps within the framework of national and provincial housing legislation and policy to (a) ensure that (i) the inhabitants of its area of jurisdiction have access to adequate housing on a progressive base".

The National Housing Code (DHS, 2009) which forms part of the Housing Act of 1997 provides guidelines on human settlement development. The housing codes describe informal settlements within the following characteristics, illegality and informality, inappropriate locations, poverty and vulnerability, inappropriate locations. The National Housing code gives guidelines on convectional building standards that have to be met and it promotes the utilization of land with security of tenure (DHS, 2009).

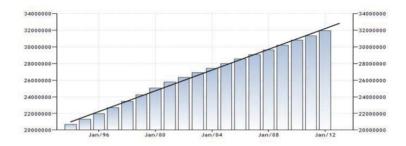
Upgrading of Informal Settlements Program (UISP) (DHS, 2009) was established in terms of the Housing Act and is also part of the National Housing Code. Basically, the program is aimed at providing funding to municipalities to upgrade informal settlements in situ through improved access to services and security of tenure. The program further encourages that the interim services should be considered as the first phase of the upgrading to reach the level of permanent municipal engineering services.

The Breaking New Ground (BNG) (DHS, 2004) is aimed at promoting progressive informal settlement eradication. It invokes for the integration of informal settlements into the broader urban fabric to overcome spatial, social and economic exclusion. BNG acknowledges in-situ upgrading as the best way to eradicate informal settlements in South Africa. This is so because the other approaches such as eviction and relocation tend to stigmatize the poor urbanites as they would be treated as outcasts of the society. However, in cases where development is undesirable, relocation is the only possible way to upgrading the situation of informal settlements. Important to note is that the procedure of upgrading the informal settlements is not authoritarian, but rather, it encapsulates the tenure options and housing typologies. The core values of the BNG are: The acceleration of housing delivery as a key strategy for poverty alleviation; The utilization of housing provision as a major job creation strategy, enabling all citizens access to property and housing as an asset for wealth creation and empowerment; Leveraging growth in the economy; Promoting social cohesion; Combating crime and improving the quality of life for the poor; Supporting the functioning of the entire single-residential property market to reduce duality within the sector by breaking the barriers between the first economy residential property boom and the second economy slump; and, Utilizing housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring (DHS, 2004).

5. Urbanization and Informal Settlements as Challenges to Urban Development: Post-1994 South Africa

Presently in Democratic South Africa, urbanization is not a new phenomenon. Ever since the advent of democracy in 1994, scores of people have been flocking to urban areas where they were formerly restricted access and could only stay in homelands (Turok, 2012). Subsequently, the massive urbanization transposed its intensity into the emergence and rise of informal settlements. Likewise, rapid urban growth lies at the heart of a multitude of problems in South African cities.

Figure 1: Population trends: Post-1994 South Africa



Source: UN Habitat (2012)

More than 2/3 of South Africa's population now lives in urban areas and this is merely due to rural-urban migration and high urbanization rates. As a result, urbanization levels have been escalating dramatically over the past 20 years. The rate at which urbanization persists triggers a variety of challenges that manifest as urban segregation and urban fragmentation and ultimately impede urban development. Furthermore, urbanization and the problems attached thereto inescapably defeat the efforts of urban planning. Such problems include unemployment and underemployment, deteriorating infrastructure, abating service delivery capacity, environmental degradation, overcrowding, and housing shortages and the mushrooming informal settlements (Lekonyane and Disoloane, 2013).

It has been observed that informal settlements are normally located in areas whose land is environmentally poor and lacks security of tenure (Richards *et al. 2006*). In addition to that, informal settlements lack infrastructure such as roads and electricity. Moreover, the structural dwellings, are built from non-durable materials such as plastics, cardboards, metal tins, zinc sheets and timber, which do not meet the standards of housing codes. Furthermore, informal settlements do not have service coverage in terms of potable water, sewerage, storm water drainage and electricity (Huchzermeyer and Karam 2006). Having acknowledged the physical characteristics of informal settlements, it is of paramount importance to note that such conditions are a threat to health, the environment and the local ecosystem. Even so, such living conditions as projected by figures 2, 3 and 4 of typical informal settlements in South Africa, are inevitably daunting to ensuring equity between social development and urban development.

Figure 2: Typical informal settlements in South Africa



Figure 3: Typical informal settlements in South Africa



It can also be observed from the representative figures (2, 3 and 4) of informal settlements that they are densely populated, which is another challenge to urban development. Provision of basic amenities in such a set-up is compromised due to the lack of sufficient space to accommodate engineering and infrastructure services. Subsequently, the feasibility of *in-situ* upgrading of the informal settlements is pragmatically impossible if it is to be undertaken without having to relocate some of the inhabitants so as to create reasonable space. Due to the massive rate at which informal settlements are spreading in South African cities. The resultant urban fragmentation attracted the attention of the national government, particularly owing to the land legal invasions and tensions between policies which on one hand sought to protect the urban poor and on the other, pursued to meet land use regulation guidelines (Ntema and Lochner, 2013). Currently, informal settlements are at the center of urban development concerns in South Africa (Turok, 2012). Henceforth, the "upgrading of informal settlements" is considered as one of the pro-poor strategies to address the plight of the urban poor. However, one can argue whether the upgrading of the informal settlements is the best feasible way of dealing with the problem, putting into cognisance how that can affect the already established urban planning and development structures. Important to consider is the fact that these informal settlements are located on land which is not serviced, one can then strongly argue that the nature in which the informal settlements are structured, without adequate space for the erection and establishment of any infrastructure. The process of upgrading these informal settlements would be of high costs and it compromises the whole setup of urban development. Perhaps the old ways of relocating the informal settlements inhabitants to better serviced land could be a better course of action. However, recent studies have indicated that residents perceive the relocation option as unfair as they would be detached from their social ties within the community (Taleshi, 2011; Amao, 2012; Van Rensburg and Campbell, 2012). On the other hand, one can invoke for more investments into urban planning approaches that are proactive in addressing future urban sprawl and land management, rather than sticking to the old methods that are rigid and cannot adopt to increasing populations and their needs. It can also be noted that the rise of informal settlements is also aggravated by the housing backlog in South Africa (Richards et al., 2007). Close to half of South Africa's 52 million people live in urban areas and of that population, a guarter of them live in informal settlements (Van Rensburg and Campbell, 2012). Moreover, Gauteng province, which is the country's geographically smallest but economically busiest province, has both the biggest and the fastest growing population with 12.2 million people recorded in 2011, which is a 33.7% increase since 2001. Additionally, Polokwane, Rustenburg, Vanderbijlpark, Nelspruit and Ekurhuleni are the five fastest-urbanizing areas, with average annual urbanizing rates of between 1.6% and 2.9% over the last decade (Ziblim, 2013).

In the face of the government's efforts to provide basic accommodation to its citizens through the RDP low-cost housing strategy, Statistics South Africa (Stats SA) estimates that by 2007 there were approximately 1.2 million households (9.7% of South Africa's estimated 12.5 million households) residing within informal settlements. Stats SA (2007) further revealed that 3 out of 9 of South Africa's provinces have higher figures of households living in informal settlements. For example, Free State has 18,4%, Gauteng 22,7% and North West 23,8% while Limpopo has 5,6%, Eastern Cape 8% and KwaZulu-Natal 8,6% (Ackelman and Anderson, 2006).

From the Gauteng province, informal settlements are at rampant in the city of Johannesburg, probably reasons attributed to the fact that it is the economic hub for the whole country and scores of people are attracted by the perceived economic opportunities.

Figure 4: Informal settlements in the City of Johannesburg



The City of Johannesburg is estimated to have a housing backlog of 240 000 units, which includes parts of Alexander informal settlement (Turok, 2012). Alexander is predominantly residential and has about 4 060 formal houses and 34 000 shacks, as well as various types of accommodation. The problem of informal settlements incited the city authorities to shift from the old master planning model to a more strategic spatial planning framework that aims at integrating the city and formalizing land development and service delivery. In her speech, presenting Gauteng's local government performance review from 2005-2011 on the 10th of May 2011, Premier Nomvula Mokonyane highlighted that informal settlements are a challenge for municipalities (HDA, 2012). On the positive, she disclosed that at least 85 informal settlements had been formalized by august 2008 and 36 were eradicated. In Johannesburg only, 49 out of the 182 informal settlements in service delivery: potable water was provided to 228 046 households and 167 014 had improved access to sanitation. Furthermore, she revealed that in terms of infrastructure, the budget spent exceeded R5-billion (HDA, 2012). Consequently, it is a clear indication that in as much as development is about the people, it also expensive. Therefore development processes call for strong economic bases, high investment and proper financial management so that the input of resources can yield the expected outcomes.

6. Conclusion

In summary, the challenges of high urbanization and informal settlements that South Africa is currently facing are daunting to urban planning and development. Informal settlements persist due to urbanization and they pose a great challenge to urban planning and development in South Africa. Notwithstanding the government's efforts to address the housing needs through the RDP and other developmental policies. Urbanization and the rise of informal settlements are intrinsically a setback to the idea of the low-cost housing strategy as vast migrants are absorbed into the informal settlements. Accordingly, the foremost aim of the Democratic South Africa has been to deal with the apartheid legacy envisaged in the dualism between residential areas. Consequently, after 20 years of democracy, the dualistic scenario has further manifested between planned and unplanned settlements. Essentially, the spill-over effects of such a scenario debauch urban development planning. Ultimately, urban imbalance is experienced through urban segregation and fragmentation (as informal settlements cannot access any urban services and people live in squalid living conditions). Therefore, the paper concludes that effective urban planning and development requires a proactive, strategic approach that is future-orientated without ignoring the present urban dynamics. Possibly, the adoption of recent innovative urban planning approaches such as strategic spatial planning for regional planning, local planning which can be utilized by local municipalities and also regulatory planning that can facilitate improvements in issues of security of tenure, could be deemed indispensable.

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