An overview of top-down vs. bottom-up models for informal settlement upgrading in South Africa
Georgiadou, M.C., Loggia, C., Nunez Ferrera, I. and Fagan-Watson, B.

This is an electronic version of a paper presented at the 52nd International Society of City and Regional Planners (ISOCARP) Congress, Durban, South Africa 12 to 16 September 2016.

An official publication combining the submitted papers will be produced by the conference organisers, edited by Ledwon, S. and Perry, G., ISBN 9789490354473.

The WestminsterResearch online digital archive at the University of Westminster aims to make the research output of the University available to a wider audience. Copyright and Moral Rights remain with the authors and/or copyright owners.

Whilst further distribution of specific materials from within this archive is forbidden, you may freely distribute the URL of WestminsterResearch: (http://westminsterresearch.wmin.ac.uk/).

In case of abuse or copyright appearing without permission e-mail repository@westminster.ac.uk
An overview of top-down vs. bottom-up models for informal settlement upgrading in South Africa

Maria Christina GEORGIADOU, Department of Property and Construction, Faculty of Architecture and the Built Environment, University of Westminster, London
Claudia LOGGIA, School of Built Environment and Development Studies, Housing Programme, University of KwaZulu-Natal, South Africa
Isis NUNEZ FERRERA, Policy Studies Institute, University of Westminster, London
Ben FAGAN-WATSON, Policy Studies Institute, University of Westminster, London

Abstract
The paper explores informal settlement upgrading approaches in South Africa and presents a review of top-down vs. bottom-up models, using experience and lessons learned from the Durban metropolitan area. Reflections on past upgrading efforts suggest that top-down policies in South Africa have not been successful to date. By contrast, participatory techniques, such as planning activism, can be used to enhance community empowerment and a sense of local ownership. This paper reveals that although the notion of ‘bottom-up’, participatory methods for community improvement is often discussed in international development discourses, the tools, processes and new knowledge needed to ensure a successful upgrade are under-utilised. Participation and collaboration can mean various things for informal housing upgrading and often the involvement of local communities is limited to providing feedback in already agreed development decisions from local authorities and construction companies. The paper concludes by suggesting directions for ‘co-producing’ knowledge with communities through participatory, action-research methods and integrating these insights into upgrading mechanisms and policies for housing and infrastructure provision. The cumulative impacts emerging from these approaches could aggregate into local, regional, and national environmental, social and economic benefits able to successfully transform urban areas and ensure self-reliance for local populations.

1. Introduction
The UN records that one in seven people live in an informal urban settlement; this totals to 850 million people globally, with over 80% of these living in developing countries (Habitat III, 2015). As a consequence of rapid urbanisation and population growth, informal settlements form a major part of the urban landscape globally and therefore constitute a major challenge (Habitat III, 2015; Knight, 2001). At the same time, more than half of the global population already live in urban areas with a significant increase projected by 2050; this is likely to increase the impact of issues related to poverty, inadequate infrastructure, housing and poor living conditions (Majale, 2008; Menshawy et al., 2011).

In general, informal settlements have gradually spilled over from residential plots onto adjoining land zoned for agriculture, without proper planning processes (Khalifa, 2011). Most informal dwellers migrate from rural areas to escape poverty, leading to the establishment (if not permanence) of informal settlements (Tshikotshi, 2009). Misselhorn (2008, p.6) argues that informal settlements are “holding places” where people can access the urban environment at low financial cost in search of a better quality of life. Addressing the informal urbanisation challenge will provide benefits not only the urban poor, but the city as a whole towards the development of sustainable and self-reliant communities (Khalifa, 2015). According to Menshawy et al. (2011) informal settlements are products of failed policies, bad governance,
corruption, inappropriate regulation, dysfunctional land markets, unresponsive financial systems and a fundamental lack of political will. Agbola and Henshaw (2011) assert that, due to failed land delivery and commercialisation systems, many informal settlements in Africa are located illegally on vacant and marginalised land.

This is a review paper exploring informal settlement upgrading approaches in South Africa, with a particular focus on top-down vs. bottom-up models. The study is structured as follows. Section 1 provides an introduction to the paper. Section 2 outlines the growth of informal settlements and background context in South Africa. Section 3 provides an overview of the existing regulations and planning policies at the national level. Section 4 focuses on informal settlement upgrading, presenting the gradual change to community participation and participatory planning. Section 5 demonstrates, by means of a pilot study conducted in the Durban metropolitan area, how an inclusive partnership with all stakeholders could be a useful tool for successful upgrading of informal settlements. Section 6 provides key recommendations for policy-makers and practitioners, before conclusions are drawn together with directions for further research. The research aims to inform local communities seeking to improve their quality of life and local authorities enhancing their planning mechanisms. The findings can be also utilised by international agencies, policy-makers, implementers and practitioners working on upgrading programmes, plans and policies, particularly under the post 2015 UN Sustainable Development Goals (SDGs) and the Habitat III New Urban Agenda.

2. The growth of informal settlements and background context in South Africa

Misselhorn (2008) states that almost 50% of the South African population lives in urban centres and a quarter of those live in informal settlements in impoverished and insecure conditions. South Africa is a party to the UN-SDGs with the obligation to “ensure access for all to adequate, safe and affordable housing and basic services by 2030” under Target 11.1 (SA Government, 2009). The country has also signed up to important declarations under the UN-Habitat Programme, including: the Vancouver Declaration on Human Settlements (1976); the Istanbul Declaration on Human and Other Settlements (1996); and, the Habitat Agenda (1996).

According to the UN International Covenant on Economic, Social and Cultural Rights (ICESCR) the main indicators for adequate housing include: legal security of tenure; availability of services, materials, facilities and infrastructure; affordability; habitability; accessibility; location; and cultural adequacy. However, some of the post-Apartheid consequences have led to spatial inequalities, social segregation and also several different housing typologies (Western, 2002; Williams, 2000). There are high-density residential developments, such as inner-city flats erected shacks in abandoned inner-city buildings, private rental housing and social housing schemes. There are also subsidised houses in urban townships, backyard shacks adjacent to formal housing, shacks in informal settlements on both public- and privately-owned land, and rural housing dwellings. Hence, it becomes difficult to assess and define the term ‘adequate’ housing in the South African context.

There is no widely acceptable definition of informal settlements, as the concept has various meanings in different countries with unique context-specific parameters (Srinivas, 2005). However, informal settlements are often characterised by certain characteristics; namely: (Habitat III, 2015; Khalifa, 2015; Klug and Vawda, 2009; Marx and Charlton, 2003; Srinivas, 2005):
Georgiadou, M.C., Loggia, C., Nunez Ferrera, I., Fagan-Watson, B.
Overview of informal settlement upgrading in South Africa, ’52nd ISOCARP Congress 2016’

- **Physical aspects**: the lack or complete absence of basic services and infrastructure (e.g. access to water, safe sanitation, reliable electricity, roads, waste removal) and poorly performing building materials (e.g. wood, cardboard, metal sheets, mud, corrugated iron).
- **Social aspects**: low-income groups, predominantly migrants; accessibility to socio-economic activities, such as workplaces, transportation, healthcare facilities, education and recreational areas.
- **Legal aspects**: lack of security of tenure and legal ownership. This refers to illegal occupation without building plans and often on hazardous land.

Some literature attempts to distinguish between ‘slums’ and ‘informal settlements’. Slums often refer to physical aspects; i.e. buildings, facilities and services (particularly sanitation and waste management) in inner cities that gradually deteriorate into slummed conditions, due to overcrowding. Informal settlements are related mostly to the legal standing of the scheme; namely, settlements that mushroom on vacant land, within and around places of opportunities, without proper planning, building regulations or standard construction methods (Khalifa, 2015). In South Africa however a clear departure from Apartheid terminology included the term ‘slum’ being replaced by ‘informal settlements’ (Huchzermeyer, 2011).

Migration and poverty are major causes of informal settlements in many African cities, including South Africa, as dwellers cannot afford to build or buy their own houses or to access formal housing schemes (Mutisya and Yarime, 2011; Wekesa et al. 2011). The post-apartheid period offered a number of top-down approaches to low-cost housing provision. South Africa government authorities have been responsible for decision-making on behalf of affected populations; however, top-down processes have not engaged directly with low-income communities, and have not understood in depth the nature of their vulnerability due to the impacts of local contexts (Huchzermeyer, 2011). Top-down models have been criticised as unsustainable in the sense that they continue the legacy of Apartheid in housing delivery. Development work and capacity building mechanisms typically focus on economic and physical aspects of housing and infrastructure provision. Hence, the existing social capital and needs of the local communities are often overlooked. In addition, the location remains unchanged, often in gated communities of urban peripheries without social integration and far from urban opportunities (Seekings, 2000).

By contrast, participatory techniques are widely considered a key means to upgrade informal settlements as they can enhance local empowerment and a sense of local ownership (Aron et al., 2009; Botes and Rensburg, 2000; El-Masri and Kellett, 2001; Frischmann, 2012; Simpson et al., 2003). Although the notion of ‘bottom-up’, participatory methods for community upgrading is often discussed in international development discourses, the tools, processes and new knowledge needed to ensure a successful upgrade have not seen widespread dissemination or uptake. In reality, participation and collaboration can mean various things for informal settlement upgrading and often the involvement of local communities is limited to providing feedback in already agreed development decisions from local authorities and construction companies (Binns and Nel, 1999; Hirmer and Cruickshank, 2014).

### 3. The legislative and policy framework of housing in South Africa

There are three streams for delivering housing provision in the post-apartheid South Africa; namely: private sector; public sector; and, self-built housing. Table 1 presents various pieces of legislation, which relate to the provision of adequate housing, covering all of the above three types of housing delivery. Article 26 of the Constitution of the South African government (1996) preserves “the right of access to adequate housing” and provides the overarching legislative
framework from which all national programmes and policies on housing, including slum upgrading derive their support and legitimacy in South Africa.

The Housing Act 107 of 1997 legally reinforces policy principles also outlined in the 1994 White Paper on Housing (SERI, 2011). The Act aims to put in place sustainable housing development processes by defining general principles and rules for housing development at all government levels (national, provincial and local). It also lays the foundation for financing national housing programmes and giving priority to accommodate the housing needs of the poor. Moreover, the Prevention of Illegal Eviction Act provides safeguarding against the eviction of unlawful occupiers living on both publicly- and privately-owned land (PIE, 1998). The National Norms and Standards set the minimum technical specifications for housing construction, including energy efficiency and environmental management strategies. In 2007, these standards were revised and from 2009 they are embedded in the National Housing Code (SA Government, 2009b). The Social Housing Policy was approved in 2005 and a revised policy has been included in the new National Housing Code in 2009. Social housing in South Africa is defined as “rental or co-operative housing for low-income people at a level of scale and built form which requires institutionalised management and which is provided by accredited Social Housing Institutes or in designated restructuring zones” (SERI, 2011; p.98).

The White Paper on Housing was the first post-apartheid housing policy aimed at realising a sustainable programme of housing delivery; it aimed to reach a target of 338,000 new homes a year (SERI, 2011). Since 1994, a number of national Housing Programmes have been implemented in line with the White Paper on Housing. Overall, these subsidy programmes are categorised into different intervention categories depending on the upgrading project, such as: Financial Programmes; Incremental Housing Programmes; Social and Rental Housing Programmes; and Rural Housing Programmes. For example, the Reconstruction and Development Programme (RDP) is a government-driven model allocated to beneficiaries with a household income of less than R3,500 (Landman and Napier, 2010). Beneficiaries of this subsidy receive a one-off grant for land, basic services (water and sanitation) and the house (top structure).

Table 1: Legislative and policy frameworks for housing in South Africa

In 2004, in order to counteract criticism that there was little input from the community into housing programmes and that therefore interventions did not reflect local needs, the South
African government introduced *Breaking New Ground (BNG)*: A comprehensive plan for upgrading slum settlements. This was a novel approach aimed at poverty eradication, reduction of vulnerability and promotion of social inclusion through participatory layout planning (Huchzermeyer, 2006). The BNG was adopted by the Department of Human Settlements Strategic Plan (2009-2014) as a policy shift to meet the challenge of slum upgrading. Under BNG policy, *in-situ* upgrading was prescribed as the best way to address the growth of slums in South Africa and support mixed-tenure and mixed-income groups to stay settled close to their existing jobs and transport routs, avoiding the marginalisation of the lowest-income households experienced until the 2000s (Marais and Ntema, 2013).

According to Marais and Ntema (2013), bottom-up, self-help housing is described as a concept which involves practices in which low-income groups resolve their housing needs mainly through their own resources in terms of labour and finance. The *People’s Housing Process (PHP)* is a formal self-help mechanism in South Africa which allows local groups to organise their resources and contribute their labour (‘sweat equity’) to build or manage the construction of their own homes. By supplementing the government-driven RDP delivery with savings, additional loans and labour, communities implementing PHP are able to build larger and better quality homes (Landman and Napier, 2010). In South Africa, this approach often involves organised communities or community groups with women in decision-making, drawing on their skills of the local population. The *Enhanced People’s Housing Process (EPHP)* was adopted in July 2008 to replace the previous PHP scheme. This new policy was the outcome of negotiations between the Department of Human Settlements and a group of Non-Governmental Organisations (NGOs), such as Planact, Development Action Group (DAG), the Built Environment Support Group (BESG), Afesis Corplan, Urban Services Group, Utshani Fund and Federation of the Urban Poor (FEDUP). The new policy integrates active participation into the definition of PHP seeking to involve beneficiaries into the decision-making over the housing upgrading process so as to: empower communities; create collective partnerships; mobilise and retain “social capital”; and deliver inclusive human settlements which are more responsive to the needs of the community (SA Government, 2009a).

Social inclusion and community participation are also encouraged at a municipal level by the South African *Upgrading of Informal Settlement Programme (UISP)*. UISP provides grants to accredited municipalities to run sustainable housing development projects aimed at improving the conditions of slum communities. UISP is administered by the National Department of Human Settlements (NDHS) and is the primary policy instrument used to meet national targets. There is also the *National Upgrading Support Programme (NUSP)* created by the NDHS which provides technical assistance for municipalities to undertake planning in conjunction with communities in informal settlements. In addition, NUSP provides support to municipalities (who act also as developers for the UISP) in project development and helps to implement integrated planning.

Since the end of the Apartheid system in 1994, there have been important changes in the policy landscape surrounding informal settlement upgrading in South Africa. At a municipal level, UISP encourages phased *in-situ* upgrading of informal settlements as a valid alternative to the relocation of slum dwellers. In fact, the three main pillars of UISP are (SA Government, 2009a): security of tenure; health and safety through provision of basic services (including water and sanitation); and *empowerment of inhabitants through bottom-up, participatory processes*. UISP also highlights that slum eradication, which is characterised by forced relocation of communities, is a radical approach that provides only short-term (temporary) solutions, without addressing the real challenges of slum upgrading. In reality, under UISP,
land and services were delinked from housing subsidies and became the municipalities’ responsibility. Most South African municipalities have the capacity to provide basic services but fewer have explored alternative means of security of tenure, such as planning activism through community empowerment. It can be therefore argued that current mechanisms are not fostering planning activism or inclusive participatory models of housing provision and urban development. In addition, UISP mainly provides subsidies for beneficiaries that are on land suitable for permanent residential development, which is not always the case (Bolnick, 2010). The following sections will explore the issue of informal settlement upgrading and the value of community-led processes in achieving inclusive and participatory models of housing provision.

4. Informal settlement upgrading

Informal settlement upgrading refers to any sector-based intervention that improves the quality of life of the residents affected (Abbott, 2002). The motivation behind an upgrading program may be external (e.g. from the government or external agencies) or it can be developed by the community. The location of these settlements is of paramount importance for the socio-economic activities of the community living there (Abbott, 2003). Physical upgrading of informal settlements takes two general approaches: demolition and relocation or in-situ development (Del Mistro and Hensher, 2009). Demolition and relocation is the process of moving inhabitants from their settlements to another ‘greenfield’ site. However, a number of scholars favour in-situ upgrading as this involves the formalisation of informal settlements in their original location (Del Mistro and Hensher, 2009; Huchzermeyer, 2006; Massey, 2014). One of the main critiques of demolition and relocation is that this approach is motivated by the macro-economic target of the government to meet the housing shortage and not the improvement of poor living conditions. This has led to conflicts and significant socio-economic disruption with little regard to displacement, poverty, vulnerability and the impact of these actions on social inclusion. In-situ upgrading is the process undertaken to improve the conditions of an informal settlement in its current location through the provision of basic services and secure tenure to people. This model recognises three conditions: “the property rights, the property values and the physical attributes of the underlying assets, and the impact on each other” (Mukhija, 2002; p.554). In-situ projects can be wide-ranging, from simply dealing with land tenure to incremental housing improvement and/or the provision of site-and-services associated with formal settlements.

4.1. ‘Self-help’ and ‘community-led’ upgrading of informal settlements

Abbott (2002) describes a shift in the demolition and relocation approach to provide greater autonomy and dweller control in the upgrade. As the major pitfalls of the eradication strategy were realised, governments and international agencies sought to move towards self-help activities, as a cost-effective response to mass urbanisation and the need to house growing urban populations (Landman and Napier, 2010). Self-help housing involves practices in which low-income groups resolve their housing needs mainly through their own resources in terms of labour and finance with some help from the government (Marais et al., 2008). Self-help activities are not new to South Africa, as since the 1950s incremental, step-by-step, self-building approach on serviced sites was considered the cheapest and most efficient solution to the existence of slums (Landman and Napier, 2010).

Community participation derives from self-help upgrading and refers to grassroots planning processes where the local populations decide themselves about the future of their own settlement (Lizarralde and Massyn, 2008). In practice, however, community participation often remains “formal, legalised and politicised” (Jordhus-Lier and Tsolekile de Wet, 2013; p.2). Critics argue that governments design top-down plans, with residents merely informed (not
engaged) at a later stage, during construction or implementation phases. Public participation approaches are prone to capture particular, often by middle class or elite, groups (Cooke and Kothari, 2001). In informal settlements, key conceptual and practical challenges hinder active community participation. These include: the heterogeneity and fragmentation of communities; lack of social and physical resource; and conflicting interests in individual and community expectations from the involvement in development projects (Emmett, 2000). Muchadenyika (2015) discusses the problematic relationship between local populations and governments, whereby issues of legislation, politics, power and identity play a major role in resource management, distribution and implementation of the upgrading project. More broadly, Innes and Boohar (2004) argue that public participation can be antagonising and discouraging for participants, who feel unheard, and pitted against each other; and, for public officials, who feel unable to take public views on board. It is therefore essential to have open-minded authorities that are prepared to listen, engage and respond to local needs and novel proposals.

5. Pilot study on community-led upgrading

The international literature presents compelling case studies on successful (to some extent) community-led support-based interventions through NGO partnerships, such as the Slum Dwellers International (SDI) Alliance, also referred to as community micro-planning (Abbott, 2002). This model originates from the Indian Sub-continent and unfolds through active community participation and private-public partnerships (ibid). Common participatory tools involve community profiling and community enumeration (also called social mapping) to record individual housing units, size, tenure conditions and income. The community carries these processes out, assisted by the NGOs, where local populations are able to discuss and identify priority projects to benefit their community.

A pilot study was conducted by the authors in June 2015 (and repeated in June 2016) to assess the level of ‘good available practice’ in community-led upgrading of informal settlements in Durban metropolitan area. Empirical data on informal settlement upgrading was gathered by means of observations and informal focus groups with community leaders and NGOs. The objective was to examine community-led approaches and understand the benefits of planning activism and inclusive participatory approaches to the upgrading. The pilot study focused on Phase 1 of an informal settlement called Namibia Stop 8 (NS8) based in Inanda on the outskirts of Durban in the KwaZulu-Natal province, as shown in Figure 1.

Figure 1: Namibia Stop 8 (Inanda, Durban metropolitan area)
Namibia Stop 8 is a greenfield project, where uTshani Fund, partner of the South African SDI Alliance and support organisation provided the finance facilities to FEDUP, who was responsible for the housing upgrading. The project involved 96 houses using the EPHP model that is predicated on a community-driven participatory approach (SA SDI Alliance, 2012). This collaborative approach delivered substantially larger (56m²), better-designed and better-sized houses than those constructed under the government-driven RDP model (40m²). In addition, more than 85% of people continued to live in their houses after the upgrading, while the comparative figures for RDP houses (in similar projects) are about 45% (Thomas, 2016). There is also some evidence of the lower quality of the RDP houses, which (for example) have restricted extension possibilities and have limited the growth of home-based enterprises (Adebayo, 2011).

In Namibia Stop 8 Phase 1, FEDUP pioneered strong elements of community empowerment and planning activism, due to a set of participatory methods embedded in:

- **Project preparation**: detailed community profiling; three women-led saving groups established an ‘Urban Poor Fund’ to finance land purchase, the delivery of housing and infrastructure development, including broader asset mobilisation, blending loans, savings and social capital; participatory planning; and community-driven project management (including a Steering Committee and Community Construction Management Team).

- **Project implementation**: beneficiaries contributing ‘sweat equity’ (time and labour) and financial loans - in some cases their own savings - to further upgrade their structures.

The above processes created a legacy for the local people in terms of income generation, skills upgrade, and sense of ownership.

### 6. Discussion and recommendations

Participation should not refer to a voluntary contribution to government programmes but rather to active involvement in shaping the upgrading process throughout the project lifecycle. Communities have the local knowledge and experience of what works and why in their own settlements. Empowering local people in participatory bottom-up models offers:

- community leadership and independence;
- commitment in the upgrading process due to ownership and sense of belonging;
- skills upgrade through training; and
- leveraging additional subsidies and resources available from the municipalities.

Previous studies on in-situ upgrading of informal settlements in Durban metropolitan area have explored the positive impact of community participation on local inhabitants in terms of having basic housing needs met, tenure security and wellbeing improvement (Patel, 2013). However, it is important to distinguish between aspects of participation and active community empowerment through planning activism, as shown in Namibia Stop 8. From the review of the background literature the following recommendations can be drawn:

- There is no ‘one-size-fits-all’ model in informal settlements upgrading. Policy makers and practitioners need to understand the local context and uncover the barriers and drivers for inclusive community-led upgrading since an early planning stage. It is essential to understand the historical development and the dynamics of the informal settlement in order to adapt or refine the upgrading model according to complexities, strengths and weaknesses of individual cases.

- **Future policy-making in the field should go beyond provision of information and basic consultation activities** with the community. There is a need for policy instruments and upgrading models that build on community leadership and planning activism, facilitating
co-production of knowledge with the local population, whilst simultaneously leading to empowered communities and participatory models of urbanisation. Scholars argue the co-production can provide critical understanding of community-led processes and how these can be integrated into institutional formalisation, government policy, technological and managerial innovations that can enhance self-reliance, skills and quality of life (Boyle and Harris, 2009; Petcou and Petrescu, 2015).

- The role of the support organisation and the researcher in community-led upgrading projects is to first help local people visualise and understand the change that will effectively take place in their own environment; and, second, to provide space for community members to negotiate and therefore take informed decisions resolving issues and potential conflicts.

7. Conclusions
Informal settlements are complex and diverse entities with their own unique issues and set of characteristics. Theoretically, this paper has revealed that the challenge of informal settlement upgrading in South Africa should not be conceived simply as a housing problem but rather as a community-led, participatory process of social change, seeking to realise multi-sector partnerships, long-term commitment, and political support to gain formalisation. This process should take place from the early planning of the upgrade, as the early project phases are the most crucial for community participation. Active community participation is also endorsed by the New Urban Agenda under Habitat III, which calls for not just partnerships but inclusive participatory models through community empowerment and planning activism.

At a practical level, however, the study argues that there is a gap in effective community-led participatory upgrading projects in South Africa. There is also little understanding of the unique, context-specific factors that underpin the establishment of an informal settlement. Currently these local particularities are lost in the ‘one-size-fits-all’ government-led upgrading models adopted by the South African municipalities, thus leading to delays in: planning; service delivery and supply change; installation of services; and tendering with building contractors. Future research should explore the co-production of local knowledge with the local communities, support organisations and policymakers to inform the development or refinement of government-led upgrading models adopted by the South African municipalities and national departments.

Acknowledgements
This work is based on two ongoing research collaborations funded by the Royal Society (through an Advanced Newton Fellowship) and the Economic and Social Research Council (ESRC) as part of the Newton Fund, in collaboration with the National Research Foundation (NRF) in South Africa. The authors would like to thank the following contributors: the officers of uTshani Fund and particularly Mr Jeff Thomas for his precious assistance and support; Thomas Watson for his support in literature review; and Peter Barbrook-Johnson for editing and proofreading.

References
Georgiadou, M.C., Loggia, C., Nunez Ferrera, I., Fagan-Watson, B.
Overview of informal settlement upgrading in South Africa, "52nd ISOCARP Congress 2016"


Overview of informal settlement upgrading in South Africa, “52nd ISOCARP Congress 2016”


