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Research Report ARPL7053A

Self-help housing as an effective delivery mechanism to reduce the backlog: Research into self-help housing on state subsidised sites and services projects.

A Research Report submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, in partial fulfilment of the requirements for the Degree of Master of Urban Studies in the field of Housing & Human Settlements.

Johannesburg, 14 December 2022

DECLARATION

I declare that this Research Report is my own unaided work. It is being submitted in partial fulfillment for the Degree of Master of Urban Studies in the field of Housing & Human Settlements to the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to any other University.



Signature: _____

Date: 14 December 2022

ABSTRACT

By announcing a radical shift away from formal housing provision to an approach of sites and services, the South African Department of Human Settlements has opened-up the potential for self-help housing to be re-established as a way for the poor to access land and housing. In view of the extensive housing shortages and historical rejection of incrementalism and the limited implementation of the Peoples' Housing Process (PHP) in post-apartheid South Africa, the research has set-out to investigate whether self-help by way of sites and services is a viable option to address the backlog. By reviewing literature and evaluating the anonymous answers to questionnaires from officials and community members, the research has attempted to find out how the approach will be implemented. In getting a wider understanding of the proposed sites and services approach, the research has found that state-assisted self-help housing is an effective delivery mechanism that can help the poor to take control of their housing needs.

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LIST OF ACRONYMS

ANC African National Congress

BNG Breaking New Ground

BRT Bus Rapid Transit

CBD Central Business District

CoJ City of Johannesburg

Coopop *Cooperación Popular* (Popular Cooperation)

CORC Community Organisation Resource Centre

DAG Development Action Group

DBSA	Development Bank of South Africa
DFA	Development Facilitation Act of 1995 (now abolished)
DoH	Department of Housing
DoHS	Department of Human Settlements
EMM	Ekurhuleni Metropolitan Municipality
EPHP	Enhanced Peoples' Housing Process
FAR	Floor Area Ratio
FEDUP	Federation of the Urban and Rural Poor
FLISP	Finance-Linked Individual Subsidy Programme
GDoHS	Gauteng Department of Human Settlements
HDA	Housing Development Agency
HSDG	Human Settlements Development Grant
HSC	Housing Support Centre
HSS	Housing Subsidy Scheme
IDP	Integrated Development Plan
IDT	Independent Development Trust
ISN	Informal Settlement Network
ISPG	Informal Settlement Partnership Grant (aka Informal Settlement Development Grant)
MEC	Member of Executive Committee
MINMEC	Ministers and Members of Executive Committee
MPT	Municipal Planning Tribunal
MTEF	Medium Term Expenditure Framework
NGO	Non-Governmental Organisation
NHBRC	National Home Builders Registration Council

NHF	National Housing Forum
NUSP	National Upgrading Support Programme
PHP	Peoples' Housing Process
RAC	Rapid Assessment & Categorisation
RDP	Reconstruction and Development Programme
SABS	South African Bureau of Standards
SDF	Spatial Development Framework
SDI	Slum Dwellers International
SHHA	Self-Help Housing Agency
SOWETO	South Western Townships
SPLUMA	Spatial Planning and Land Use Management Act
TRSA	Transitional Residential Settlement Area
UISP	Upgrading of Informal Settlement Programme
UN	United Nations
UN Habitat	United Nations Human Settlement Programme
UPFI	Urban Poor Fund International
USDG	Urban Settlements Development Grant

APPENDICES

Appendix 1 Synopsis of the applicable spatial planning and housing legislation and policies.

Appendix 2 Ethics Clearance Certificate: SOAP 150/06/2021.

Appendix 3 Plagiarism Declaration.

CHAPTER 1: INTRODUCTION

1.1 Introduction

Originating in the work of John Turner and Robert Fichter in the 1970s, the self-help philosophy of *'Freedom to Build: Dweller control of the housing process'* is based on beneficiaries actively managing the building process themselves (housing as a 'verb') rather than being passive recipients of standardised products (housing as a 'noun') (Turner, 1972). Although prior to 1994 the sites and services approach with freehold title had been advocated by the Urban Foundation 'as a solution to the [South African] housing crisis' (Huchzermeyer, 2002: 92), the so-called 'toilets-in-the-veld' approach was not accepted by the ANC who insisted that the full package of land, services and a top-structure be delivered. Self-help by way of serviced sites is still considered an effective way of creating housing opportunities and upgrading informal settlements (Srinivas, un-dated).

1.2 Background

The announcement in 2020 of a rapid land release programme and a shift by government away from building formal houses to an approach of sites and services forms the background to the topic. The South African former Minister of Human Settlements Lindiwe Sisulu is quoted as saying that '[the government] will be releasing land, cutting it out, fencing it off and giving it to beneficiaries' and that the 'essentials of how to build a house [will be provided]' (Eglin, 2020, un-paginated). Acknowledging that the very poor are the '[m]ajority of those in need of land for housing', the minister referred to the relaxation of 'land-use management and building control rules and regulations' to permit low-income households to build with available resources (*ibid*). By announcing a radical shift in state-assistance, the minister opened-up self-help as an alternative for the poor.

1.3 Problem Statement and Rationale

The problems underlying this research are the shortage of adequate housing for the poor, the inability of the state and the market to address extensive low-income housing needs and declining participation in self-help housing (Kumar, Royston and Clark, 2020). In spite of support for self-help housing from the UN Habitat and several local NGOs, Landman and Napier (2010: 3) advise that it 'has not gone to scale', with 'only about 1% of state provided houses … [delivered by] … aided self-help'. The low uptake of self-help has been attributed partly to 'exceedingly bureaucratic procedures that makes it difficult for communities to control the process' (Huchzermeyer, 2001: cited in Landman and Napier, 2010: 3) and because it is 'too difficult to implement and manage' (Landman and Napier, 2010: 1). The predominance of 'fully subsidised and completed [RDP] houses' has unsurprisingly 'overshadowed' the PHP, with 'giveaway houses [being] preferred above self-built options'. The expectation on the government to provide the full package therefore brings into question whether self-help will be taken-up

by poor households, who may choose to wait (sometimes indefinitely) for the state to provide a house '[rather than] building their own' (*ibid*: 5).

1.4 Objectives

The purpose of the research is to find out if a new approach is workable and can address the backlog, which is estimated at around 2.1 million units (Fieuw and Mitlin, 2018). Furthermore, the research will attempt to determine whether the proposed sites and services approach is a genuine conceptual shift towards 'dweller control' of the housing process as advocated by John Turner and which lies beneath the theoretical basis for assisted self-help. Or as Bromley (2003: 289) has observed, will the potential for communal self-help to become a viable large-scale housing strategy be lost to 'top-down decision-making instead of grass-root empowerment'?

1.5 Research Question and Sub-Questions

The main question underlying the research is:

1) 'What is the potential of a site and service approach to provide housing for the poor?'

Although supported at 'grassroots' by the Homeless Peoples' Federation, the Peoples' Housing Process (PHP) has not been widely implemented in post-apartheid South Africa (Charlton and Kihato, 2006: 266). The research therefore needs to understand what factors are limiting the effective implementation of self-help and what could be done to increase uptake of the approach.

Sub-questions are the following:

2) What policy mechanisms can be put into operation to make sites and services more widely available?
3) Where will well-located land be identified?
4) Will the approach be affordable for the poor and will it gain acceptance?
5) Is it possible for minimum safety requirements to allow for less formal standards?
6) Can approval and funding processes be simplified to accommodate more people and speed-up delivery?

1.6 Expected Findings

The advantages of sites and services to governments and the homeless as a way of supplying and accessing land respectively are expected to be confirmed, lending support to its renewal as a strategy. It is also anticipated that security of tenure will be highlighted as a precondition for the uptake and resurgence of self-help. The findings are likely to reveal that policy certainty for a less formal approach will be critical and that

'tackling major areas of political sensitivity' and 'underlying policy contradictions', noted by Charlton and Kihato (2006: 276) as having an 'impact on the lives of the poor', will need to be addressed.

1.7 Research Methodology

The research method has been formulated from the 6 steps outlined in the Research Onion (Saunders, Lewis and Thornhill, 2016) and as explained by Crossley and Jansen (2021) in order to try and answer questions related to sites and services.

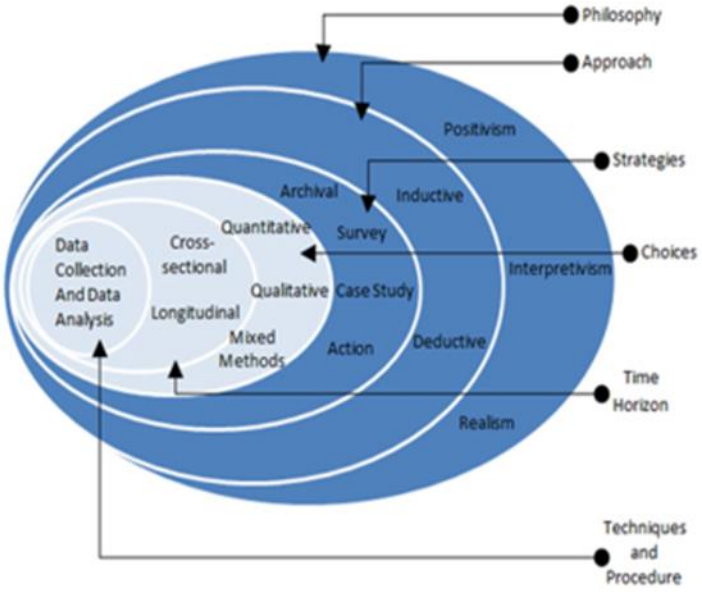


Figure 1.1The Research Onion is a theoretical concept of formulating a research methodology, (Source: Saunders, et al, 2016).

The 6 steps followed in formulating the research methodology - viz. Philosophy, Approach, Strategy, Choices, Time Horizon and Techniques – are briefly discussed below:

1.7.1 Philosophy behind the Research

The underlying philosophy of the research is that self-help housing and sites and services are a cost-effective way for governments to establish opportunities for the poor to build for themselves. In order to validate this philosophy, the research has followed a qualitative approach by reviewing important literature and assessing primary data from interviews conducted with officials from the National and Provincial Departments of Human Settlements, the City of Johannesburg and community members from Bottom Compound informal settlement. By finding convergent thinking it has been possible to determine that the argument for sites and services is compelling.

As objective or hard-nosed statistics about sites and services are hard to come to terms with, a 'positivist' philosophy of obtaining empirical data 'based on measurement'

(Crossley and Jansen, 2021: un-paginated) would not have revealed the bigger picture. Finding answers related to the topic therefore required a pragmatic or practical philosophy based on reasoning to understand and interpret relevant factors. Crossley and Jansen (2021: un-paginated) refer to 'pragmatism' as a practical, common sense approach to research 'where knowledge is not fixed, but instead is constantly questioned and interpreted'. This rationale has enabled the research to get a better understanding of sites and services in the South African context.

1.7.2 Research Approach

The positive hypothesis that people can build their own houses when supplied with a serviced site is widely acknowledged and well-documented. For example, authors like Srinivas (2020) and Harris (1999) show that sites and services have been implemented in several countries as an alternative to conventional housing. Widespread recognition of the approach suggested that the research should follow a deductive or rational process to build on the theory. However, negative perceptions of the apartheid era's 'toilets in the veld' strategy, coupled with a sense of entitlement from the political expectation that formal housing will be supplied, make the prospects for sites and services uncertain in South Africa. Unknown factors like these called for qualitative research into key components of sites and services to be undertaken and gave rise to further questions being identified.

1.7.3 Research Strategy

As the perception and opinion around sites and services was diverse, an ontological or empirical set of hard data or facts was unlikely to emerge. Consequently, the strategy that was followed was epistemological or as Crossley and Jansen (2021: un-paginated) explain '[asking questions] "how" we can obtain knowledge and come to understand things'. A strategy of 'grounded research' (i.e. identifying 'commonalities') and 'archival research' (i.e. drawing on existing material) has enabled qualitative correlations to be identified from the responses without the constraints of fitting into the 'pre-existing theory' (*ibid*). It was also important to objectively or impartially assess the respondents' answers as their understanding of the topic and not to impose my own subjective views when considering the answers.

1.7.4. Research Choices

The answers to the research questions were open for interpretation, meaning that an element of subjectivity would come out in the conclusion. When formulating the approach, my expectation was that the study would confirm sites and services as a viable option, thereby making it likely that my explanation of the findings would reinforce the hypothesis. Yet, because the research investigated a major policy shift on the part of government, considered here as a 'black swan' or paradigm shift, it was critical to find common threads when considering qualitative data.

Without quantitative data, the development of the theory in this report can therefore be understood as partly 'abductive' i.e. '[t]o find the most likely explanation', 'deductive' i.e. testing the theory of sites and services to confirm or reject the hypothesis that it is a

viable option and 'inductive', whereby the theory is formed from observations and analysis of data (Melnikovas, 2018: 34). Elements of 'abduction' or finding correlations or explanations from the available evidence '[to come up with] a best guess or conclusion based on available evidence' (*ibid*: 34) thus steered the research along a continuum of mixed method approaches.

1.7.5 Research Time Horizon

As the proposed change was announced late in 2020, the short-term housing strategy of the Department of Human Settlements' 2021/2022 financial years formed the time horizon for the study. Analysis was thus taken from a 'cross-sectional' collection of data from information available in this period (Crossley and Jansen, 2021: un-paginated). In view of the time constraints, a long-term or 'longitudinal time horizon' was not possible (*ibid*).

1.7.6 Research Techniques and Procedures

Questionnaires were formulated as a guide for the interviews with Department of Human Settlements' officials and community members in order to obtain information on how sites and services could work in South Africa. The questions were structured to answer the main research questions, but also to get information on sub-questions. The questionnaires concluded with an open-ended question regarding the interviewee's observations regarding the sites and services approach, which was intended to reveal how the approach is perceived. The questions did not produce a quantifiable statistical analysis and specifically avoided 'yes' or 'no' answers in line with the qualitative research design. In spite of the limited number of interviews, the answers enabled patterns or themes to be discernible, with a logical chain of evidence permitting interpretation, thereby answering the research questions and developing the theory of sites and services further.

Some of the theoretical and technical considerations coming out of the literature were placed into the context of the Bottom Compound case study, which was selected because it is being upgraded by way of the sites and services approach. Evaluating the policy and planning tools being used by the City of Johannesburg helped to explain the mechanics of the approach. After conducting the interviews it was possible to evaluate the respondent's answers objectively on the basis of their understanding of the topic. In this way, the interviews with the officials and the community members revealed common threads that had also emerged from the literature.

1.7.7 Limitations of the Research

In view of the wide-ranging framework of the main research question – viz. *'what elements make it possible for self-help to be implemented effectively for the poor?'* - it was important to investigate as many applicable factors as possible. But it was also critical to be aware that arriving at an exhaustive outcome was not going to be practical. Notwithstanding the scale of the problems causing the housing backlog (which are well-documented) and the complexity of the topic, the study was limited by the number of people (viz. officials and community members) who could be interviewed. Although I

have tried to consider most of the main concerns, the extent of the topic made me realise that an all-inclusive investigation of each issue was beyond the scope of the study.

While a quantitative or measured approach to obtaining numerical data might have helped to numerically determine the scale of the backlog and the level of intervention required, for example, it was not possible given the inherent limitations of the study – especially to tackle complex questions like land and whether a revised policy could meet the demand. Yet it was still necessary to ask the questions and to note the problems without the objective of the study – viz. to find out (broadly speaking) if the revised approach is workable - being compromised.

A numerical approach would also not have enabled the South African context to be explored in depth, where many factors add to the lack of adequate shelter and the proliferation of informal settlements. Although many issues like low levels of affordability, poverty, scarcity of well-located land, economics, politics and the incapacity of formal subsidy housing to keep up with demand have been discussed in the report, detailed analysis of all of the issues was to some extent beyond the scope of this study.

1.8 Ethical Considerations

While the ethics application for the research was approved as 'low risk', it was important to take the context of the research into account. By carrying out research in a poor community where living conditions are very hard, I was aware that my presence there to conduct an interview on the subject of housing could lead to an expectation (or anticipation) that upgrading was in the pipeline and could follow. I was therefore careful to explain to the community members that I spoke to that my research was for academic purposes and that prospects for their circumstances to improve depend upon the City of Johannesburg's plan for upgrading the settlement. I also realised that the community members participated in the interview because they were eager to express their views about plans for the settlement and were optimistic that the upgrading project would start soon.

While the University of the Witwatersrand's (2021) *'Ethics Application Form for Human Research Ethics Committee (HREC Non-Medical)'* advises that '[v]ulnerable categories do not necessarily include poor or marginalised communities', I was conscious that the people at Bottom Compound live under very uncertain and unsafe conditions. As a result, it was important to show understanding for the situation and to highlight the predicament of people living in informal settlements in the research. The community's vulnerability is largely due to poverty, but it is made worse by a lack of basic services and adequate shelter. Although they depend mainly on the support structures established within the community, it was apparent that the people living in Bottom Compound anticipate that the upgrading project will bring about an improvement to their lives. Such expectancy demonstrates how important the City of Johannesburg's upgrading plans are to the community.

In conducting the interviews with the officials and community members from the Bottom Compound informal settlement, I was careful to ensure the confidentiality and anonymity of the participants and not to identify them or to disclose their personal details. This was important for the officials who were to some extent cautious about commenting on the topic of a new site and service approach given that there is no official policy as yet.

1.9 Outline of the Research Report

Chapter 1 introduces the subject and sets-out the problem statement and purpose of the study, the central arguments or rationale relating to the topic, the main and sub research questions, the research methods, ethical considerations and the limitations of the study. This chapter gives direction to the research.

The Literature Review in Chapter 2 expands on the theoretical, explanatory and policy factors underlying the topic, going into depth regarding the background, academic reasoning and points of contention. The arguments found in the literature widen the problem statement and give consideration to theoretical alternatives as possible answers to the research questions. Chapter 2 includes a Conceptual Framing of the main themes (used interchangeably) that underpin 'Assisted Self-Help', as well as a brief discussion of the general steps followed in developing subsidy houses. The chapter concludes with a brief overview of state assisted self-help housing in post-apartheid South Africa.

Chapter 3 puts the main arguments into context by giving an overview of the circumstances found in the case study. As this is a 'context chapter' to further explore the topic, it sets-out the conditions of the case study relevant to the research.

The findings, key points and recurring themes coming out of the research are evaluated in Chapter 4. By comparing similarities and differences in the information, the analysis chapter shows how site and service is perceived and interrogates whether it is a viable alternative.

The Conclusion reflects on the findings and revisits the research questions and purpose of the study. In this chapter, the evidence collected from the case study and interviews is recapped to substantiate the significance of the findings in terms of the literature review and makes recommendations consistent with the topic.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The Literature Review aims to expand on the theoretical, explanatory and policy factors behind self-help and sites and services, going into depth regarding the background, academic reasoning and points of contention. The arguments found in the literature will expand on the problem statement and give consideration to theoretical alternatives as possible answers to the research questions.

2.2 What is aided self-help?

Aided self-help is 'housing built with state assistance by families for their own use' (Harris, 1999: 281). Charlton and Kihato (2006: 255) describe 'state-assisted self-help' as an enabling policy whereby the state 'supports and facilitates the delivery of housing by the private sector, or by community organisations, rather than engaging directly in shelter provision itself'. The authors note that this is 'both market and people-driven production'. Their article on the evolution of South Africa's subsidy housing programme gives tremendous insight into the reasons underlying the shaping of policy, noting that the state became more directly involved in low-cost housing provision over the course of the years than originally planned (*ibid*). Segopa (2007: 78) explains that unlike conventional housing delivery mechanisms, with self-help governments are 'not directly involved in the production (construction) of houses', but rather 'facilitate home ownership' and 'self-reliance' on the part of the poor.

2.3 History and origins of aided self-help housing

The term was coined by Jacob L. Crane in 1945 from the Puerto Rican experience and from Spanish self-help manuals referred to by John Turner in encouraging self-help in the aftermath of a major earthquake which struck Arequipa, Peru in 1958. Crane promoted the concept to US officials and development agencies (Bromley, 2003). However, Harris (1999) advises that the acute housing shortage after World War 1 prompted the Soviet Union and several European cities, notably Vienna and Stockholm, to implement self-help housing.

One of the 'most common housing programmes in the world', since 1918 aided self-help housing has featured prominently in state housing policy, but has also 'slipped through the cracks' (Harris, 1999: 281). By this he means that although the approach has been 'endorsed from all sides of the political spectrum', from communists in the Soviet Union, socialists in Vienna or liberal-democrats in the United States, for example, the approach is not usually supported by major political parties, with the left opposing 'market oriented' policies, preferring 'publicly-owned [rental] housing' as the solution. As Harris

writes, '[a]t best this type of policy filled, at the worst it slipped through, the cracks' (*ibid*: 301).



Figure 2.1 A diagram from a children's book in 1931 showing prefabricated parts being installed in a 'Magic House' in Stockholm. The panels remind one of the zinc sheets sold in South African informal townships. (Source: Cautley, 1931: 23) (Found in Harris, 1999: 296)

Contrary to the widespread understanding that aided self-help originated in Latin America and as given preeminence by John Turner's *Freedom to Build* at the peak of the Cold War, Harris (1999: 282) records that it was a 'pragmatic, untheorised, response to severe housing shortages and political unrest after the First World War' that saw European countries and later the US implement it in various forms. The Bolshevik Revolution and the rise of communism put political pressure on governments to solve the housing shortage, with cities like 'Athens, Stockholm, Paris, Riga, Rome, Helsinki, Toronto and Vienna' responding by supporting families to build their own homes. Public housing was built in Britain, while other countries like The Netherlands opted for co-ops (*ibid*: 283).

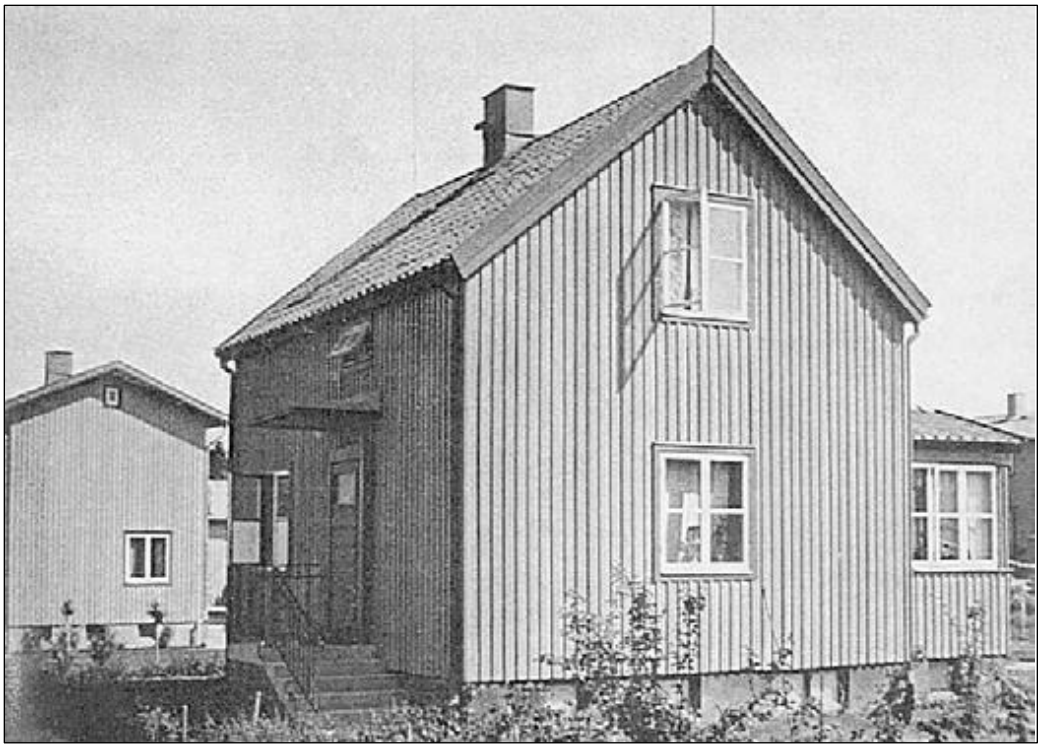


Figure 2.2 'Magic House' owner-built house in Stockholm c. 1920. (Source: Nelson & Nelson, 1937: 18) (Found in Harris, 1999: 290)

According to Harris (1999: 282) the prominence given to self-help housing has not been replicated 'in the more advanced industrial societies' since the post WW1 period. War seems to have been a powerful motivation for large-scale self-help housing to be put into practice, with Harris (1999) advising that under supervision from the League of Nations, the Greek government gave building sites and basic services to thousands of refugees flooding into Athens from the war between Turkey and Greece in the early 1920s. The costs of 'privately-built [self-help] housing' were less than half of public housing, with most dwellings being 'small, one-storey structures made from wood' and built using 'sweat-equity' by the owners (*ibid*: 285). In Germany, the 'Homestead Law' was enacted to provide a 'home and garden to every German family' with 'single family homes [defined] as the ideal' (*ibid*: 286).

2.4 Peru's influence on John Turner and assisted self-help

Published in 1972, John Turner and Robert Fichter's *Freedom to Build* brought the 'social and physical conditions' of Peru's *barriadas* shantytowns to the world's attention, highlighting the optimistic aspects of 'community development' and 'neighbourhood upgrading' in Third World countries (Bromley, 2003: 289). Bromley's (2003) account of Peru's community-oriented approaches to development under the presidency of Fernando Belaúnde in the 1960s is significant in showing the inspiration behind Turner's work and how self-help housing was intended to become a backbone of Peruvian policy. Like Harris (2003), he contends that it was more the 'origins and timing' of

Turner's work in Peru that led to him becoming the 'pre-eminent authority on low-income housing in developing countries', rather than the originality of his ideas. The upgrading of *barriadas* by way of municipal support and communal labour was known as 'popular cooperation' (Coopop) and was given prominence by Belaúnde, a trained architect, to solve local problems using community resources and labour without unnecessary political intervention or bureaucratic restrictions (*ibid*: 283).



Figure 2.3 *Barriadas* of Lima, Peru. (Source: Melinda Chan. Flickr.com)

Turner's vision of self-help through dweller-control of the housing process is explained by Bromley (2003) as a middle ground between the ideas of Belaúnde and Pedro Beltrán who was appointed by Javier Prado, Belaúnde's predecessor, to address problems of rural poverty and the 'lack of services in the rapidly expanding urban *barriadas*' (*ibid*: 275). While the approaches 'differed on questions of urban design', with Belaúnde preferring 'higher densities and apartment living', as opposed to Beltrán's preference for 'lower densities and single family houses' by way of sites and services, both rejected 'highly subsidized low-income public housing', but shared the view that 'basic minimum standards comparable to those of Western Europe and North America' should be applied (*ibid*: 285).

Bromley (2003: 290) notes that Turner and Fichter (1972: 8) write on the first page of *Freedom to Build*:

> '[T]he urgency of a basic shelter problem cannot be ignored; but neither the shelter problem nor the manifold social problems of which it is a part can be solved by bureaucratically administered, politically imposed programs'.

Sadly, Bromley (2003: 285) writes that instead of becoming the 'basis for an affordable housing strategy for the nation's poor majority', '*Cooperación Popular*' (Coopop) or 'aided self-help' was not implemented on a large enough scale to have a significant impact, mostly because it was 'too small, weak and rurally focused', noting that the *barriadas* continued to grow in the 1960s. Suspicious of top-down control being exerted by governments over politically-charged low-income areas, he points out that 'bureaucratic inefficiency and corruption' have caused 'harsh living conditions and poor housing' to persist in Peru, in spite of innovative housing plans like 'national aided self-help' (*ibid*: 289).



Figure 2.4 Latin American *Favela*: (Source: AFP)

2.5 US support for aided self-help in Latin America

As early as the 1950s the US government saw self-help housing as a 'relatively inexpensive' way of '[ensuring] political stability and the continuity of capitalism' in Latin American countries (Bromley, 2003: 277). The revolution in Cuba and the threat of

communism to US business interests during the Cold War triggered the Eisenhower, Kennedy and Johnson administrations to implement policies aimed at '[winning] the hearts and minds of the impoverished and marginalized masses in Latin America' (*ibid*: 278). Official US policy supported 'aided self-help housing' and 'private property [ownership]' as ways of encouraging 'social stability and economic growth' in the populations of these countries (*ibid*: 278). Bromley (2003) notes that Eisenhower was particularly impressed with a self-help scheme in Santiago, Chile when he visited there in 1960, so much so that 'aided self-help housing became the official US policy to Latin America' (*ibid*: 278).

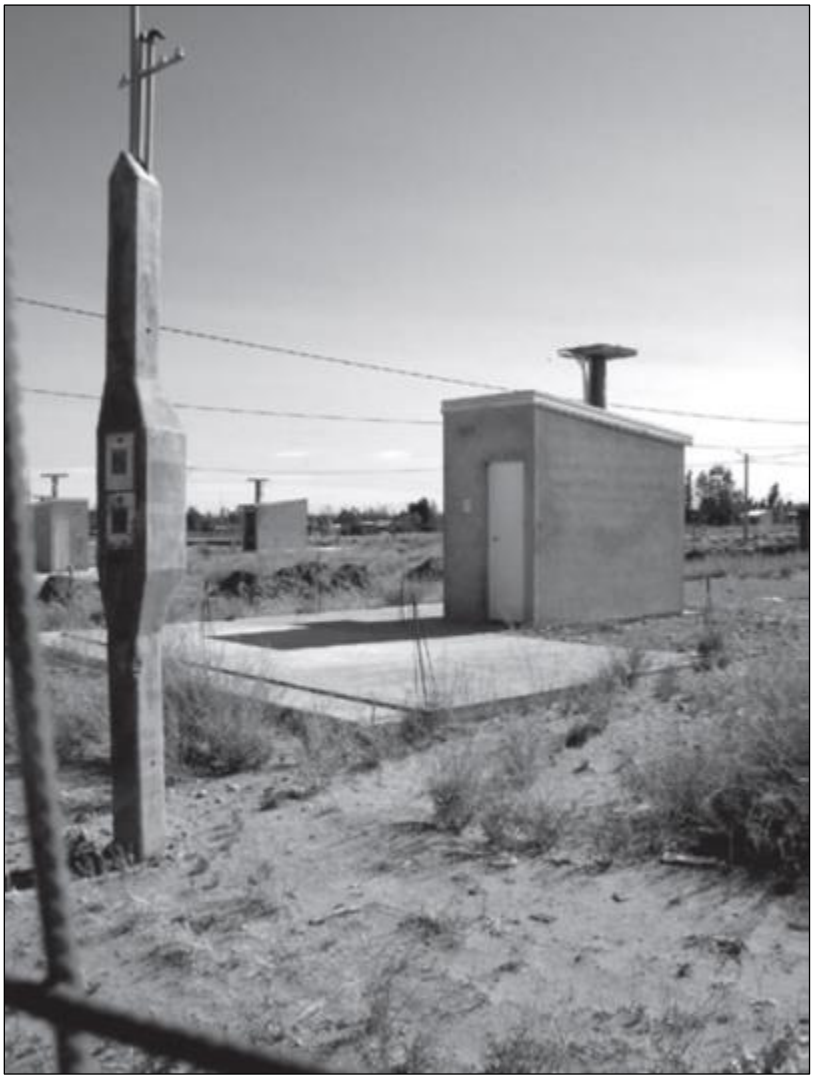


Figure 2.5 Pre-occupancy sites and services in Neuquén, Argentina - where a slab, bathroom and electricity have been installed. (Source: Peter Ward, 2012: 298)



Figure 2.6 Post-occupancy additions to the original 'core' - Neuquén, Argentina. (Source: Peter Ward, 2012: 299)

2.6 The World Bank's funding for sites and services and its subsequent abandonment of the model

Funding by the World Bank for sites and services projects in developing countries is generally attributed to John Turner's advocacy of self-help as an alternative to conventional approaches and his consistent belief in 'dweller-control' of the housing process (Harris, 2003). Writing that he 'changed the way we think about low-cost housing', Harris (2003: 245) shows that although 'Turner was not the first to praise self-help', which had been advocated by several international agencies since the 1940s, his advocacy inspired the notion that problems of informal settlements could be resolved by residents building for themselves.

In the absence of consensus on how to deal with urbanisation in rapidly growing cities of the global south, Parnell (2016) observes that it was the World Bank's views which shaped urban policy at the time, leading to extensive debate at the UN's Habitat conference in Vancouver in 1976. She also makes the point that it was because of this 'policy vacuum' that 'multi-lateral lending agencies became interested in cities as potential borrowers', heralding the World Bank's commitment to funding for bulk infrastructure in the sites and services era from 1974 to the mid-1980s (*ibid*: 531). In spite of being criticised for '[making] money out of lending on urban infrastructure for the poor', the World Bank's undertaking to reduce poverty on a large scale placed urban problems on the global agenda and 'gave poverty a global institutional home' (*ibid*: 531).

'Sites and Services Projects: A World Bank Paper' published in April 1974 is detailed in setting-out critical aspects related to design, technical assistance, standards, financing, organisation and methodology and comes complete with a checklist to be followed. The introduction outlines the bank's support for sites and services as a cost-effective way of planning for rapid urban growth by 'providing urbanized land and supporting services for low income communities' (World Bank, 1974: 1). The paper shows considerable understanding of the challenges and is unequivocal in its conviction regarding self-help as a viable alternative to conventional low-cost housing for which 'even "minimum" cost standards' are unaffordable. With more than a third of the urban population living in 'squatter settlements', inexpensive self-help construction is seen as 'central' to the supply of affordable shelter and sites and services as a way of containing unplanned growth and improving living conditions (*ibid*: 1, 2).

Notwithstanding an investment of $14.6 billion in 100 sites and services projects across 53 countries, the approach was abandoned in the mid-1990s due to mixed results from its implementation (Owens, Gulyani and Rizvi, 2018). Regardless of its attempt to 'harness in an orderly fashion the kind of investment which low income settlers have heretofore employed in 'squatting' or buying in illegal subdivisions' (Peattie, 1982: 133, quoted in Owens, *et al*, 2018: 262), the sites and services model declined as quickly as it had been taken up. What had been 'propagated globally' as 'an antidote to rapid slum expansion' was criticised for failing to deliver on measureable objectives. Projects had not prevented further informal settlements from proliferating and were condemned for taking too long to complete and for low occupancy as they tended to be too far from jobs and income opportunities (*ibid*: 260).

Owens, *et al*, (2018: 262) cannot ascribe 'the demise of this once promising model' to a 'single cause', but put it down to a 'series of critiques that emerged from implementation experience'. Yet, they also reflect that as evaluations had been done on projects from a 'wide range of countries and project designs' it is unsurprising that the findings were 'highly mixed', in spite of several studies reporting positively that sites and services had indeed 'delivered effective, affordable and well-targeted housing' (*ibid*: 262). In the face of 'growing project skepticism', 'limited resources' and 'accelerating slum development', the abandonment of the approach in favour of 'in-situ upgrading solutions and housing finance support' could be expected. Problems that might have been resolved by making adjustments to the design of projects like plot sizes, providing for a variety of land uses and mixed income groups and better integration with urban networks, added to criticisms around 'affordability and targeting [of beneficiaries]' to bring about what was perceived as the 'systemic [failure of the approach]' (*ibid*: 264). However in spite of this criticism, the authors emphasise that no other delivery mechanism has since been able to tackle the issue of supplying land and housing to the poor and conclude that 'there is ample evidence to support the success of sites and services approaches over the longer term' (*ibid*: 272).

2.7 The opposing positions of John Turner and Rod Burgess: The 'use value' vs. the 'exchange value'

Self-help is criticised by Rod Burgess, a Neo-Marxist, who sees it as exploitation of workers within the predominant capitalist system of landowners, suppliers of building

materials, the construction industry and financial institutions, etc. all with vested interests in the housing problem. Burgess submits that Turner's notion of 'freedom to build' actually 'disregarded true *choice* – resident autonomy and freedom to build – in favor of what was, in fact, structural *constraint*, namely, poverty and a lack of effective choice' (Ward, 2012: 296, emphasis in original). Noting that 'critics argued that Turner had glossed over some of the high social costs of living and raising a family under conditions of high insecurity, without adequate services, and in poor and hazardous dwelling conditions', Ward (2012: 297) comments that Burgess's Marxist views did not allow him to concede that self-help policies were not always exploitative of the working class, just as Turner's advocacy of self-help 'romanticized the notions of autonomy and unfettered freedom to build'.

Skeptical of self-help, Burgess writes that the relaxation of standards results in 'petty-commodification' and an 'exchange value' in addition to the 'use value' advocated by Turner (Burgess, 1982). Burgess's main contention is that the cost of building is manipulated by the capitalist system and replicated at the informal level by various stakeholders (Burgess, 1982).

Questioning Turner's findings that the self-help house can be built for half the cost of one built by government agencies – presumably from savings in labour and finance costs – Burgess criticises Turner for locating the concept of self-help in a heavily regulated, bureaucratic system (Burgess, 1982). According to Burgess, government assistance entrenches state control and establishes commercial markets for housing, which increases the price and makes it unaffordable for the poor. He describes as naive Turner's rationale that the state should legislate against private interests and monopoly capital to provide land, materials and finance and proposes that the capitalist system should be done away with and production control given to workers, observing that the economic interests of self-help protagonists are contradictory to the moral tone they adopt (*ibid*, 1982).

Ward (2012: 299) agrees with Burgess regarding increased costs to the dweller for what he calls 'the formalization of the informal self-help process', noting that the rate of 'self-built consolidation' is slower on site and service projects compared to incremental construction in informal settlements where more 'flexibility' is permissible. As Burgess argues, the constraints of access to finance and building costs are stacked against the poor. Whether undertaken by the state or incrementally at the informal level, there are significant costs to building. It is therefore common sense that investment in a dwelling is not undertaken only for the shelter it provides, or 'use' value advocated by Turner, but also the financial return for the owner - the 'exchange' value noted by Burgess.

2.8 The Urban Foundation and IDT's sites and services solution in South Africa prior to 1994

A standardised approach has been the cornerstone of South Africa's housing policy since pre-1994, with project-linked subsidy housing tending to be located on the edge of apartheid era townships where the Urban Foundation's New Housing Company and

South African Housing Trust had acquired land prior to the democratic elections (Charlton and Kihato, 2006). Set-up by the business sector in 1976 following the student uprisings in Soweto, the Urban Foundation proposed the 'standardized and individualized notion of sites and services with freehold title as a solution to the urban housing crisis' (Huchzermeyer, 2002: 92), thereby shaping policy that emerged from the National Housing Forum (NHF) in the early 1990s. The market orientated approach of 'homeownership' through 'individual freehold title' advocated by the Urban Foundation is noted by Huchzermeyer (2002: 92) as having commodified 'land and low-income housing'. The Urban Foundation's advocacy of 'informal housing delivery' as an 'unambiguous central government strategy' is noted by Harrison (1992) in his historical analysis of informal settlements in South Africa when he writes '[i]nformal or "less formal" housing is now an accepted form of shelter, provided that it occurs within an officially sanctioned site-and-service scheme' (Harrison, 1992: 19).



Figure 2.7 Toilets in the Veld: Mayfield Ext. 45, Benoni. Houses have not been constructed and the toilets have been vandalised. (Source: *City Press*, 23 July 2019)

Although prior to 1994 the apartheid government's Independent Development Trust (IDT) had delivered approx. 100,000 serviced sites using a once-off capital subsidy of R7,500 / Stand (Huchzermeyer and Karam, 2016: 88), Tomlinson (1999: 284, quoted in Charlton and Kihato, 2006: 270) records that the ANC as the government-in-waiting dismissed self-help and sites and services at the NHF as 'falling far short of the demand for a decently located genuine mass-housing programme'. When one considers the inadequate and neglected housing conditions for black people that had been allowed to proliferate during the colonial and apartheid periods, it is easy to understand why the so-called 'toilets in the veld' approach was highly contentious. Notwithstanding some considerable successes using the approach, for example at Oukasie in Brits (see Pikholz, 1997), the political compromise reached at the NHF was to include a 'basic

starter house' in the site and service approach, thereby distinguishing the new policy from the previous government's (Charlton and Kihato, 2006: 272).

2.9 SA's housing policy goes beyond sites and services at the NHF

The compromise between the apartheid government's sites and services approach and the housing policy that emerged noted by Charlton and Kihato (2006: 267) is worth highlighting:

> '[The] political need to deliver acceptable houses, was not rooted in a deeper understanding of the consequences of the service levels/location/top-structure trade-off on beneficiaries' [but was rather] a reactive move related to the historic rejection of the notion of incrementalism – the gradual consolidation of a starter house over time by the end-user – and may again, in fact, have further contributed to the spatial marginalisation of the poor.'

Charlton and Kihato (2006: 271) recognise the 'breadth vs. depth' debate as 'tension between targeting as many as possible with some form of basic housing provision versus targeting a lucky few with a complete housing package'. This crucial question was deliberated at the NHF where the once-off capital subsidy was seen as 'simpler to implement' for a government tasked with urgently addressing the 'poor living conditions' which were adding fuel to the 'politically-related' hostel violence rampant at the time. On-going administrative and maintenance costs associated with 'state rental housing' were considered too risky and uncertain, which coupled with the political priority of delivering 'land and housing' with 'full freehold title' in fulfillment of election promises, resulted in the familiar 'RDP House' becoming the basic requirement for meeting needs (*ibid*: 271).

As the primary purpose of the capital subsidy is to provide sites, basic services and a starter house, it can be seen that the 'sites and services' approach, is firmly entrenched in housing policy, with the 'People's Housing Process (PHP)' being implemented sporadically through 'self-help groups' or 'Housing Support Centres' (Marais, Ntema and Venter, un-dated, un-paginated).

In view of government's recently stated shift in approach, excluding a top-structure, the 'underlying policy contradictions' and 'difficulties of tackling major areas of political sensitivity' (Huchzermeyer 2001), referred to by Charlton and Kihato (2006: 276), are likely to be key determinants of a revised approach.

2.10 Sites and services projects achieve success over time

Pikholz (1997: 379) validates the success achieved by the IDT prior to 1994 in 'both speedy delivery and reaching a large number of households' through the delivery of serviced sites. Describing the *in situ* upgrading of Oukasie, on the outskirts of Brits, the author attests to a well-organised, highly-political community using powerful political

engagement to successfully upgrade the area. She advises that in 'resource-scarce communities' power is linked to those who 'have control over resources' and that by '[minimising] destructive conflict between competing interests' projects have a better chance of succeeding (*ibid*: 384). In spite of criticism from 'civics organisations, NGOs and liberation movements' for providing only a serviced site, Pikholz (1997) makes the point that beneficiaries of the IDT's 'massive upgrading programme' were 'happy to have taps and toilets as it would have made them a lot better off than they were' (*ibid*: 379, 380). The large number of serviced sites delivered by the capital subsidy of the IDT is also noted by Gusler (2000: 27) who writes that it 'became one of the largest NGO housing delivery initiatives in the world', surpassing 100,000 serviced sites before being replaced by the new housing subsidy scheme.

Retrospective research by Owens, Gulyani and Rizvi (2018) into sites and services projects built in the late 1970s in Chennai and Mumbai demonstrates that the development of small plots for low-income households increased access to housing (see Figure 2.8 below). The successful outcome is attributed to various plot sizes for mixed-income households and connections to transport and employment networks.



Figure 2.8 Site Plan of Charkop in Mumbai. (Source: Alain Bertaud, World Bank 1985, IBRD Map No. 17587) (Found in Owens, Gulyani and Rizvi, 2018: 270)

The authors show that while the Mumbai and Chennai projects achieved the goals of '(a.) demonstrating the concept of incremental housing; (b.) reaching a targeted number of beneficiaries; and (c.) achieving cost recovery' (*ibid*: 264), there was an uncertain

period after the services had been installed and the plots had been purchased with full cost recovery, as to whether houses would be built. More than 20 years later a variety of mixed-income houses have been built (as can be seen in Figure 2.9 below) and the authors describe these projects as successful, recommending that 'governments and private firms can increase the supply of affordable housing by scaling up delivery of small housing plots' (*ibid*: 272).



Figure 2.9 Chennai sites and services project 20 years later. (Source: Sumila Gulyani, Linkedin)

2.11 Drawbacks of sites and services

As most governments could not afford to subsidise housing, full cost recovery for sub-divided land and services has been the basis for sites and services in many countries since the approach was adopted by the World Bank in 1972. In spite of reduced standards, sites and services models based on full cost recovery are still unaffordable for about 20 percent of urban dwellers (Choguill, 2007).

Remoteness of locations and problems in assembling land are also recurrent criticisms of sites and services (Owens, Gulyani and Rizvi, 2018). The difficulties of cost recovery and its inability to deliver at the scale that was needed caused the World Bank to change their approach in the mid-1980s from sites and services and direct funding to an 'enabling environment' through 'economic, financial, legal and institutional' support for the housing sector (*ibid*: 146). The age and employment status of beneficiaries are also limiting factors with self-help as Dansoh, Stilwell and Leach (2007: 260) point out from their research into the Tamboville Low-Cost Housing Project in Pietermaritzburg where

Housing Support Centres set-up to provide technical and legal advice on aspects of home ownership and construction experienced problems of an 'aging' target market and high unemployment, with older beneficiaries not being in a position to earn enough to improve the starter house that was provided.

Administrative difficulties and default in the repayment of loans to micro-finance lenders, cooperatives or government self-help agencies have also presented stumbling blocks in other countries where self-help programmes have been implemented. In terms of Botswana's Self-Help Housing Agency (SHHA) model, repayments are not made regularly and the recovery of outstanding debt has met with little success, with arrears rising as the limits of the available loans increased (Segopa, 2007). The requirement for prospective beneficiaries to purchase plots also puts self-help out of reach of the poor, with Segopa (2007: 73) noting that the 'SHHA now focuses on the "rich poor" that can afford the plot prices and the interest rates charged for the repayment of the SHHA loan'. Although Segopa's research highlights the tremendous 'use value' of the SHHA scheme to beneficiaries, in monetary terms the properties do not fetch high prices on the 'open market', largely due to their peripheral locations (*ibid*: 76). A trade-off between 'government's commitment to cost-recovery' and its 'social obligation' is recognised by Segopa (2007: 87) in the Botswana SHHA case, for which low interest rates and lengthy repayment periods improved the prospects for self-help beneficiaries. The main concerns identified by Segopa are 'access to housing finance, access to affordable land and the restrictive legislative instruments governing housing development' (*ibid*: 83).

Just as administrative difficulties and on-going financial uncertainty were the main reasons against publicly owned and managed rental housing from being adopted in South Africa, Segopa (2007: 75) reports that default in the repayment of loans for plots and building packages and difficulties in managing loan books for Botswana's Self-Help Housing Agency (SHHA) programme saw the government consider 'shifting the management of SHHA loans from Local Councils to better equipped financial institutions'.

The main limitation of sites and services internationally seems to be the inability of the very poor to purchase the site in terms of the full cost recovery model (Choguill, 2007; Srinivas, 2020), with higher income groups displacing the people for whom the projects were intended. However, in the proposed South African approach where serviced sites are to be given to beneficiaries, affordability relates more to the high costs of building a top-structure as opposed to paying for a stand. Time consuming 'bureaucratic procedures, institutional requirements and political problems' in identifying beneficiaries, allocating stands and for applicants to meet eligibility criteria make sites and services schemes 'unaffordable or inaccessible for the lowest income groups' and are also susceptible to corruption (Srinivas, 2020: un-paginated). Difficulties in assembling land, remote locations and problems with connecting bulk infrastructure on and off site, sometimes due to a lack of coordination between implementing agencies, can cause delays in stands being serviced even after the beneficiaries have been allocated. High building standards and restrictions imposed on the use of land for small-scale industry or income generating activities such as renting of rooms further reduce sustainability for the end-user (*ibid*).

2.12 Problems experienced with sites and services in Nigeria

'Negligence and corruption' are cited by Bello, Oladokun and Adegunle (2013: 4) as the main cause behind the Nigerian government failing to install adequate infrastructure to 'increase the supply of land for housing'. The proliferation of slums is a result of dwellings being built before infrastructure is installed, poor integration of services 'into the city-wide networks' and non-adherence to regulations (*ibid*: 4). Though investment in infrastructure serves as a stimulus for housing development, poor management of sites and services schemes has resulted in several projects turning out to be non-functional with sites being laid-out but not provided with infrastructure. Delays in allocating stands and deferred occupation causes infrastructure to be vandalised and survey beacons to be removed, resulting in plots becoming 'derelict', overgrown and unused (*ibid*: 7). Impractical plot sizes is a further problem that gives rise to densification from sub-letting of plots, wasted expenditure on infrastructure and prime sites not being developed (*ibid*: 7). Taking into account that communities have diverse social and cultural values and distinctive 'environmental settings' is therefore crucial to the planning and management of sites and services areas where a 'universal approach' is '[unlikely] to be suitable for all communities' (*ibid*: 9).

2.13 Conceptual Framing

The following themes form the Conceptual Framework for the research and help to explain self-help housing and site and service (Figure 2.10).



Figure 2.10 Conceptual Framework showing key components of Assisted Self-Help Housing

2.13.1 Rapid Land Release

In the face of '[a] lack of affordable housing options', rapid land release is the concept of making land available for settlement to improve access to affordable housing opportunities and to 'combat illegal land invasion and promote regulated land use' (CoJ, 2021a: 35). The programme is designed to formalise informal settlements and 'follows a 'site and service' model, where beneficiaries get a plot with basic services so they can build houses' (Kumar, Royston and Clark, 2020: un-paginated). The idea of releasing land has been given prominence since the Covid-19 pandemic and follows from constraints on the national budget, which has made the continued delivery of top-structures by the conventional RDP/BNG model unsustainable. '[The] programme has the potential to reach the millions of people who do not have adequate housing or equitable access to land' (Kumar, *et al*, 2020: un-paginated).

Rapid land release emanates from John Turner's conviction that 'self-help restore[s] power and control back to people' and the idea that providing access to land '[will] spur property markets, leading ultimately to "beneficiaries" ascending a ladder out of poverty' (*ibid*: un-paginated). Kumar, *et al* (2020: un-paginated) estimate that 'it takes an average of 11 years to implement a housing project' and are therefore skeptical that the Rapid Land Release Programme 'will be exempt from the inefficacy of the underlying processes and instruments that have plagued housing delivery to-date'.

2.13.2 Site and Service Housing

Site and service housing schemes are explained by Norwood (1973: 359) as a strategy to '[provide] a planned framework within which … people themselves build their own houses as their resources permit'. Formulated in response to the explosion of urban populations, he notes that failing to adequately plan for migration to cities results in the propagation of 'completely unplanned [informal settlements]' on the periphery of urban areas. Planning of site and service schemes provides for basic services and is intended to improve the circumstances and respectability for people living in informal settlements. Although the parameter is to 'facilitate the provision of as many houses as possible, as quickly as possible, and as cheaply as possible', the author also advises that 'the implementation of a successful site and service scheme requires just as much analysis, appraisal and planning as does any other type of housing scheme' (*ibid*: 359).

The fundamental concept of self-help and site and services is explained very well by Marais, Ntema and Venter (un-dated: un-paginated) as follows:

> '[T]he practical implication of Turner's work is that governments should not provide those aspects of housing which people can provide for themselves. Consequently, Turner was a proponent of site-and-service schemes (referred to as "aided self-help" schemes) in terms of which governments had to take responsibility for the provision of basic services, and individual households were responsible for the construction of the housing unit'.

2.13.3 Self-Help

Against the backdrop of 'enormous and on-going urban growth', self-help is recognised as an important way for individual households to provide housing for themselves through a 'step-by-step [progressive] construction process' (Bredenoord, 2016: 1). Given the extensive demand for low-income housing, especially in developing countries, self-help or 'self-managed' housing is described by Bredenoord as 'a phenomenon of great importance … [that] … should be facilitated by formal housing policies' to improve 'sub-standard' conditions. Seen as having capacity to meet wide-ranging housing needs, self-help can be distinguished from 'social or public housing' by its 'bottom-up' approach, whereby 'individual households determine the building quality and construction pace', the notion of 'dweller control' advocated by John Turner. 'Institutional' housing on the other hand is supplied in a 'top-down manner' by the state or private developers with limited participation by the end-user. Often necessitated by poverty, self-help is typically undertaken informally, but can be implemented on a more formalised basis with varying degrees of technical and financial assistance from NGOs, housing cooperatives or the state. (*Ibid*: 1)

2.13.4 Sweat-Equity

The connection between self-help and sweat-equity is differentiated by Harris (2003: 248 quoted in Marais, Ntema and Venter, un-dated, un-paginated) as follows:

> '[B]y self-help Turner has always meant not only the investment of sweat equity by owners in their homes but also the processes of owner design and management'.

This clarification shows that the concept of sweat-equity comprises more than the physical 'self-construction' of a dwelling by the owner, but a wider meaning that incorporates Turners advocacy of 'dweller control' as regards the management of the process. Marais, *et al* also note the observation by Harris (2003) that Turner's belief in 'dweller control' '[h]as received the least recognition in policy development'.

In unpacking the concept of 'sweat-equity', Marais, *et al* advise that it is taken to mean 'self-construction', which implies that beneficiaries will be able to contribute labour to reduce costs and build better quality, larger houses than those produced by a 'top-down', contractor-driven approach. Although the term 'sweat-equity' is to some extent synonymous with self-help, the authors make the point that '[upholding] the emphasis … on the 'end product (size, quality) and not on the process' has resulted in '[increased] … state control (rather than dweller control)'. Huchzermeyer (2006b, cited in Marais *et al*, un-dated, un-paginated) refers to the emphasis on the end-product as 'paternalistic' and 'delivery-orientated'.

While giving emphasis to the 'end-product' and not the 'process' is understandable from an official or technocratic perspective in conventional projects, in self-help (or PHP) projects it is contrary to Turner's principle of a step-by-step process toward meeting the needs of the dweller. In spite of the policy's commitment to true PHP as a grassroots initiative (to be driven from the bottom-up), Marais, *et al* show that the '[g]uidelines provided … [are] … almost similar to those of the normal contractor-driven approach'.

Reluctance to let go of rigid guidelines in the pursuit of delivery objectives therefore '[limits] beneficiary choice to unpaid labour (sweat-equity)' and goes against the underlying philosophy of PHP. (*Ibid*)

2.13.5 Incremental Housing

'Incremental housing' is a progressive, step-by-step process of gradual home improvement undertaken by poor households over time using the resources available to them and stems from the inability of conventional delivery mechanisms to supply adequate low-income housing. A lack of institutional or official capacity has seen '(the growth of) informal self-help settlements' and results in the poor having no alternative but to 'build, expand and improve' their houses themselves (Bredenoord, 2016: 7). This is called 'self-managed incremental housing' and is the norm in developing countries, gaining recognition '[as] an important housing production method of the urban poor' that can be undertaken either individually or on a collective basis (*ibid*: 7). The focus recently has been 'sustainable and durable building materials and building techniques' (*ibid*: 7).

Incremental housing has been part of the post-apartheid subsidy programme, with so-called 'starter pack' top-structures being built on serviced sites for on-going upgrading and finishing by the residents. Basic houses included essential components like foundations, concrete slabs and roofs, with some walls being left out and windows, doors and finishes, etc. being added later. A wet-core, viz. a flushing toilet, running water and a basin, were provided from the outset for sanitation. Electricity was connected afterwards depending upon the capacity of bulk supply to the area. The strategy was to provide as many basic shelters as possible (to a lower specification) so that more beneficiaries could be assisted. Nonetheless, minimum norms and standards have been adapted to be more energy efficient and sustainable as required by the *Breaking New Ground* (*BNG*) policy introduced in 2004.

2.13.6 Differences (and similarities) between site and service and informal settlement upgrading

Site and service differs from informal settlement upgrading in that it is a proactive / preemptive strategy to provide land and basic services for urban settlement, as opposed to a reactive / obligatory response to the need to upgrade and formalise existing informal settlements. By increasing the supply of building plots, the site and service approach allows for land to be planned and occupied in an organised and orderly way, in the process '[containing] the growth of unplanned [informal settlements]' and delivering '[an] efficient urban development pattern … [that] cannot readily be supplied on an unorganized basis' (World Bank, 1974: 2). The objective is to enable communities to settle on land without the threat of eviction or relocation and to facilitate self-help building of houses. In this way, the approach makes more economical use of resources and '[achieves] much better physical living conditions than are available in unplanned [informal settlements]' (*ibid*: 2). Although 'similar benefits' can be accomplished by upgrading, the paper advises that it is more difficult and costly to 'reconstruct … [than by establishing] … better patterns of development in the first place' (*ibid*: 2).

The Upgrading of Informal Settlements Programme (UISP) is comparable to site and services in that it is similarly intended to supply essential services and secure tenure 'in a structured manner', with the main distinction being that it is undertaken *in situ* for existing informal settlements 'situated on land suitable for permanent residential development' (DoHS, 2009: 9, 14). The programme applies to settlements that are characterised by '[i]llegality and informality, inappropriate locations, restricted public and private sector investment, poverty and vulnerability, and social stress' (*ibid*: 16). Like site and service, the programme encourages self-help by 'the empowerment of residents … to take control of housing development', but also recognises that 'possible relocation and resettlement … [may be necessary] … as a last resort' … in exceptional circumstances' (*ibid*: 9).

2.13.7 Security of tenure

Underlying self-help is the concept that secure tenure provides reassurance for people to invest in their own houses. Urban LandMark (2010: 3) shows that there are two approaches to tenure: 'regularisation', which refers to 'legal recognition [and] individual ownership' and 'tenure security', which provides for administrative and legal mechanisms against evictions. Tenure security for informal settlements is regarded as the 'first step towards official recognition' (*ibid*: 5).

The following four steps advocated by Urban LandMark (2010: 14, 15) combine elements of the 'regularisation' and 'tenure security' approaches to achieve incremental security of tenure:

1) '[A]dministrative recognition' requires a 'basic site plan', a 'database of occupants' and 'letters of occupation' to be prepared and confers 'blanket legal recognition [for] the settlement';
2) '[L]egal recognition' calls for a 'detailed layout plan' and a 'full register of all occupants [linked to] a property description' to allow the 'area [to be] acknowledged in legal terms' and to permit the municipality to upgrade 'without contravening their own laws';
3) '[D]evelopmental recognition' follows-on from 'legal recognition' and provides for '[increased] tenure rights' and 'more formal tenure options (such as leases)'; and
4) '[T]ownship establishment' requires the township register to be opened at the Deeds Office so that 'individual ownership' can be transferred.

The 'incremental tenure approach' is a way of 'opening up more officially recognised channels of land supply' and 'improving the pro-poor functioning of urban land markets' (Urban LandMark, 2010: 5). Despite 'individual ownership' forming the basis for South African housing policy, 'property ownership and the protection of property rights' can result in 'gentrification' and 'downward raiding' on land designated for the poor, while higher costs for the beneficiary from 'taxation [and] services charges' also 'make it difficult for people to remain on the land'. Placing emphasis on 'blanket, settlement rights … rather than individual rights', the tenure security approach does not require ownership to achieve legal recognition for informal settlements (*ibid*: 9).

2.13.8 Self-help and sites and services as 'pro-poor' housing strategies

Most of the literature around assisted self-help housing reinforces the view that it is a way of helping the poor to provide housing themselves. Bredenoord and van Lindert (2010: 286), for example, make it clear that the results achieved by 'self-help builders' are 'living proof of the power of self-help' and the effectiveness of 'pro-poor' government strategies. They note that the 'pressing housing needs of the urban poor have always primarily been satisfied by the poor themselves' and make a strong case for housing policies 'that support the self-help efforts of the poor'.

Likewise, Bello, Oladokun and Adegunle (2013: 14) are in full support of 'a more urban poor friendly' approach, but warn of the need for 'functionality and proper maintenance' for sites and services schemes to have an impact. Choguill (2007: 147) highlights the role governments have in developing good quality housing and backs a return to the 'self-help phase of housing policy'.

2.13.9 Incremental housing as a workable solution

In developing countries, incremental housing by way of serviced sites is a practical way of supplying the demand and according to the UN should be given 'much more attention' by governments (UN, 2005: 166, cited in Bredenoord and van Lindert, 2010: 282). As access to formal shelter is out of reach for the poor, they have no alternative but to 'resort to unconventional or informal modes of housing provision' and self-help housing is in reality the only possibility (Bredenoord and van Lindert, 2010: 279). Following their court battle to win the right to be upgraded in terms of the Upgrading of Informal Settlements Programme (UISP), Tissington (2011: 57) advises that the Slovo Park community in the south of Johannesburg came to realise that the '[incremental], phased approach to development … is the only way the government will be able to improve the lives of millions of residents living in informal settlements' and strongly recommends that government compromises on standards for self-help housing.

Faced with the enormous challenge of accommodating the urban poor, governments in many countries in Africa, Asia and Latin America urgently need to find workable solutions to address the deficit, one of which is undoubtedly self-help (Bredenoord and van Lindert, 2010). The UN estimates that by 2030 approximately '5 billion people' or 'around 60% of the world's population' will be living in urban areas, which means that considerable numbers of houses will have to be constructed each year to catch-up (*ibid*: 279). The UN's point of view that 'assisted self-help housing is the most affordable and intelligent way of providing sustainable shelter' (UN, 2005: 166, cited in Bredenoord and van Lindert, 2010: 278) is corroborated by Schermbrucker, Patel and Keijzer (2016: 84) who advise that Slum Dwellers International (SDI) distinguish 'incremental housing provision [as] more accessible and practical for the poor'.

2.13.10 Prospects for incremental housing

In view of their insecure incomes, changes in family cycles and the in/ability of households to save, the advantages of the incremental approach over conventional housing for the poor are considerable. Yet, the sites and services projects undertaken in

the 1970s and 1980s were unable to deal with the scale of housing required due to rapid urbanisation (Bredenoord and van Lindert, 2010). The shift away from self-help to broader comprehensive strategies 'distracted attention' away from the significant need for basic services, land for housing and the upgrading of informal settlements, thereby compromising self-help prospects for the poor (*ibid*: 280). Because sites and services open-up the possibility for people to build for themselves, it is evident that the 'use value' of the house is advanced by this approach and should therefore form a central part of overall, differentiated housing strategies (*ibid*). Incremental construction can be seen in the diagram below (Figure 2.11), which shows that a small shack is gradually converted over time into a double-storey house, in the process improving the usability for the owner.

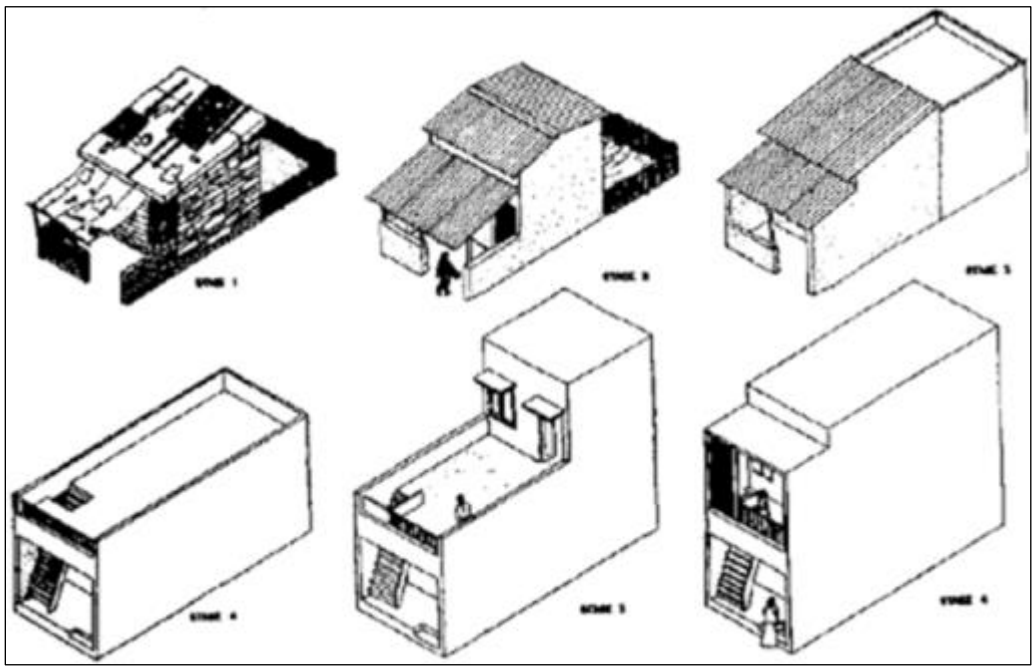


Figure 2.11 Stages of construction: From a shack to a double-storey house. (Source: NZDL.ORG)

In South Africa, the People's Housing Process (PHP) has not delivered significant numbers of 'formal, aided-self-help housing' due to the predominant delivery of conventional RDP/BNG Houses and to a lesser extent Social Housing by the state, which has increased the expectation of a 'fully subsidised and completed house' by prospective beneficiaries (Landman and Napier, 2010: 5). In 2005/2006 when the PHP was redefined in terms of *Breaking New Ground's* renewed attention on community participation, developer-driven, project-linked subsidies accounted for '70 per cent' of the approx. 2.4 million subsidies approved between 1994 and 2004 (National Treasury, 2004: 124). Referring to the same number of subsidies for the same period, Himlin (2005: un-paginated) advises that PHP projects represented eleven percent of the total subsidies approved, with '272,165 households' having been approved for PHP out of '2,436,404 total subsidies'.

Efficient delivery by the state in South Africa has thus constrained the uptake or resurgence of self-help, '[unlike] in other countries … [where] … less state intervention

allows self-help to be the main source of formal low-income housing production' (Landman and Napier, 2010: 6). For households that do not qualify for a subsidy the 'only alternative' is 'unaided self-help housing' in informal settlements and backyard shacks (*ibid*: 7). The acceptability and 'scale of implementation' of self-help, especially in terms of the proposed sites and services approach, therefore depends upon the extent to which a wide range of housing delivery mechanisms are supported (*ibid*: 7).

2.13.11 Standards for self-help housing

Higher standards in planning, engineering and building add to the overall quality and technical aspects of a project, but like so many things, it comes down to affordability. Bredenoord and van Lindert (2010: 281) observe that security of tenure plays an important part in the construction of a 'durable house' as the owners of a plot with formal title tend to invest in improving their dwelling over time as the diagram of incremental self-help construction in El Alto, on the outskirts of La Paz, indicates (Figure 2.12).

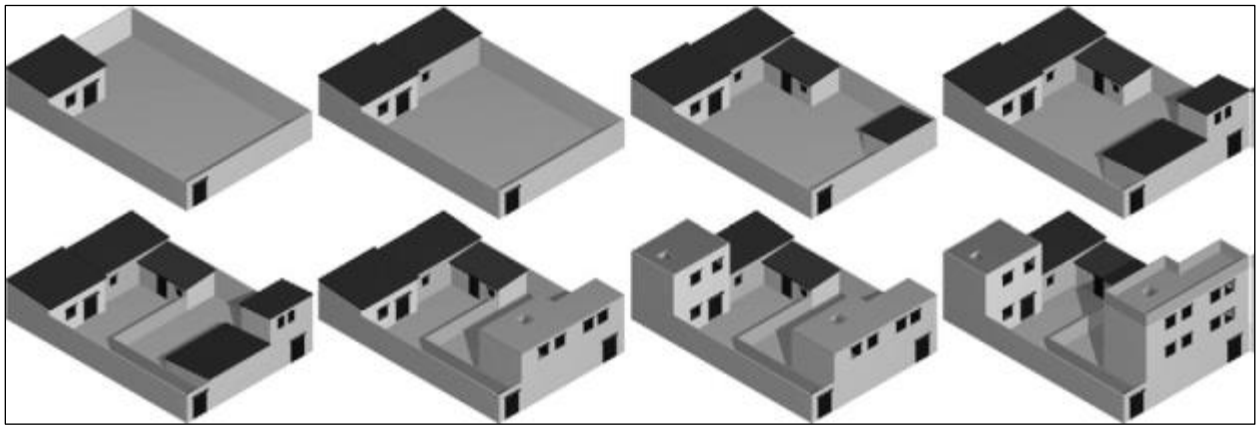


Figure 2.12 Incremental self-help construction, sub-division and densification in El Alto, Bolivia. (Source: Bredenoord and van Lindert, 2010: 284)

The literature shows that less formal standards are the underlying rationale for dwellers to make affordable incremental improvements according to their finance, timeframe, capabilities and design preferences. A flexible approach to standards and materials could be applied to ensure minimum health, safety and performance standards are followed. A good example is the use of fire-retardant materials in re-constructing shacks when Mshini Wam informal settlement in Cape Town was re-blocked, with the community happy to 'move from wooden shacks to safer structures' but nevertheless still aspiring to one-day upgrade to 'permanent, brick houses' (Schermbrucker, Patel and Keijzer, 2016: 88). The experience of Slum Dwellers International is that although 'professional expertise is often necessary', it must be applied in terms of the 'experience-based knowledge of slum-dweller communities' who in developing their own solutions sometimes 'also challenge traditional planning standards' (*ibid*: 87). Bredenoord and van Lindert (2010: 281) remark that 'what finally counts is the ability of the family to improve their housing and living conditions throughout the years'.

2.14 General steps in the subsidised housing development process

This section briefly discusses general steps to be followed from inception through to concept design and construction when site and service and/or conventional subsidy projects are undertaken:

2.14.1 Project Inception: Pre-feasibility, integration of development objectives and applying for funding

Project inception is based on the priorities set by the municipality's Integrated Development Plan (IDP), which coordinates development between local authorities and other spheres of government. This is referred to by National Treasury's Cities Support Programme Toolkit (2017: 50) as 'vertical integration' between national, provincial and local government objectives, as well as those of communities at a city-wide or local level. As housing projects are expected to deliver on wide-ranging developmental goals, e.g. job creation during construction, they are also required to incorporate the objectives of other programmes or departments. This is known as 'horizontal integration' (*ibid*: 50).

At inception stage a project is approved (by the MEC) if it meets the criteria of '[t]echnical feasibility, national priorities, … capacity of the municipality to undertake the project, alignment with the IDP, suitability and cost of the land … [and] … the number of households who will benefit' (DoHS, 2009: 56, 57). Funding for bulk infrastructure and internal services is allocated (to provincial government and municipalities) by Treasury in the form of the Urban Settlements Development Grant (USDG) or Informal Settlement Development Grant (ISDG), which was introduced in 2021 specifically for upgrading. The construction of houses is financed from the Human Settlement Development Grant (HSDG). The subsidies enable work to be undertaken in a particular financial year and are applied for according to the municipality's 'multiyear strategic plan' and the provincial government's 'Medium Term Expenditure Framework (MTEF)' (DoHS, 2009: 17).

In order to determine the 'socio-economic and demographic profile of the settlement', the application / inception stage requires a community survey, beneficiary registration and public participation to be undertaken (DoHS, 2009: 43). The pre-planning stage also sets out to identify and secure the land through negotiation or expropriation. Rudimentary services may be supplied on an interim basis prior to the project commencing or the settlement being formalised (*ibid*: 43). In order to provide technical assistance and to supply materials, housing support centres are established 'at an early stage' for owner-driven (PHP) projects (*ibid*: 57).

2.14.2 Concept Design: Identifying, acquiring and planning the land

In addition to its location to metropolitan centres, social networks, transportation hubs and economic opportunities, probably the most important factor to be considered in evaluating a site for low-income residential purposes is whether it can be acquired and developed feasibly. Unless state-owned land has been specifically earmarked for low-cost housing, selecting a new site is difficult, with the process being prolonged by environmental impact assessments, lengthy township approval procedures and

complications related to obtaining the land such as current ownership, lease agreements, expropriation, rates and taxes and the cost. This makes programming, budgeting and determining the cash-flow very complicated. Other significant aspects to be taken into account are the geo-technical conditions, the availability and proximity of bulk services and the area's capacity to provide sufficient housing for the recipient community. In determining these characteristics, the concept is expanded further so that '[d]etailed town planning, land surveying and pegging … [and] … contour survey' can be completed (DoHS, 2009: 18, 29).

When upgrading informal settlements, careful consideration must be given to the existing layout, taking into account established support structures and the investment made by residents in their dwellings. Town planners must therefore consult extensively with the community to develop a plan that is acceptable to them and that is least disruptive of the existing pattern, but that also makes good use of available space and can be serviced economically. Choices influencing the type of housing e.g. detached (stand-alone) houses vs. semi-detached (row-housing), building density, topography, flood-lines, the presence of groundwater, rocks and large trees, the size and configuration of stands, engineering and building specifications, a mix of land uses, the widths of primary and secondary roads, traffic impact and storm-water attenuation all need to be made during the town planning process.

2.14.3 Detailed Design: Tender and construction: Self-Help (PHP) vs. Project-Linked

Aspects like the form of tenure for the end-user, the choice of materials and a suitable construction methodology, as well as the appointment of sub-contractors, all have a direct bearing on the project's framework. For self-help (PHP) or site and service projects, when owners or community cooperatives are undertaking construction themselves, the detailed design stage should make allowance for a degree of flexibility in standards. With project-linked housing there is very little input into the end-product from the beneficiaries as the stand size of 250m² is stipulated and houses need to comply with minimum specifications to get building plan approval, quality assurance certification and enrolment with the NHBRC. The RDP/BNG house size in Gauteng is 40m² and must include two bedrooms, a bathroom, a living room and a kitchen area. The placement of the house should be orientated to the north for thermal efficiency and ought to make allowance to be extended in the future. For PHP projects, a more adaptable approach will encourage the process to be driven from the 'bottom-up' to empower individual owners to take control of the process according to their circumstances.

Risks associated with funding and the high cost of land, expertise, materials and labour must be taken into account. The expenses of paying for the land, developing the site and building the house have a direct bearing on whether there are any shortfalls or surpluses left over from the available subsidy. The primary incentive for developers is to make a profit, whereas with self-help, assistance from housing support centres, family and local builders should reduce costs, in theory helping to improve the size and quality of the house. The appointment of sub-contractors, labour rates for the various trades and the choice of materials, etc. thus apply to both developer-driven and owner-build

projects. For contractor-driven projects the requirement to employ eighty percent of local contractors and twenty percent externals affects viability further, with local contractors often insisting on a profit-share. It is worth noting that if the required skills are not present in the community, then external contractors should not be prevented from doing the work. Similarly, planners, project managers and contractors need to be aware that delivery can be deliberately disrupted or stopped outright by 'construction mafia', disgruntled workers or disaffected parties who may attempt to gain control by extortion, unreasonable demands for higher rates and even violence. Drawdowns of funding and the payment of claims for work completed must be reliable and consistent to facilitate a positive cash-flow and to prevent construction from being interrupted or delayed unnecessarily.

2.15 Brief overview of the evolution of state-assisted self-help housing in the post-apartheid era

To understand the unexpected about-turn in approach announced in 2020 towards an incremental, site and service strategy, it is important to recognise that South Africa's housing policy will almost certainly continue to change as the requirement for adequate shelter, informal settlement upgrading and the fulfilment of wider societal needs become even more pressing. This section briefly discusses some of the history of policy evolution and the rationale behind self-help that has led to the contemporary reappearance of the approach.

Although questioning whether the supply of land, essential services and a basic starter house does in fact contribute towards the 'alleviation of poverty', Charlton and Kihato's (2006: 262) paper *'Reaching the Poor? An analysis of the influences on the evolution of South Africa's housing programme'* notes that 'both government and academics hold the view that the provision of houses is a key development intervention in reducing poverty'. Undoubtedly, meeting basic needs has been the starting point for housing policy since the National Housing Forum (NHF) negotiations were held in the period leading up to the democratic elections in 1994, when the '[basic RDP] starter house, which beneficiaries would add to and consolidate over time' was adopted (*ibid*: 254). As discussed earlier in this chapter, this was a compromise between the ANC's rejection of the apartheid era's method of site and service and 'a political need to deliver acceptable houses' (*ibid*: 267).

Charlton and Kihato (2006) highlight that the reasoning was '[r]ooted in the notion that the best producers of housing were in fact the urban poor themselves, supported by government', whereby it was presumed that beneficiaries would gradually upgrade the 'starter house' by way of 'access to loan finance' or affordable credit (*ibid*: 269). However, the concept of incrementalism, or '[the] "progressive" realisation of ... housing rights over time' was not unanimously supported, with some delegates at the NHF opposed to having the word 'incremental' included in the '[historical] Botshabelo Accord of 1994' (*ibid*: 269, emphasis in the original). This background illustrates that the concept of self-help, site and service and incrementalism (used here interchangeably) has been '[a] highly contentious political issue' since the original policy was drafted. Site

and service was (and maybe still is) seen politically 'as a failure of government to deliver to its citizens', giving rise to the perception that owner-built houses are below standard and that '[i]nformality … [is equated with] … inferiority' (*ibid*: 258).

Despite the fact that '[t]he starter house' … [was intended to be] … an open-ended concept … subject to wide variations in interpretation', the addition of a 'defined specification' 30m² top-structure shifted support from a step-by-step process to one of mass supply. Notwithstanding that the resultant project-linked or contractor-driven model was needed to '[fulfil the promise] … made by the new government to deliver "one million low-cost houses" in five years' (*ibid*: 268, emphasis in the original), it was to a large extent motivated by 'maximising profit' for construction companies (*ibid*: 270). As it was geared-up to produce as many houses as quickly as possible, it was inevitable that problems with quality would arise. Housing delivery has subsequently been a numbers-driven exercise, with quantity rather than quality being measured, even if this changed to some extent in 2004 when *Breaking New Ground* brought in higher specifications, integrated development and a renewed focus on quality assurance.

By the end of the first decade of South Africa's subsidy housing programme, large construction companies had for the most part withdrawn from the sector, primarily due to decreased viability caused by lengthy delays and subsidies not keeping up with inflation (*ibid*). Out of necessity, accredited municipalities were required to take over the role of developer, sometimes in terms of purpose-made joint ventures or public-private partnerships.

With the introduction of the 'Peoples' Housing Process (PHP)' in 1998 renewed attention was given to '[increased] *beneficiary* involvement in housing … [at least for the construction of the top-structure]' (*ibid*: 265, emphasis in the original). The revival of PHP at that time can be understood as a return to the intended policy discussed above. Furthermore, it can be comprehended in terms of the Department of Housing (as it was known then) and grass-roots organisations like the Homeless People's Federation responding to the failure of the project-linked model to engage with communities. PHP has also come under fire for not being clear on what is meant by 'community participation' and that it '[h]as tended to institutionalise a community-based process … organised around community networks'. (*Ibid*: 265)

The Upgrading of Informal Settlements Programme (UISP) introduced in 2009 is targeted specifically at existing informal settlements and if implemented *in situ* has great potential to bring about a transition for the very poor. Mega projects such as the recently announced Frankenwald site next to Alexandra are aimed at people from higher-income groups who do not qualify for a subsidy, but who can afford higher rentals, the so-called 'gap market' (viz. people who earn more than R7, 500 / month but cannot pay for a mortgage).

Having looked briefly at the evolution of policy over the years, it is evident that the shift to site and service is backed by the theory of self-help housing. However, in view of the scarcity of well-located land and the changing urban landscape where higher-density walk-up apartments are more economical, one has to wonder where site and service projects will be located? The integration of low-income housing close to transport

corridors within an established urban structure makes lower-densities unfeasible, the basis upon which the site and service model works. Whether building 3-storey walk-ups for rental or social housing, or the development of mega projects, the supply of housing always comes down to suitable, well-located land.

2.16 Conclusion

The theoretical importance of state-assisted self-help as a delivery mechanism is clear from the literature. However, it shows that for the approach to gain widespread acceptance, communities need to participate in decisions regarding projects and be given support to establish their residences. While proponents of self-help advocate empowerment of the poor through a supportive process, which is the basis of 'freedom to build' advocated by John Turner, complicated issues like funding, access to serviced land, setting-up technical support and acceptance of less formal standards need to be confronted. Complexities like these were noticeable from investigating the experience of other countries and from looking at the progression of South Africa's housing policy. Forward-thinking strategies like incrementalism, site and service and informal settlement upgrading have tremendous potential, but need a change in mindset and a steadfast commitment from overall policy direction to make a difference. For self-help to gain traction, much greater clarity on policies like the Peoples' Housing Process (PHP) and the Rapid Land Release Programme is required. Conundrums like finding a balance between unregulated, overtly informal settlements and minimum norms that advance safe, affordable and well-functioning living environments therefore need to be resolved.

Difficulties in cost recovery from the sale of plots were conspicuous from reading about site and service projects in other countries. This indicates that the provision of a free serviced stand by way of a once-off capital subsidy would be an advantage for the South African approach and (in theory) should accelerate take-up and delivery. As the financial burden of paying for a plot is an obstacle for the very poor, full subsidisation of a serviced stand is a major contribution by the state to generating housing opportunities and in conferring an asset to the beneficiary. State assistance in the form of a serviced stand and on-going technical support therefore come through as vitally important to kick-starting the self-help process.

Although the administrative obligations and financial costs to authorities in managing subsidies and providing tenure are considerable, housing programmes in South Africa have been set-up to deal with many of these aspects. Taking note that the revised strategy was announced during the Covid-19 pandemic and at a time when government's budget was severely constrained, the literature shows that extensive consultation is needed to communicate the 'change in direction' to 'those most likely to be affected' (Kumar, Royston and Clark, 2020: un-paginated).

CHAPTER 3: CONTEXT AND CASE STUDY

3.1 Introduction

This chapter shows that site and service is being implemented using the incremental phases provided by the Upgrading of Informal Settlements Programme (UISP) and conditions of the City of Johannesburg's Annexure 9999, which is a schedule applicable to Transitional Residential Settlement Areas (TRSAs) identified as suitable for 'Regularisation' following Amendment 9999 to four of the city's Town Planning Schemes in 2009 (Urban LandMark, 2013).

The case study of Bottom Compound in Slovoville Ext. 1 (see Figure 3.1 below) to the west of Soweto illustrates that the City of Johannesburg is consolidating an informal settlement by way of the 3 phases of the UISP from feasibility study, environmental and geo-technical investigation, preparation of a layout plan and the installation of interim services on the basis of the terms provided for by Annexure 9999. Regularisation is defined as:

> '[A]n approach that recognizes informal settlements and promotes tenure security by including it in the City's legal framework (Town Planning Scheme) so that basic services can be provided and the area can be managed and improved over time.' (Urban LandMark, 2013: 11).

TRSAs are noted by Urban LandMark (2013: 11) as:

> '[L]and upon which informal settlements are established by the occupation of land and provision of residential accommodation in the form of self-help structures and some ancillary non-residential uses'.

Bottom Compound is not a typical informal settlement in that residents occupy rooms in a large, disused structure. However, 28 shacks have been erected on the site and many more would have been erected if it was not for the efforts of the community to prevent this. The distinction is not one of less or more informality, but primarily because residents of archetypical informal settlements strongly resist attempts by authorities to demolish their shacks when a new layout is put into effect. The UISP also calls for disruption to people's lives to be kept to a minimum, which will be problematic at Bottom Compound when the dilapidated building is demolished to make way for the new layout.

Although the case study is not a greenfield project, the principles of 'official recognition' of the settlement and *in-situ* upgrading are important in the context of sites and services as they likewise identify tenure security, suitable land and essential services as preconditions for 'consolidation', which is noted by Kornienko (2014: 15) as '[the] process of modifying physical dwellings and living spaces from a state of precariousness to one of increased security'. The incremental approach facilitated by Annexure 9999 provides the legal framework and the assurance to the municipality (and the resident) to invest resources in the settlement and is the starting point from which self-help housing can be built.

The Bottom Compound case study will identify some of the difficulties to be overcome in upgrading and delivering sites and services and try to provide some answers to the main research questions – viz. a. whether sites and services can deliver effectively, b. how the approach is being implemented, c. where land has been identified, d. the acceptability of the approach, e. adequate standards and f. the streamlining of processes to improve delivery.



Figure 3.1 Bottom Compound Settlement in Slovoville Ext. 1. (Author's Photograph, 18 August 2021)

3.2 Locality

Sites and services and *in-situ* upgrading are pro-poor ways of planning for urban growth, regularising informal settlements and facilitating assisted self-help housing. The strategy can be understood as preemptive (or maybe reactive) planning in the context of extensive residential growth being experienced to the west of Soweto, where Bottom Compound is situated. The R558 (see Figure 3.2 below) forms the arterial spine for large formal residential projects like Protea Glen, Lufhereng, Doornkop, Green Village, Slovoville Ext. 1, Tshepisong and Braamfischerville. This main arterial route (R558) links Lenasia and the N12 in the south with the Leratong Hospital interchange to Mogale City, Chamdor industrial area and Roodepoort CBD in the north and is attracting informal land invasion by people wanting to live in the area.



Figure 3.2 Locality of Bottom Compound Settlement in relation to Soweto and the Johannesburg CBD. (Source: Google Maps)

The scale of the urban growth along the R558 (parts of which can be seen Figure 3.3 below) is evidence of the area's attraction as a residential location, although located some 20km away from the CBD of Johannesburg. The Harmony Doornkop Gold Mine is a major employer in the region, providing work for 3,924 workers and contractors on the mine and was expected to produce 2,994 kg of gold in 2021 (Harmony Gold, 2018). Apart from informal trading, home-based enterprises and small-scale agricultural land uses stemming from the surrounding farms and small-holdings, there are few formal employment opportunities in the immediate vicinity of Bottom Compound. Transportation is primarily by way of minibus taxis from the R558 via Main Road.

The sprawling extent of formal and informal housing along the R558 is explained by Todes (2011: 159) as a continuation of the urban poor getting hold of places to live 'within or close to existing townships reserved for Africans under apartheid', predominantly in Soweto. This line of reasoning is reinforced by Huchzermeyer, Karam and Maina (2014: 155) who observe that the concentrations of informal settlements date back to the 'transition from apartheid', a locational tendency that formal subsidy and mixed-income projects have kept to. The spatial and economic marginalisation of Soweto's predominantly dormitory function is recognised by the City of Johannesburg's Spatial Development Framework 2040, which advises that approx. 40 percent of the city's population lives there and is home to the largest concentration of backyard dwellings in the city (CoJ, 2016).



Figure 3.3 Locality of Bottom Compound and Bottom Time House in relation to Harmony Doornkop Gold Mine, Main Road and R558 Arterial Route. (Source: Google Maps)

3.3 Background to the Bottom Compound Informal Settlement

The Bottom Compound and Bottom Time House settlement came about following the abandonment of the former mine hostel more than three decades ago. According to Poloko Tau's article in *The Star* (2011), the 'rundown mining village' was invaded in the late 1990s by approx. 2,000 homeless people '[in] the hope of getting RDP houses', which were being built in Slovoville Ext. 1. The Bottom Time House settlement is an old mine office that has since been vacated due to extensive vandalism and the wooden floors having caved in (Tau, 2011), displacing 28 households who have been accommodated by the latest upgrading layout plan, but currently live in shacks (CoJ, 2021). The large Bottom Compound structure accommodates 133 households in a number of partitioned rooms, which are in poor structural condition. In 2011, Tau noted that the people were 'still waiting [for RDP houses]'. A site visit to the settlement in August 2021 indicated that the situation is still the same, with the major exception being the extensive planning that has been done by the City of Johannesburg in terms of Annexure 9999, the Draft Upgrading Plan (2018) and the revised Settlement Plan (2021).

The residents rely on communal taps for water and a few communal flush toilets connected to the main sewer line and have no legal electrical connections, although electricity is in widespread use from illegal connections. Severely run-down, dilapidated and declared structurally unsound, the layout of the old compound is typical of the

dehumanising, prison-like architecture of single-quarter mine hostels from the apartheid era. Life shared in a 'dim room [by] a family of four' in Bottom Compound is described by a resident interviewed for Tau's article as miserable and 'unbearable', especially in the rainy season and in winter, with wind, rain and dust coming through the holes in the roof (Tau, 2011, un-paginated). The same resident complains about promises not being kept for the delivery of houses and services by politicians who only visit the area to canvas for votes prior to elections. The situation is unfortunately the same in 2021, with proper toilets, electricity and adequate housing being desperately needed by the residents.



Figure 3.4 Aerial View of Bottom Compound Informal Settlement and Bottom Time House. (Source: Google Maps)

3.4 The context of the Draft Upgrading Plan (2018) and revised Settlement Plan (2021) for Bottom Compound in terms of housing policy and planning mechanisms

Although a long road lies ahead to new serviced sites being delivered for the 161 Bottom Compound households (133 from Bottom Compound and 28 from Bottom Time House) (CoJ, 2021), extensive planning and consultation has been done to upgrade the settlement. The incremental approach is testimony to key planning legislation and policy being applied to bring about *in situ* upgrading by way of sites and services. The extent of the challenges to be overcome is also apparent when visiting the settlement and from discussing several critical steps with the Project Manager from the City's Sustainable Human Settlement's Department, who has generously facilitated access to the information outlined briefly in this chapter.

From the perspective of the research question viz. '*how will sites and services be implemented?'*, a review of key planning and housing policy shows that mechanisms are already in place for site and service and assisted self-help housing to be put into practice. Of particular significance are the incremental steps outlined by the Upgrading of Informal Settlements Programme (UISP) and the rules for upgrading TRSAs stipulated by Annexure 9999. Yet, without large tracts of land having been earmarked for sites and services, it is unclear whether large-scale replicability can be achieved.

Appendix 1 provides a synopsis of the applicable spatial planning and housing policies facilitating regularisation at Bottom Compound.

3.4.1 Incremental steps towards Housing Consolidation: Phases 1 to 4 of the Upgrading of Informal Settlements Programme (UISP)

Formulated to 'address the plight of persons without adequate housing' (DoHS, 2009: 9), the Upgrading of Informal Settlements Programme (UISP) is a key policy tool for the *in situ* regularisation of informal settlements that provides for secure tenure, community empowerment and basic services. The underlying principle is to 'address social and economic exclusion' and for residents to be empowered to take control of the development process (*ibid*: 13), indicating that John Turner's advocacy of 'dweller control' has helped to shape the policy. UISP projects were previously funded by Urban Settlements Development Grants (USDG) with assistance from the National Upgrading Support Programme (NUSP), but since 2021 subsidies are allocated directly to municipalities from Treasury's Informal Settlement Partnership Grant (ISPG) aka the Informal Settlement Development Grant (ISDG). The purpose of the new grant is '[a] programmatic approach to the upgrading of informal settlements at municipal level' (National Treasury, 2019: 847).

In Phase 1, the Application stage, municipalities would apply to the province for funding through the submission of Interim Business Plans, which should include relevant details of the municipality's Integrated Development Plan (IDP) and the Housing Development Plan, as well as pre-feasibility details of the particular upgrading project (DoHS, 2009: 43). According to the City of Johannesburg's Project Manager (interview on 18 August 2021), the pre-feasibility study for Bottom Compound was undertaken in 2013.

Phase 2 or Project Initiation is undertaken generally over a period of 8 to 12 months and facilitates the allocation of funding to municipalities for land to be acquired (either through negotiation or expropriation), for socio-economic and demographic surveys to be undertaken and for interim basic services to be installed pending the regularisation of the settlement (DoHS, 2009). Pre-planning studies to determine the geo-technical conditions and environmental impact assessments are also undertaken in Phase 2 to support the layout planning process (*ibid*). In the case of Bottom Compound, the land is owned by the City of Johannesburg and a geo-technical investigation has been done, with the site being classified as dolomitic, which is further complicated by extensive undermining and de-watering, with some sinkholes around old mining shafts having been identified. A traffic impact study must still be carried-out to determine access to the site from Main Road (City of Johannesburg's Project Manager, interview on 18 August 2021). There is limited car-ownership and residents rely primarily on minibus taxis.

In Phase 3, Project Implementation, the municipality submits a final business plan to the MEC for the approval of funding for project management, the initiation of town planning processes, the establishment of housing support centres, the formalisation of land occupation rights, relocation assistance, land rehabilitation and the installation of permanent municipal engineering infrastructure (DoHS, 2009). There are still only interim services provided at Bottom Compound (see the photographs in Figures 3.5 and 3.6 below).

Phase 4 is the Housing Consolidation phase and is administered in terms of the provisions of the various housing programmes provided by the Housing Code such as the People's Housing Process (PHP) (assisted self-help) and follows the completion of the first three phases. The final phase of the UISP also sees the township establishment process being finalised and the registration of ownership (where appropriate). During this phase, qualifying residents are encouraged to develop housing proposals in accordance with their individual and communal needs, affordability and aspirations (DoHS, 2009).

The nature of tenure rights that are to be awarded for the duration of Phases 1 to 3, before township establishment and the Housing Consolidation phase commence, are at the discretion of the MEC in consultation with the community and municipality. Tenure rights that may be considered in respect of Phases 1 to 3 could include rental agreements entered into with each household and/or the gratuitous loan of a site for occupation by the relevant household (DoHS, 2009).



Figure 3.5 Temporary toilets (connected to a main sewer line) have been provided at Bottom Compound. (Author's photograph, 18 August 2021)



Figure 3.6 Residents of Bottom Compound are supplied with water from communal stand pipes. (Author's photograph, 18 August 2021)

3.4.2 Transitional Residential Settlement Areas and Annexure 9999 of Amendment Scheme 9999, June 2009

In terms of Annexure 9999, the land use for Bottom Compound (and other informal settlements suitable for upgrading) is *Transitional Residential Settlement*, which allows for residential, economic and other land uses in the area (Urban LandMark, 2013: 12). The land use management aspects stipulated by Annexure 9999 recognise that until a basic layout plan is in place and the structures have been identified, an incremental approach to this aspect is needed. In accordance with sound town planning principles and for safety reasons, the conditions make allowance for one main single-storey dwelling plus one other on each plot, side spaces of 1m between buildings, no solid boundary walls, coverage of 60 percent, a process to change the land use and rules to enforce the land use requirements (*ibid*). It is important to note that while the *City of Johannesburg Land Use Scheme, 2018* refers to Annexure 9999 as the 'applicable Annexure' to be used in defining (and regulating) 'transitional residential settlement areas' (CoJ, 2018a: un-paginated), the provisos of Annexure 9999 should be more clearly spelt out to provide better regulatory support for the regularisation approach to upgrading.

Importantly for the research question of *applicable standards for sites and services*, the building controls stipulated by Annexure 9999 refer to the SABS standards for informal

housing (viz. SABS 0400 and SABS 0401) (Urban LandMark, 2013). While the designation *Transitional Residential Settlement* confers a form of blanket legal recognition on the settlement, the preparation of the layout plan allows incremental steps to be taken towards achieving 'individual tenure security' and the numbering of structures so that 'Occupation Permits' can be issued. It is significant to note that the Occupation Permit is not dependent on specific plot boundaries but rather entitles a registered occupant to occupy a structure within the settlement (*ibid*).

3.5 'Regularisation' and 'Internal Blocking' as ways of establishing sites and services

Urban LandMark (2013: 13) describes TRSAs and Annexure 9999 as an 'innovative' mechanism that provides 'legal recognition' for incremental improvements to be made in the 'interim period' while a settlement is being 'regularised'. They note that the City of Cape Town has a similar 'blanket' zoning called 'Single Residential – Incremental Housing or SR2' that provides for blocks in a settlement to be legally registered in the Deeds Office for further sub-division and transfer to households when the layout is finalised (*ibid*: 41). This system of 'internal blocking' (or re-blocking) enables 'group living arrangements' to be kept in cases where individual sites are not required, whereas 'regularisation' in Johannesburg is 'based on the basic layout plan' and does not have 'legal status' in the Deeds Office but paves the way for 'formal township establishment' to follow (*ibid*: 42). In terms of this research, it is important to note that both the 'regularisation' and 'internal blocking' approaches offer flexible mechanisms to establish sites for self-help housing in compliance with town planning bye-laws.



Figure 3.7 'Internal blocking' is being undertaken at Naledi Camp in Soweto. Communal stand pipes have been installed and the informal settlement is being reconfigured in accordance with the layout plan. (Author's photograph, 18 August 2021)

The above photograph of Naledi Camp (close to Merafe Railway Station in Soweto) is an example of 'internal blocking' (re-blocking) being done in advance of formal township establishment in order to provide interim basic services and to realign the shacks with a layout plan. The advantage of 'internal blocking' is that it allows residents to rebuild their structures on planned stands that will in due course be formalised, giving them the assurance to invest in self-help housing improvements. During my visit to Naledi Camp, one elderly resident whose structure had been knocked-down to make way for the realignment of the layout was unhappy with the temporary structure that the municipality had provided. She showed me inside and complained that the roof structure was flimsy and could easily blow off (pls. see the photograph in Figure 3.8 below). This frustration with the temporary shack indicates that she had been happier in her previous structure that she had built and lived in for a long time. It also highlights that if given a piece of ground with basic services, people want to construct self-help houses.



Figure 3.8 A resident of Naledi Camp in Soweto points to the flimsiness of the roof of the temporary structure provided during the course of 'internal blocking'. This lady had been more content with the 'permanent structure' she had built herself. (Author's photograph, 18 August 2021)

Notwithstanding the logistical challenges of providing temporary accommodation during upgrading, 'internal blocking' of settlements allows people to remain where they have been living and does away with the unfortunate situation of evictions or relocations elsewhere. The 're-blocking' of Naledi Camp is being implemented using funding allocated from the Informal Settlement Partnership Grant (ISPG), while the planning of the layout is facilitated in terms of Annexure 9999.

Huchzermeyer, Karam and Maina (2014: 157) substantiate 'regularisation' as a way of achieving 'interim relief' and are in support of the approach as 'the basis for *in situ* upgrading under the UISP'. However, as a result of its perception as a 'temporary' measure before proceeding to 'conventional housing delivery', they note that it has not been fully embraced by Gauteng Province 'as a distinct approach to housing delivery'. Yet, in view of the 211 informal settlements in Johannesburg and an estimated backlog of 457,200 units (CoJ, 2021a: 157), the 'regularisation' approach including sites and services and self-help, could help to address around 20 percent of the city's housing backlog for the poor (the informal settlements are shown in Figure 3.9 below).

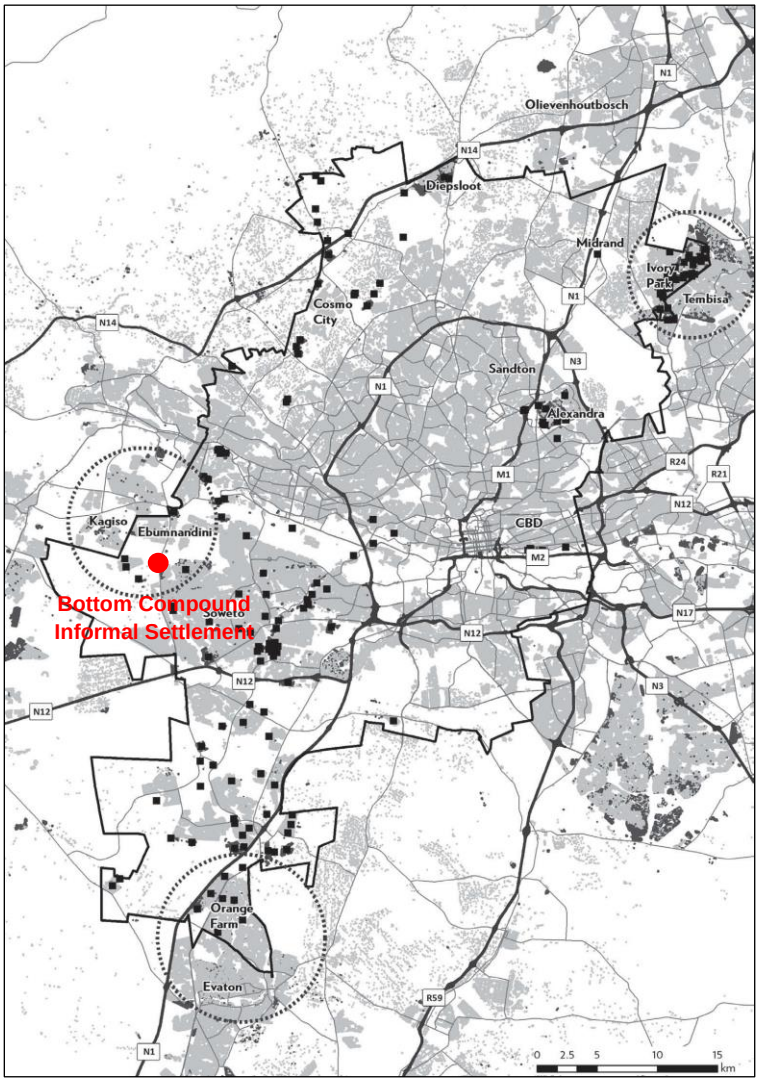


Figure 3.9 The location of Johannesburg's informal settlements. (Source: CoJ: 2009, 2011 and GTI: 2010.) (Based on a map found in Huchzermeyer, *et al*, 2014: 161)

3.6 Regularisation along the 'Tenure Security Continuum'

Urban LandMark's advocacy of incremental steps to achieving security of tenure through 'official recognition' for informal settlements and the City of Johannesburg's regularisation approach by means of 'legal or statutory [mechanisms]' to unlock

municipal and state investment have been instrumental in increasing the supply of land for the poor. The concept of a 'Tenure Security Continuum', shown in Urban LandMark's original 2008 diagram below (Figure 3.10), illustrates how informal settlements can be upgraded from a situation of 'no tenure security' and the threat of eviction or relocation on the one end to 'high tenure security' and full title on the other through a process of 'administrative recognition' that moves towards 'legal recognition' using the CoJ Amendment Scheme 9999 (Urban LandMark, 2013: 18).

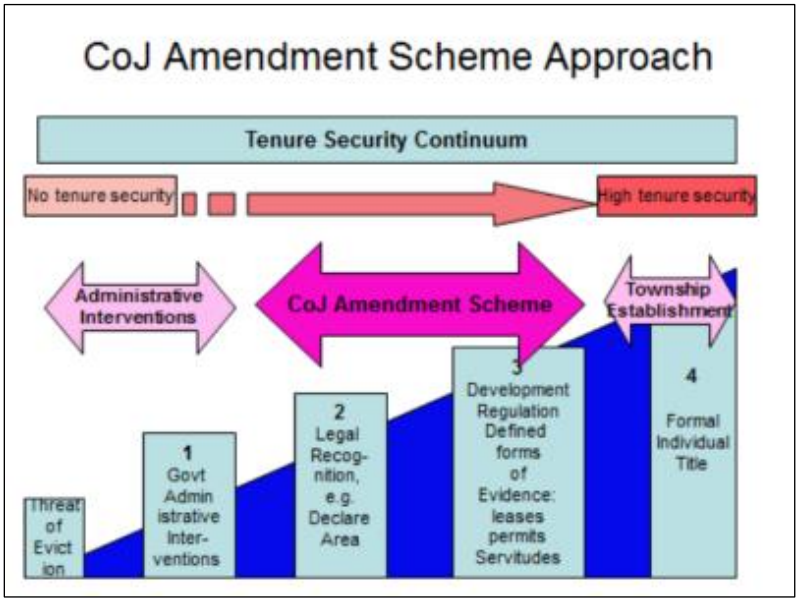


Figure 3.10 Tenure Continuum and the Regularisation Approach. (Source: Urban LandMark, 2013: 18)

As regularisation confers 'administrative [and] legal recognition' on a settlement without necessarily resulting in township establishment, it is not located at the far end of 'high tenure security' but somewhere in the middle between 'blanket tenure recognition' and 'individual tenure recognition' as depicted in Urban LandMark's diagram below (Figure 3.11). This continuum represents a flexible way of both upgrading and providing sites and services, as can be seen at Bottom Compound.

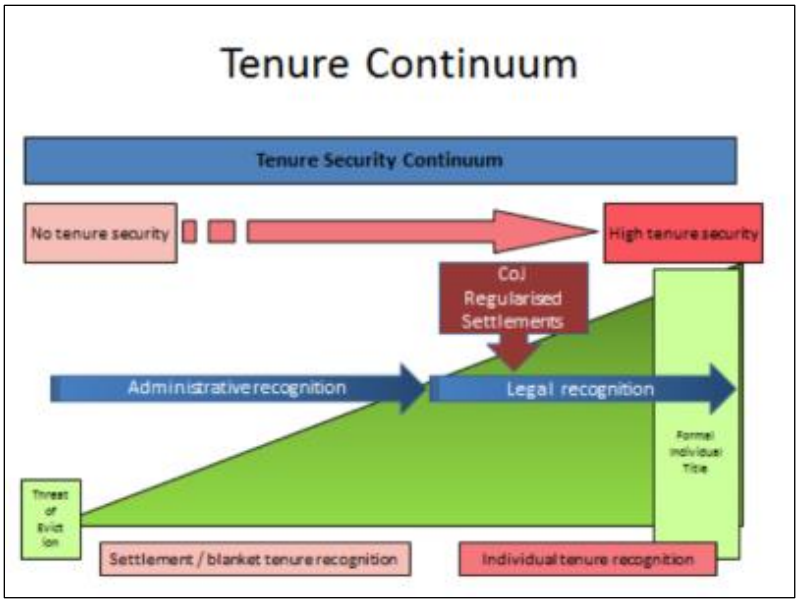


Figure 3.11 The Tenure Continuum and the position of the Regularisation Approach. (Source: Urban LandMark, 2013: 20)

3.7 Bottom Compound: Category B1 upgrading with interim essential services and the Enhanced People's Housing Process

In terms of the Rapid Assessment & Categorisation (RAC) criteria developed by the National Upgrading Support Programme (NUSP) and the Housing Development Agency (HDA), the Bottom Compound settlement is classified as B1, which means that it is suitable for *incremental upgrading with interim essential services*, leading eventually to 'formalisation or other permanent "less formal" settlement solutions' (National Treasury's Cities Support Programme Toolkit, 2017: 43, emphasis in the original). As opposed to the other 3 categories, viz. A: *full conventional upgrade*, B2: *deferred relocation with emergency services* and C: *imminent relocation*, the B1 classification represents an excellent opportunity for self-help by way of sites and services. The reason for this is because category A: *full conventional upgrade* is geared towards formal houses, full services and formal tenure, while categories B2 and C generally lead to relocation, although the Toolkit (2017) notes there is an opportunity for self-help to be implemented in the interim period before relocation, but with less potential for a permanent solution. For settlements categorised as B1, the Toolkit (2017: 58) advocates a 'participative, partnership-based' approach by way of the Enhanced Peoples' Housing Process (EPHP) using HSDG funding. It also notes the EPHP's 'important alignment [with the incremental & regularisation approaches]' and the 'significant potential' it has for upgrading, in spite of 'limited' historical uptake and for it to be 'more effectively channeled'.

3.8 'Access to the city' for the poor via informal settlements, formal townships and sites and services

The Toolkit (2017: 159) highlights that the 'fundamental driver [behind the formation of informal settlements]' is 'access to land and the city' and stresses that it is important for

municipalities to ‘plan ahead’ for ‘urban migration’, which is a challenge in most developing cities. In considering the question of where land will be identified, existing informal settlements and formal townships close to work opportunities are where the poor gain ‘access to the city’ either by building new shacks or renting in backyards. Existing category A and B1 settlements therefore represent viable opportunities for step-by-step upgrading to be implemented, as in the cases of Bottom Compound and Naledi Camp. Guidelines developed by the HDA for managing land settlement recommend that municipalities be proactive in identifying, acquiring and servicing land ‘on a planned and structured basis’ as a way of preventing the poor from having to occupy land illegally, although there is a risk that preemptive planning might encourage further urban migration and land occupation (Toolkit, 2017: 179). Figure 3.12 illustrates alternatives for managing land settlement and confirms the theoretical basis that *in situ* upgrading or sites and services significantly increases access to housing opportunities for the poor. But as Urban LandMark (2013: 9) point out and as can be seen at Bottom Compound, the process of upgrading and township establishment is ‘slow and fraught with difficulties such as land acquisition, relocation of settlements, protests from communities and limited allocations of budgets’.

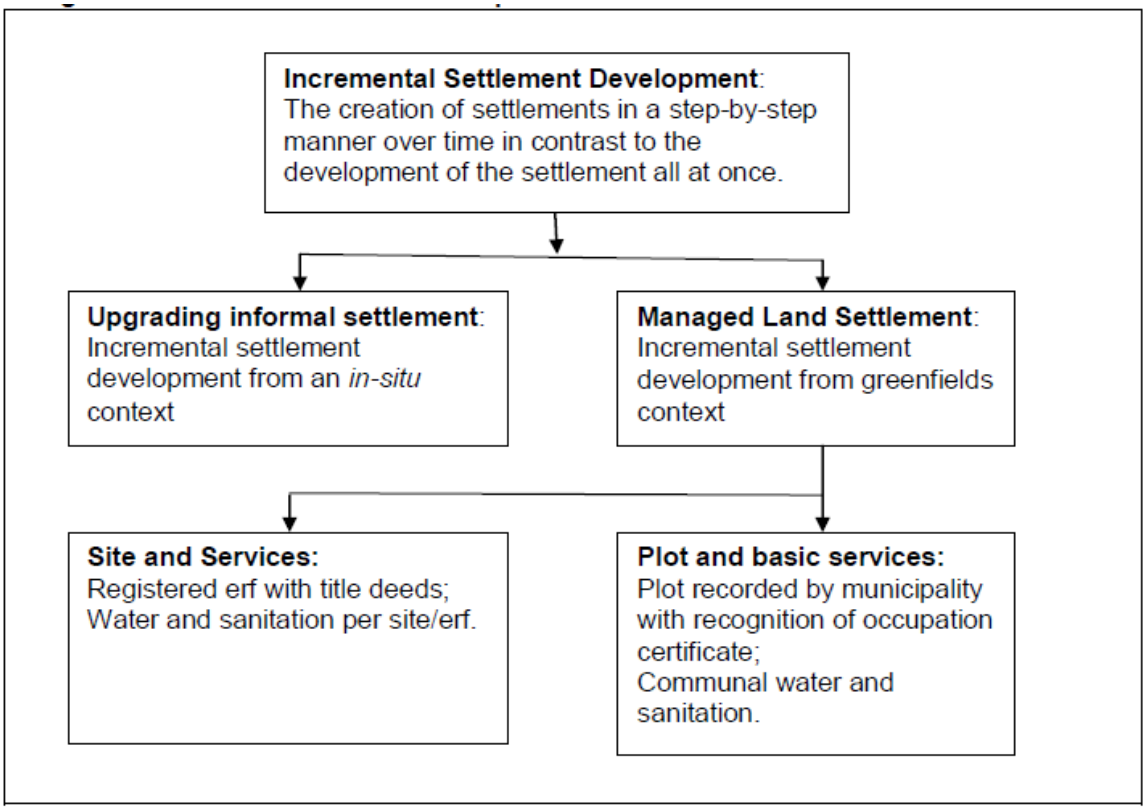


Figure 3.12 Diagram indicating how land settlement can be managed on an incremental basis either by *in situ* upgrading, greenfield projects or sites and services. (Source: Toolkit, 2017: 179)

3.9 The Layout Plan for Bottom Compound

The layout plan required by Annexure 9999 is the mechanism by which 'official recognition' and 'incremental tenure security' is achieved in Johannesburg for settlements that are 'not formally proclaimed as townships'. As it requires structures to be numbered and a register to be opened, the layout plan facilitates the integration of the settlement with the city's land administration and billing systems and enables projects and budgets to be approved (Urban LandMark, 2013: 13). The UISP and Amendment 9999 resulted in a concept layout plan being prepared for Bottom Compound in 2018, providing for 242 BNG site and services stands, each approx. 180m² in extent (shown in Figure 3.13 below). The Draft Upgrading Plan, 2018 and the subsequently revised Settlement Plan, 2021 have been prepared on the basis of Urban Settlements Development Grant (USDG) funding being allocated from the NUSP for the planning and installation of essential services. A short-term budget of R1,883,812.70 was to have been implemented over a 2-year period to provide basic services 'to improve the existing living conditions of people within the settlement' according to their immediate needs (CoJ, 2018b: 6), but has not been spent. This amount made allowance for water and sanitation to be upgraded, with 12 additional precast toilets to have been provided, 3,000m of gravel roads, emergency storm-water management and solid waste removal collection points. Land acquisition costs were not applicable as the property is owned by the City of Johannesburg. A medium-term budget for a higher level of water, sewer and roads connected to the bulk infrastructure would have added an additional R23million to the cost, but excluded electrification by Eskom.

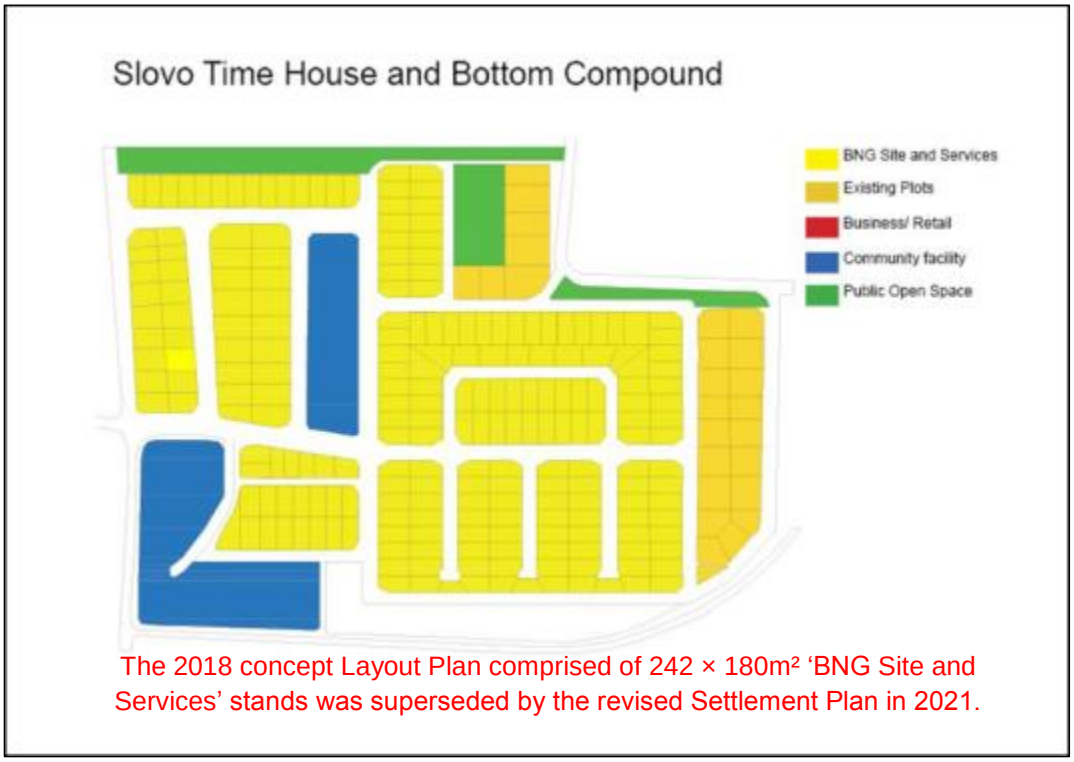


Figure 3.13 Concept layout plan for the Bottom Compound Transitional Residential Settlement Area, October 2018. (Source: City of Johannesburg, 2018b)

No ‘severe physical and environmental constraints (hydrological, topographical, environmental and geotechnical)’ were identified by the Draft Upgrading Plan, 2018 (CoJ, 2018b: 4), although the dolomitic geo-technical conditions would add to the costs of technical specification items such as the dolomite stability investigation and flexible pipe fittings for the services to ensure that water does not leak or pond, for example. The presence of dolomite formations in large strips from Ekurhuleni in the east across the mining belt to the southern and western parts of Soweto and the former Group Areas Act township of Lenasia is noted by Huchzermeyer, *et al* (2014) as affecting several large informal settlements, some of which have resisted attempts at relocation in spite of the dolomite. The dolomitic soil conditions are an example of how building standards for self-help houses will need to be taken into consideration in the Housing Consolidation phase.

In the 2018 plan, the existing compound structure was earmarked for refurbishment as a Social Housing unit, together with other housing typologies of various densities. However, the revised 2021 plan is based on the structure being demolished at a cost of R7million (City of Johannesburg’s Project Manager, interview on 18 August 2021), making way for 164 site and service erven. Although the walls and steel roof purlins of the compound structure are intact, the concrete ring beam above the windows has been severely damaged by water leaking from the roof sheeting, which needs to be replaced, (see Figure 3.14 below). Even though preserving this large structure (which is home to 133 households) could be an option, it is open for debate whether it is worth being renovated as opposed to the current plan to demolish it. The National Heritage Foundation is being consulted to check whether it has historical significance (City of Johannesburg’s Project Manager, interview on 18 August 2021).



Figure 3.14 The former mine hostel building at Bottom Compound has been declared structurally unsound but is still occupied. (Author's photograph, 18 August 2021)

The Draft Upgrading Plan (CoJ,2018b) for Bottom Compound made provision for 4-storey BNG walk-ups to be constructed, but was subsequently revised in 2021 to the current layout comprised of 164 residential erven and has been adopted by the community (see Figure 3.15 below). It is important to note that the layout was amended after consultation with the community who preferred larger 250m² erven rather than the 180m² stands previously contemplated. The revised plan has been conceived as an Enhanced People's Housing Process (EPHP) project with individual title deeds (City of Johannesburg's Project Manager, interview on 18 August 2021). The Toolkit (2017: 66, 67) advises that the 'demand-led [PHP model]', whereby the community actively participates in all aspects of the project, is well-suited to the upgrading of informal settlements and recommends 'a blended PHP-UISP approach [as the] normal and preferred method' for upgrading category B1 settlements.



Figure 3.15 Revised Settlement Plan: Bottom Compound Transitional Residential Settlement Area, April 2021. (Source: City of Johannesburg, 2021b)

The layout plan is noted by Harrison (2009) as not only facilitating the provision of land and services, but also demarcating occupation (Harrison, 2009). The importance of the layout plan to the Bottom Compound community as a way of managing the settlement, allocating stands and preventing the influx of new residents to the area can be seen in the photograph in Figure 3.16 below, which shows the layout plan and aerial photograph for Bottom Compound attached to the wall of the community leader's room. From an informal conversation with the same leader during my visit to the settlement in August 2021, it was mentioned that unscrupulous and criminal elements pose a serious challenge to consistent, reliable and long-serving leadership in the community and threaten its orderly functioning, with the community having to put a stop to unwanted activities, specifically to prevent more shacks from being erected on the perimeter. The role of leaders in safeguarding and managing the upgrading process is thus hugely important.

A similar point is made by Harrison (2009, un-paginated) in observing that there is no one single formula for 'formalisation and upgrading', noting that '[s]ome settlements are safe and well located, but others are marginal and hazardous, some are well established and organised while others are socially fractious'. My impression of Bottom Compound is one of a closely-knit community determined to improve their living conditions through collaboration and participation and using the means at their disposal, for which the layout plan is central.



Figure 3.16 The revised Settlement Plan has been attached to the wall of the community leader's room in Bottom Compound. (Author's photograph, 18 August 2021)

3.10 'Orderly urbanisation' at Bottom Compound

The policy of 'orderly urbanisation' is explained by Harrison (1992: 18) as planning for urban growth in an 'ordered and directed [way]' and can be understood as a pragmatic response to the pressing need to manage informal settlements. Outlined in a 1985 report by the President's Council *'An Urbanisation Strategy for the Republic of South Africa'*, the policy took into account that although the process of urbanisation 'could not be stopped', it could be 'guided and regulated' in a way that allowed state resources to be distributed more widely than by formal public housing with its emphasis on high standards (*ibid*: 17). In a similar way that the NUSP, UISP and Toolkit categorise settlements according to their suitability for upgrading, the President's Council report made the distinction between 'undesirable informal settlement', which occurs in an unplanned or disordered way and 'desirable informal settlement' on land identified as suitable for occupation (*ibid*: 18). Recognition was also given to the reality that tearing down informal settlements simply shifted the problem somewhere else (*ibid*).

Orderly development in the late 1980s and early 1990s was given support by the call from the Urban Foundation for informal housing to be embraced as a clear delivery strategy, where possible 'within an officially sanctioned site-and-service scheme', although *de facto* 'spontaneous' informal settlement was seen as inevitable because conventional housing was unable to meet the demand (*ibid*: 19). Towards the end of the apartheid era almost 100 'officially sanctioned site-and-service schemes' had been developed for approx. one million people at places like Orange Farm and Ivory Park (*ibid*: 14), which showed a reconciled and accommodating approach to informal settlements on the part of the previous government. Against this historical background,

the new layout for Bottom Compound can be seen as a contemporary example of the enduring need for 'orderly development', which is a principle embodied in current policy. Even though Bottom Compound is not typical of most informal settlements in that people mainly occupy rooms in the old building as opposed to living in shacks, it is still very important to keep disruption to a minimum and in consultation with the community to allow for temporary rehousing in the upgrading plan.

The perspective from the past also highlights the argument made by Bernstein (1989, cited in Harrison, 1992: 18) that there are 'three possible approaches by government to informal settlement' – viz. '*coercive* (shack demolition, harassment, etc.); *laissez faire* in which development is allowed to take place without government intervention; and *supportive*, in which informal settlements are upgraded where appropriate and site-and-services schemes are promoted'. However, as Harrison (1992: 18) notes, the apartheid government's approach was not always clear, with the 'distinction between squatting and "desirable" and "undesirable" informal settlements' varying according to 'developments in the wider 'political arena'. Seventeen years later a similar observation is made by Huchzermeyer (2006: un-paginated) who discerns that policies like the UISP are not being implemented due to a 'discrepancy between progressive national policy and technocratic local government practice in Gauteng Province'. This is, however, not the case at Bottom Compound where a new layout plan was needed (see Figure 3.17).

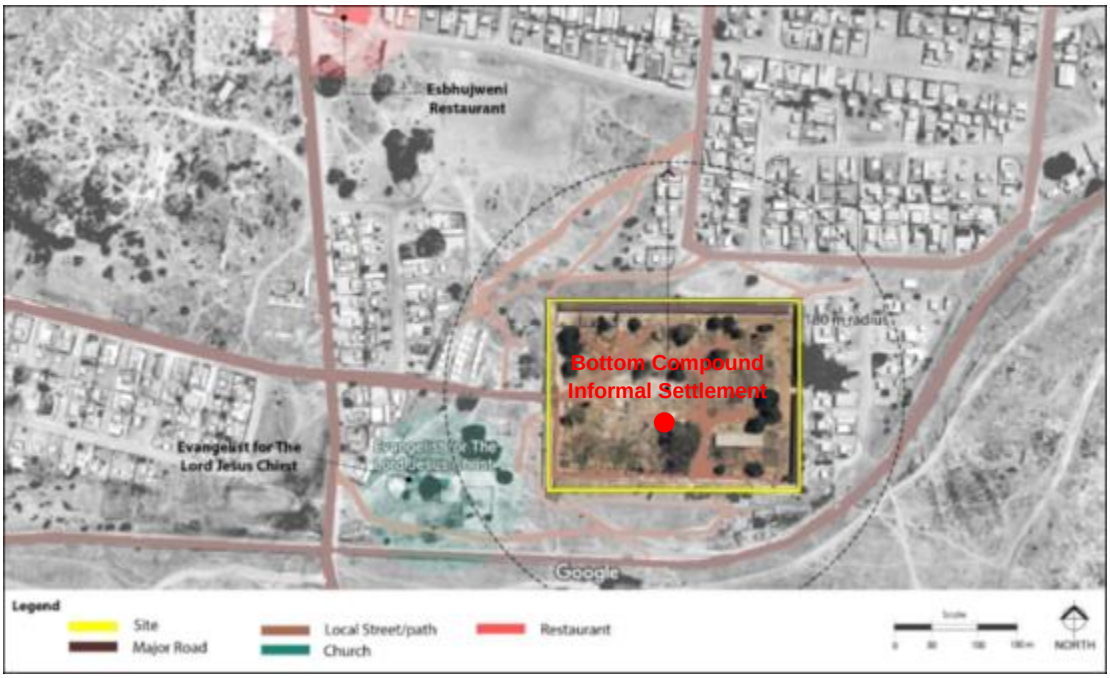


Figure 3.17 Movement patterns around the Bottom Compound complex. (Source: City of Johannesburg, 2018)

The point that 'informal settlements occupy contested spaces in our cities' is made by Huchzermeyer (2006, un-paginated) who questions 'the continued fixation with orderly and segregated development in South African cities' noting that the imperatives of the property market, global competitiveness and economic investment take precedence over the Constitutional rights to housing for the very poor and vulnerable. How to deal

with informal land settlement, land invasions and informality against the backdrop of '[the] struggle for space in the city' and the tension with the formal property market is the difficult question to resolve, especially given that not all levels of government are unanimous in adopting the upgrading approach (*ibid*).

The absence of city-wide planning for less-formal occupation in better-located areas suggests that well-ordered housing development by means of the rapid land release programme, site and service, the UISP and self-help has only limited acceptance, with conventional projects continuing to be located on peripheral land. Intolerance for informal occupation may well also highlight a critical shortage of specially demarcated, non-fringe areas where less-formal settlements could legally gain a foothold, without the threat of being evicted or relocated. Rather than being put forward as a cohesive strategy to make the occupation of non-marginal land possible for lower-income people, orderly development therefore seems to be restricted to marginal areas and is carried-out in terms of a disconnected approach and is limited to local areas, rather than at a metropolitan scale.

The commitment to upgrading at Bottom Compound demonstrates that regularisation makes a substantial difference in improving peoples' lives and achieving orderly development, even though on a relatively small scale (see Figure 3.18).

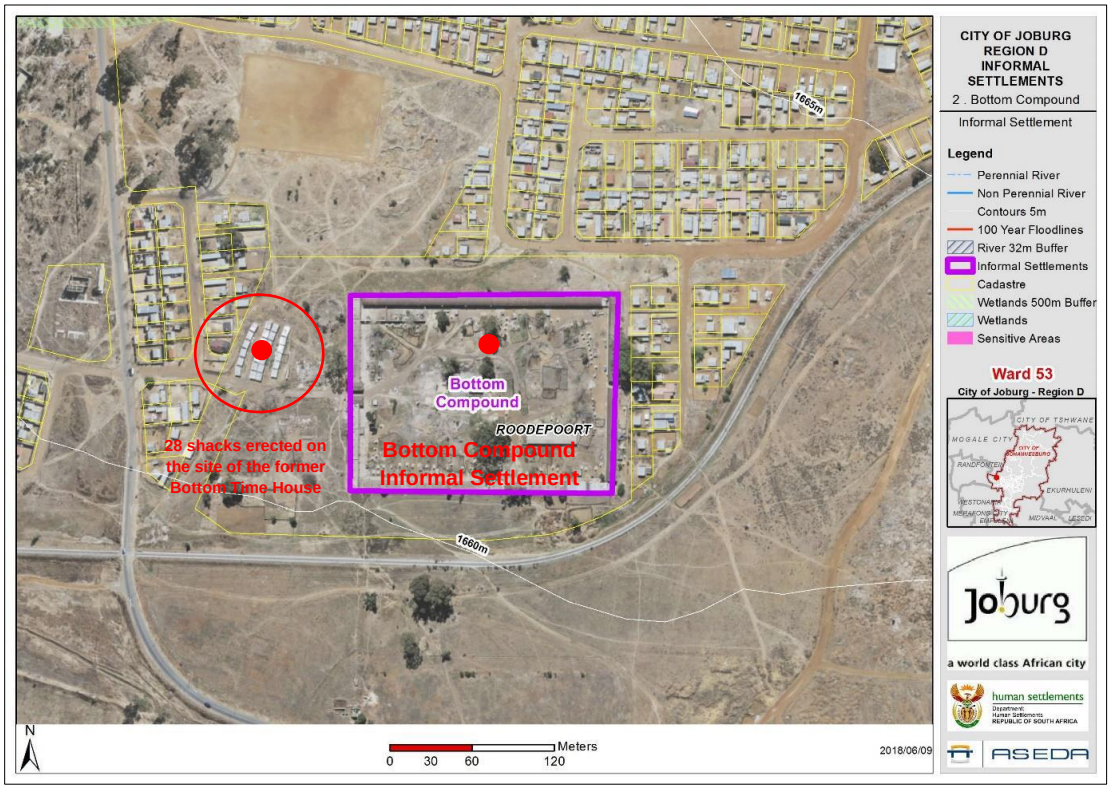


Figure 3.18 Environmental Map: Draft Upgrading Plan, 2018. (Source: City of Johannesburg, 2018)

While town planners and engineers by nature want to order the structure of settlements, Huchzermeyer (2006: un-paginated) questions the preoccupation with orderly development, noting that post-apartheid town planning has failed to bring about a more

equal, less segregated urban environment. She makes the observation that in the course of upgrading, 'subsequent formal development' tends to replace 'organic or people-led ('informal') processes' and therefore advocates 'a deeper reform of urban planning beyond orderly development' to bring about more equitable changes to the segregated formation of the 'apartheid city'. The question of whether acceptance of an informal paradigm and less formal standards could reduce social exclusion and geographical separation of informal settlements is central to this research.

According to Huchzermeyer (2006: un-paginated), informal land occupations are for the most part driven by basic human needs (the *use value* put forward by Turner as opposed to the *exchange value* of Burgess), but predictably come into conflict with the formal property market, which is underpinned by the requirement for orderliness and the perception that informal settlements are a threat to values. Yet in spite of being at odds with 'market-driven [development]', the occupancy of vacant parcels of land makes productive use of available resources and helps to reduce spatial inequality and marginalisation of the poor (*ibid*). Yet, informal occupation of better-located in-fill land is not supported. The author cites the Brazilian case of community advocacy groups having fought for extensive amendments to the Constitution to support 'informal land occupation' and advises that '[B]razilian cities are visibly shaped by informal processes driven by the poor, as much as they are by the market' (*ibid*). The regularisation underway at Bottom Compound can be understood as finding a middle ground between orderly development and overt informality, which can be seen in Figure 3.19 below.



Figure 3.19 The site of the former Bottom Time House where 28 shacks have been erected. (Author's photograph, 18 August 2021)

3.11 To fomalise or not to formalise? Grappling with informal settlements (and urban development)

Harrison's (1992: 15) account of the historical development of informal settlements in South Africa records that in the early 1950s the Johannesburg City Council '[had come to accept] the futility of attempts to eradicate informal settlement' and adopted a policy of 'controlled squatting' in response to the massive housing shortage resulting from many black people moving to the city in the WW2 period. This approach resulted in South Africa's first large-scale site and service project being built in Moroka, Soweto for 50,000 people 'within an officially sanctioned informal settlement' (see Figure 3.20 below). However he also shows that the intention of tackling problems of informal settlements and urban landlessness by policies of 'orderly urbanisation' had been overtaken by the construction of racially segregated townships and the forced removal and displacement of people from 'shanty towns and inner-city slums' (*ibid*: 16). 'Orderly urbanisation' is thus an objective which has carried on in the post-apartheid era as a political and economic imperative for government and municipalities competing for investment.



Figure 3.20 South Africa's first sites and services scheme at Moroka Emergency Camp, c. 1947. The settlement was planned as temporary accommodation, but developed into a permanent residential area. (Aviation photography by Margaret Bourke-White.) (Source: Alex Lichtenstein, 2013)

While the steps of 'how' to implement upgrading and sites and services are outlined in the UISP and Toolkit, for example, it is not certain whether there is widespread buy-in

for the approach? Huchzermeyer (2006, un-paginated) writes that several informal settlement communities have been left with no alternative but to approach the courts to win the right to be upgraded *in situ* rather than be relocated and that a 'reskilling or mindset change [is needed]' on the part of municipalities to roll-out the UISP. She notes a 'discrepancy between progressive national policy and technocratic local government practice' as a stumbling block to acceptance of less formal housing, which is seen as a threat to property values and attracting investment for the city. Importantly, the author notes that 'massive urban land release and subsidised housing delivery' is needed to curb spatial inequality and exclusion of the poor from the urban land market and to prevent further land invasions arising out of the 'desperate need for accommodation' (*ibid*, un-paginated).

3.12 Conclusion

The reason for concluding the context chapter on an historical note is to explain how successive governments have grappled with the question of informal settlements and the supply of land for housing. While South Africa's housing subsidy programme has reinvented itself in terms of comprehensive legislation and progressive policies that support *in situ* upgrading, regularisation and PHP, as can be seen at Bottom Compound (shown in Figure 3.21 below), it has also been subject to criticism for perpetuating apartheid spatial planning. Yet, although several aspects of the RDP housing model can be criticised on the one hand, mainly the remoteness of their locations, it is also reasonable to concede that the conventional greenfield, project-linked approach has made it feasible in terms of economies of scale for large numbers of services and housing to be delivered.



Figure 3.21 Bottom Compound informal settlement. (Author's photograph, 18 August 2021)

The accumulation of low-income housing and informal settlements close to peripheral townships and in backyard shacks, particularly to the west of Soweto (where Bottom Compound is situated), Lenasia and Orange Farm in the south, Ivory Park, Alexandra and Diepsloot to the north and of course in the overcrowded inner city, indicates the main areas to be targeted in Johannesburg for intensive intervention. These agglomerations of informal settlement point to the importance of *in situ* upgrading, but also for additional land to be planned for less formal, self-help housing by way of sites and services.

CHAPTER 4: ANALYSIS OF THE FINDINGS FROM THE FIELDWORK

4.1 Introduction

This chapter evaluates the answers to questions put to community leaders from Bottom Compound informal settlement and members of staff from the National Department of Human Settlements (DoHS), Gauteng Provincial Department of Human Settlements (GDoHS) and the City of Johannesburg (CoJ). The interviews were structured around obtaining anonymous responses to the research questions. In accordance with the qualitative research design, a pragmatic or practical philosophy based on reasoning so as to understand and decode relevant factors has been followed in assessing the responses.

Three community leaders from Bottom Compound were interviewed. However, because of the need to translate the questions, the interview was conducted with all three community members at the same time. Their responses were consistent, especially around the need for adequate housing and safety.

Separate interviews were conducted with two officials from the National Department of Human Settlements, one from the Gauteng Department of Human Settlements and one from the City of Johannesburg. Because the community members and the officials responded to the topic from different viewpoints viz. as the recipients of government policy on the one hand and the formulators and implementers on the other, the analysis has been done separately for each group of respondents. The evaluation is structured around the themes coming out of the interviews.

4.2 Analysis of the interview with Community Leaders at Bottom Compound

4.2.1 Background to the interview and the respondents

The person in charge at Bottom Compound nominated two additional community members to participate in the interview with him. My understanding of this is not only for translation purposes, but because he relied on the other two leaders to answer questions related to the settlement dependably from many years of living there and working with the municipality. Recent shootings and the dangers of being a leader in an informal settlement under violent threat from ethnically aligned groups trying to occupy the area calls for common purpose and unanimity, not to mention courage. It was very sad to learn from the two other community members that the community leader had tragically lost three of his children, together with two other children, in a fire that occurred in 2015 in the same room where the interview was conducted (Community Leaders, interview 1 October 2021). This heartbreaking occurrence underlines the urgent need for upgrading, especially as far as illegal connections and electrical safety is concerned.



Figure 4.1 Bottom Compound on a rainy morning. (Author's photograph, 1 October 2021)

The photograph above (Figure 4.1) was taken after the first summer rain and the residents had to deal with leaking roofs and water coming into their rooms. The poor conditions highlight the urgent need for the Layout Plan, 2021 to be fast-tracked.

4.2.2 The affordability of self-help for the very poor and what should be included in a sites and services package?

As expected, the interviews have uncovered several new questions. For example, when asked their opinion of the government changing the approach from fully subsidised housing to one of sites and services excluding a top-structure, all three community members were resolute that this is a 'bad thing'. They noted that unemployed people and the elderly won't be able to build a house, although it might be possible for people earning money or with assistance from family, or by putting down 'lay-byes' on materials (Community Leaders, interview 1 October 2021). This fundamental consideration brings into question whether self-help is within the means of pensioners, the very poor and for people not earning an income.

The community members were clear that running water, water-borne sewerage, toilets (see Figure 4.2 below) and electricity should be provided and they reiterated that although the PHP (self-help) could be an option, they would prefer 2-bedroom houses with an internal bathroom to be constructed (even larger than the current 40m² BNG houses).



Figure 4.2 Aging temporary infrastructure at Bottom Compound is inadequate for the community. (Author's photograph, 1 October 2021)

As noted in the Context Chapter, the stand size of 250m² was considered large enough. When asked if the serviced sites should be fully subsidised i.e. free, the respondents indicated that for those people not working or without an income then it should be. However, they indicated that they would be prepared to invest 'some of their own money' in the serviced stand (*ibid*). While more research is needed, this is interesting because the approach in other countries has been to fully recover the cost of the serviced stand from the recipient, but has been shown to be unaffordable for the very poor (Choguill, 2007). The interview with the community members established that building materials would be the biggest cost, especially for the elderly and people with very limited incomes who would be unable to find the money to build a house. Although the construction of a top-structure is likely to be unaffordable, the community members, nevertheless, accepted that a serviced stand from government would be a good start (Community Leaders, interview 1 October 2021).

4.2.3 Subsidy criteria and the question of non-qualifiers

While the Bottom Compound respondents were clear that subsidy approval criteria should not be relaxed to include non-South Africans, they stated that it might be reasonable to ease the regulations '[for non-qualifying] people earning very little', but that the subsidy could only be paid out once to an individual, which is understandable given the large number of people to be assisted, and as the respondents at Bottom Compound have not yet benefitted (Community Leaders, interview 1 October 2021).

However, it is not in accordance with the former Minister of Human Settlement's announcement in November 2020 that the subsidy qualification criteria would be reviewed to accommodate non-qualifying people in terms of a 'rapid land release programme' and that previous beneficiaries could be re-assisted (Eglin, 2020: un-paginated). The possibility that non-qualifiers could be assisted is also outlined in a media statement by the City of Johannesburg in March 2021 wherein it states that the provision of serviced stands '[could be] an option for non-qualifiers … [or] … for those that have fallen in the gap due to various circumstances' (CoJ, 2021c: un-paginated). Further clarity on whether non-qualifiers will be assisted is therefore a critical factor to be resolved in the approach.

4.2.4 Trust in the layout plan and the City of Johannesburg to reduce the backlog

When asked how many sites are needed at Bottom Compound, the community members referred to the Layout Plan, 2021, which provides for 164 stands, but noted that additional stands would not go to waste, indicating that the requirement for stands is likely to exceed what can be planned for a given site. They also expressed confidence in the City of Johannesburg as the implementing agency most capable of delivering the 164 stands (Community Leaders, interview 1 October 2021). In response to the question of w*hether sites and services could reduce the backlog*, the interviewees replied that it should 'create more housing opportunities' and that it could bring about 'more order … and help in upgrading' (*ibid*). Although coming from only three respondents, this answer can be understood as support for the approach and the need for orderly development, which the interviewees considered not a bad thing for the community.

4.2.5 Where should land be identified, what is needed by the community and acceptability of the approach?

As to where land should be identified, the answer was clear: vacant land in Soweto, Slovoville and Orange Farm and to find new land on a large-scale. The respondents were quite sure that there is an urgent need for a satellite police station, which is due to the violence and criminal activity mentioned earlier. A shopping centre, a library, a school, taxi-ranks, parks and a bus stop are also needed, as well as a soccer field, which is included on the layout plan.

As to the acceptability of the sites and services approach (without a top-structure), the community members responded that it would be acceptable. Although they would prefer a house to be included, serviced sites would be a 'good beginning' (*ibid*). This willingness to settle for a serviced stand only is understandable when one considers the very poor conditions (see Figures 4.3 and 4.4 below). As discussed in the Context Chapter, extensive consultation has taken place with the Bottom Compound community and they have endorsed the layout plan.



Figure 4.3 Rain water from a leaking roof at Bottom Compound. (Author's photograph, 1 October 2021)



Figure 4.4 Buckets are used to collect rain water from a leaking roof at Bottom Compound. (Author's photograph, 1 October 2021)

4.2.6 Further assistance to build a top-structure and confirming the advantages of the approach

The respondents trusted that '[they] would be given further assistance … [and] … [believed] … [they] will get assistance', signifying faith in government to help them (Community Leaders, interview 1 October 2021). Building materials are the main requirement, with the respondents noting that labour '[could] be sourced … [or] … they could build themselves' (*ibid*). The interviewees added that 'high standards and safety are critical', noting that the starter-pack should include 'water, tap, toilet, electricity and a slab'. In response to what minimum building standards are necessary, the answer was that specifications should ensure 'structural stability, safety and shelter from the weather' (*ibid*). Figure 4.5 below shows the impermanent nature of the shacks erected on the old Bottom Time House site.



Figure 4.5 The 28 shacks erected on the site of the old Bottom Time House. (Author's photograph, 1 October 2021)

For the residents of Bottom Compound, the research has investigated what could be possible for them, but is still only an aspiration, a dream really. The reality came through from the general discussion. When asked to provide some general comments concerning sites and services, the respondents noted several important elements:

> ‘The area … must be clean … not a dumping site … safe (from criminals) … supplied with adequate services … [and] … that delivery should be speeded-up’ (*ibid*).

The extreme poverty and low levels of affordability at Bottom Compound were not taken into account by the community members in their enthusiasm for upgrading, particularly if unachievable building standards were to be applied. Although savings and technical support were considered as possible options, the respondents were not sure how they would receive assistance if needed.

As expected, the usefulness of self-help was substantiated by the interview. Yet, while the answers point towards support for sites and services, the low level of affordability is concerning.

4.3 Analysis of the interviews with officials from the National Department of Human Settlements (DoHS), the Gauteng Department of Human Settlements (GDoHS) and the City of Johannesburg (CoJ)

4.3.1 Sites and services is a work in progress: Reasons behind government’s change in approach and incorporating components of the PHP and the UISP into the strategy

When asked why government was considering a revised approach, Official 1 from the DoHS responded that ‘[since 2017/2018] … the fiscus has been under pressure’, hence the announcement by former Minister Sisulu in 2020 that government would be moving away from building top-structures towards ‘[the provision of] … serviced sites’ (Official 1, interview 5 October 2021). The change goes to the heart of the width versus depth dilemma with ‘more people … [to be assisted with fewer resources]’. Official 1 commented that ‘[by meeting] … people halfway … [the beneficiaries] … treat the subsidy with more respect’ (*ibid*), which is a reference to subsidy houses being sold for a fraction of their value by cash-strapped recipients.

Official 2 from the DoHS had a different take on the reason for the change in approach, advising that ‘the Department is moving to ensure … [the delivery of serviced sites] … … by means of the PHP (self-build) mechanism’, noting that ‘the delivery rate is slow (due to Covid-19), informal settlements are exploding … [and] … more people will be assisted’ (Official 2, interview 7 October 2021). Given the budget constraints, one can understand the need ‘to divide the cake between the 9 provinces’, with Gauteng and the Western Cape receiving the largest share of funding in the 2021/2022 financial year (*ibid*). Official 1 further advised that R7.8 billion has been ring-fenced in the 2021/2022 financial year for the new ‘Informal Settlement Partnership Grants’ to be allocated to the provinces and metros for the planning and servicing of sites (Official 1, interview 5 October 2021), which hopefully shows government’s renewed focus on the upgrading of informal settlements. The funding targets the ‘cost of land, water and sewers’ (*ibid*).

As ‘more funding [would be] available’, Official 3 from the Gauteng Department of Human Settlements (GDoHS) similarly noted that ‘more beneficiaries would be assisted

… [and] … a high level of engineering services [could be provided]' (Official 3, interview 26 October 2021). He made the point that with serviced sites, beneficiaries can 'build themselves … when they are ready' (*ibid*), which reinforces the underlying theory of 'self-managed construction' (Bredenoord and van Lindert, 2010: 279).

Serviced sites were thus considered more effective in accommodating the influx of people to the city, which according to Official 4 from the City of Johannesburg increases by approximately 200,000 people annually (Official 4, interview 12 November 2021). As 'people have nowhere to stay … the first place they look is in informal settlements', which adds to the backlog (*ibid*).

While Official 1 advised that the Department of Human Settlements is 'working on a draft policy' (Official 1, interview 5 October 2021), Official 2 said that although there is 'no specific policy yet, each programme … [in the Housing Code] … outlines the standards for a serviced site' (Official 2, interview 7 October 2021). The breakdown of costs for an A Grade 243m² serviced site (considered by the DoHS as most cost-effective), is outlined in the *Adjustment of the 2018/2019 Housing Subsidy Quantum and Grant Levels of the National Human Settlement Programmes* document as follows:

Cost of Water	R4140.11;
Cost of Sewer	R7210.41;
Cost of Roads	R23570.60; and
Cost of Storm-Water	R4153.81.
Sub-Total	**R39074.94**
Plus Indicative Land Cost	R6000.00
Plus Indirect Costs	R6910.32
Total	**R51985.26**

(DoHS, 2017: 2, Annexures B, C and I).

Costing less than a third of the full package (comprised of an A-Grade serviced site, indicative land cost, indirect costs and a 40m² BNG house in the total amount of R168, 853.26 / Unit), it can be seen from the above breakdown that the provision of a serviced site for R51, 985.26 / Stand will make it possible for more households to be assisted by excluding the top-structure.

The respondents were unanimous that aspects of the PHP and UISP will be incorporated into the sites and services approach. Official 1 confirmed that the new Informal Settlement Partnership Grant (ISPG) is specifically intended for provinces and metros to finance 'interim and permanent engineering services' as provided for by the UISP, adding that 'social compacts' will determine which components are to be included (Official 1, interview 5 October 2021). Official 2 advised that the 'UISP will be updated' to include aspects of self-build (PHP) for the housing consolidation phase, which could include building materials and housing support centres for the building of houses. These responses signify a resurgence of PHP as a delivery model.

4.3.2 Appropriate building densities, house typologies and stand sizes for sites and services

Official 1 was clear that densification is necessary '[as] we are running out of land', but because of complexities with multi-level construction, did not foresee walk-ups featuring prominently (Official 1, interview 5 October 2021). Although acknowledging that '[constructing] a second-level becomes more complicated', Official 2 noted that double-storey construction enables extended families to be accommodated (Official 2, interview 7 October 2021).

With regard to stand sizes, Official 1 and Official 2 preferred free-standing 250m² sites, which indicates limited departure from current norms. However, Official 3 advised that the Ekurhuleni Metropolitan Municipality had adopted smaller stands of between 120m² and 150m² (Official 3, interview 26 October 2021). On this point, Gulyani (2016) shows that in Mumbai and Chennai a range of stands from as small as 21m² up to 223m² were planned to accommodate people from different income groups and have been built in stages on several levels (see Figure 4.6 below).



Figure 4.6 Incremental housing in Mumbai showing densification of one-room houses on small stands (right) into double-storey houses (left). (Photography by Sumila Gulyani) (Source: World Bank)



Figure 4.7 Examples of incremental concrete frame construction adding additional floors (*'panosikoma'*) to self-built houses on the periphery of Athens. (Source: Dimitris Philippides, 1984) (Found in Magouliotis, N., 2018: 5)

The examples from India and Greece (see Figure 4.6. and Figure 4.7 above) show that densification and multi-level buildings can be achieved with sites and services but are more typical of the customary building designs and standards for those countries.

4.3.3 Who will be targeted in the new approach?

Official 1 advised that qualifying households in Category B1 informal settlements and inhabitants of rural settlements will primarily be targeted by the new approach (Official 1, interview 5 October 2021). In support of the upgrading approach, the UISP provides for subsidy eligibility criteria to be relaxed so that non-qualifying or marginal applicants can benefit. In this regard, the document states that '[p]ersons qualifying for assistance under the programme may include persons who do not comply with the qualification criteria applicable to the Housing Subsidy Scheme' (DoHS, 2009: 28).

The easing of subsidy approval criteria therefore enables 'an area and/or community wide focus … [and minimises] … disruption of existing fragile community networks and support structures' (*ibid*: 13). In this way the UISP not only provides clarity on how non-qualifiers can be assisted, but also enables more people to be included, which '[i]s of the utmost importance to ensure locally appropriate solutions' (*ibid*: 13).

4.3.4 How many sites are to be delivered in the medium term and will the backlog be reduced?

Official 2 advised that 300,000 sites are to be serviced in the Medium Term Expenditure Framework (MTEF) period ending in 2024 (Official 2, interview 7 October 2021). The target equates to 100,000 sites per year over a three year period and signifies the priority being given to basic services. One has to wonder if so many stands can in fact be serviced or if this is a provisional number? The Development Bank of South Africa (DBSA) cautions that municipalities do not have the required resources to deliver basic services and that due to a lack of planning and infrastructure 'service delivery is one of

the biggest challenges South Africa faces' (DBSA, 2022: un-paginated). It is therefore critical that municipalities are assisted by all means to deliver services.

National Treasury's Budget Review 2021 advises that the amount of R24.8 billion has been allocated to provinces and municipalities to upgrade and secure tenure for 900 informal settlements in the same period using the new Informal Settlement Partnership Grants introduced in the 2021/2022 budget. In alignment with 'evolving policy objectives', this funding is intended for 'communities and community-based organisations … [to] … lead the planning and design of upgrades' (National Treasury, 2021: 64, 75). According to Official 1, Gauteng Province and the 3 major metros in the province are expected to receive the majority of funding (Official 1, interview 5 October 2021).

In answer to *whether the backlog will be reduced*, Official 1 said that the revised approach is intended 'to help more people', but at the same time warned that the 'cost of building a house remains a problem' and recommended that the approach must take into account affordability levels in determining 'appropriate standards … [and] … qualifying criteria [for further assistance]' (Official 1, interview 5 October 2021). Official 2 said she didn't think the backlog would be significantly reduced and commented that informal settlements will persist as long as undocumented foreigners continue to enter the country. She also noted the slow pace of delivery and the inability of provinces and metros to spend allocated funding as limiting factors to reducing the backlog (Official 2, interview 7 October 2021). The problems of 'underspending', 'non-compliance' and 'mismanagement of funds' are similarly documented in the Budget Review 2021, which records that 'funds are … reallocated to municipalities that have fast-tracked projects and shown an ability to spend their allocations' (National Treasury, 2021: 75).

Official 3 was more optimistic, stating that sites and services is a 'mechanism to eradicate the backlog' (Official 3, interview 26 October 2021). Referring to a backlog in Johannesburg of approximately 300,000 units, Official 4 advised that because '[obtaining] land is a problem' it is difficult to forecast to what extent the backlog will be reduced (Official 4, interview 12 November 2021).

4.3.5 Identifying suitable land and security of tenure

The Housing Development Agency (HDA), provinces and metros were mentioned by the respondents as the authorities tasked with identifying and rezoning suitable land, with Official 1 noting that Category B1 informal settlements would be prioritised (Official 1, interview 5 October 2021). He added that the Informal Settlement Partnership Grant is geared towards acquiring and servicing land for communities (*ibid*). In terms of location, Official 2 emphasised that land needs to be identified 'closer to major towns and economic activities' (Official 2, interview 7 October 2021).

In spite of all informal settlements needing to be assessed for possible upgrading in terms of the UISP, greenfield development was preferred by the respondents because of economies of scale, access to bulk infrastructure and the technical difficulties of *in situ* upgrading. Speaking from experience, Official 4 noted that 're-blocking is disruptive … [and] … it is not easy to upgrade informal settlements … it is easier to provide site

and service' (Official 4, interview 12 November 2021). Official 4 also advised that the City of Johannesburg is in the process of procuring greenfield sites in Midrand (Rabie Ridge) and Vlakfontein (Lenasia) for sites and services projects. However, he noted that legal difficulties with land expropriation have resulted in the process ending-up in court (*ibid*). As could have been predicted from the outset, the question of land for sites and services has emerged as probably the most critical factor to be resolved.

As regards secure tenure, the interviewees advised that full ownership with title deeds is the preferred objective, with Official 1 expressing concern that building should not proceed without secure rights being in place. He also noted that more stringent regulations are needed to prevent sites from being sold randomly (Official 1, interview 5 October 2021). Official 2 made reference to traditional leaders giving permission to occupy in rural areas and political, social or legal recognition as improving tenure security in informal settlements (Official 2, interview 7 October 2021). Royston (2012: 2) explains that 'locally administered tenure' is a way for the municipality to work with the community to record and administer rights to occupation in the interim period while the formal township establishment and opening of the township register processes are being undertaken.

4.3.6 Difficulties in providing infrastructure, transport facilities and social & economic amenities on privately-owned land

In response to whether social facilities will be provided, Official 1 advised that it is less problematic for amenities to be established on state-owned land, noting that legal complications on privately-owned land can obstruct the process (Official 1, interview 5 October 2021). Widespread lack of delivery, however, shows that even on state/municipal-owned land, the absence of planning causes a shortage of infrastructure, which contributes to poor living conditions.

Referring to L&J informal settlement in Olifantsfontein where the private-owner does not want communal services to be installed, Official 1 informed me that the Ekurhuleni Metropolitan Municipality (EMM) has only been able to supply chemical toilets and Jo-Jo tanks for water (*ibid*). Investigation reveals that residents of L&J barricaded the R21 highway in 2017 to draw attention to the shortage of adequate services and have had several violent confrontations with metro police trying to demolish shacks (see Figure 4.8 below).



Figure 4.8 Residents of L&J informal settlement in a standoff with the Ekurhuleni Metro Police over basic services and the demolition of shacks. (Photograph by Gosebo Mathope) (Source: *The Citizen*, 8 May 2017)

According to Mathope's (2017: un-paginated) article in *The Citizen*, the L&J informal settlement came about in 1984 when the owner allowed some of his employees to erect shacks on his land, which 'mushroomed into 3,000 shacks and an estimated 6,000 residents'. The situation was still unresolved 34 years later and draws attention to the legal complexities of informal settlements located on privately-owned land. Writing in the *Midrand Reporter*, Dube (2017: un-paginated) reports that the EMM was unable to buy or expropriate the land for the residents to build houses and asks whether 'the government [should] spend millions to buy private land for settlers or should [they] allocate land somewhere else?' The L&J situation also raises the question of expropriation without compensation currently being considered.

4.3.7 Consultation with political parties, community leaders and the public: Will the sites and services approach be accepted?

Responding to *whether the new approach will be accepted*, Official 1 advised that three percent of the 2021/2022 budget has been allowed for 'social compacts' to be concluded with communities for the purpose of explaining the new approach. He acknowledged that it is a concern 'whether the public will take this well' adding that 'circumstances have changed', which is a reference to the strain on government's finances (Official 1, interview 5 October 2021).

Official 2 observed that although 'beneficiaries compare what they have received', changes in house sizes, specifications and ways of implementing projects have generally been accepted. She also made the point that because 'people are so desperate' they are likely to accept any help, as they have no other way of escaping from their difficult circumstances (Official 2, interview 7 October 2021). Because 'people are aware of the financial challenges', Official 3 was confident that 'it will be easy to motivate [the change in approach]' (Official 3, interview 26 October 2021). This view

was shared by Official 4 who was of the opinion that through 'extensive engagement with communities … [and] … social compacts … people will be happy to get land and build themselves' (Official 4, interview 12 November 2021).

While Official 1 restated that 'it is not going to be easy [to make communities aware of the programme]', Official 2 advised that the revised approach would be discussed extensively at MINMEC, also noting that 'Radio BNG' can be used to communicate and market different programmes to communities (Official 1, interview 5 October 2021; Official 2, interview 7 October 2021).

4.3.8 Ongoing support for constructing the house

Whether there will be ongoing support for the house to be constructed is unclear. The answers to this fundamental question differed between the respondents, with Official 1 expressing concern that people may not be able to build a house without financial and technical support (Official 1, interview 5 October 2021). Affordability is directly linked to the seemingly intractable requirement on the part of officials for unrealistically high building standards, which in my view represents the biggest challenge to incremental housing. The standards are most likely to be determined by what individual households can afford.

Although the UISP makes allowance for the establishment of 'Housing Support Centres to support individual households and groups' through 'training … capacity building … [and] … the management of building materials' (DoHS, 2009: 31), Adebayo's (2008) study of self-help projects cited by the Department of Planning, Monitoring and Evaluation in The Presidency (DPME, 2015) found that officials questioned the viability of housing support centres. Adebayo's (2008) research shows that in spite of being 'well-intended', 'the financial implications of maintaining the service were particularly considered an obstacle', especially on smaller projects (DPME, 2015: 80).

This research reveals differences in understanding by officials regarding support for the Housing Consolidation Phase, with Official 2 being certain that further assistance will be given to construct the house (Official 2, interview 7 October 2021), whereas Official 3 doubted whether additional financial assistance would be given, anticipating that standardised, pre-approved building plans would be made available (Official 3, interview 26 October 2021). On this point, DPME (2015: 79) cites Adebayo (2008) and Mkhize (2003) who note that 'building plans and building standards often deter beneficiaries from expanding their houses', with people preferring to avoid 'official channels', or '[going] ahead without submitting plans'.

The question of funding and practical support for building the top-structure is therefore uncertain and represents a significant gap in the most important phase of the approach. While the UISP (2009), National Treasury's Toolkit (2017) and the DPME (2015) all advocate the establishment of housing support centres, the model needs to be clearly spelt-out in terms of a step-by-step procedure.

Adebayo's (2008) research into Housing Support Centres shows that basic construction training for self-help housing is sufficient for the purpose (DPME, 2015). However,

Mani's (2009) research uncovered the situation whereby PHP beneficiaries were unwilling to provide 'volunteer labour' to build their own houses and 'insisted on being paid' (*ibid*: 81).

4.3.9 Mechanisms to assist beneficiaries to construct top-structures

Official 1 advised that a 'Human Settlements Development Bank' is under consideration to make 'low-interest loans' available for low-income people to build houses (Official 1, interview 5 October 2021). Official 2 noted that the PHP will 'provide building material vouchers' and offer support on 'how to build' (Official 2, interview 7 October 2021). The UISP records that 'a variety of options are available for the implementation of Phase 4 [housing consolidation]' including PHP and 'contractor built houses' (DoHS, 2009: 44). The Department's website advises that PHP subsidies can be accessed by households 'who want to build or manage the building of their own homes' (DoHS, 2021: un-paginated). Saving for the construction of a top-structure was considered the most probable option by Official 3 (Official 3, interview 26 October 2021).

4.3.10 No compromising on technical specifications for sites and services

Responding to what building standards will be appropriate for sites and services projects, the interviewees all advised that the current norms and standards outlined by the Department of Human Settlements (2017, 2018) will apply. As houses would be enrolled with the NHBRC, structural components like the foundations and roofs would need to be designed, constructed and certified according to prescribed standards. In making the point that standards are necessary to prevent poor workmanship, structural failures and state funding from being misused, the officials were unwavering on not compromising on standards.

4.4. Discussion of key themes connected to self-help and sites and services

Although several answers to the research questions have emerged, the key factors of standards, funding, public land and difficulties with transfer need further analysis.

4.4.1 Affordable standards

Appropriate standards go to the heart of whether self-help is affordable and 'is a core issue that could derail the entire approach' (Klug, 2022: un-paginated). Yet without safety standards and minimum planning norms such as building lines to prevent the rapid spread of fires, for example, settlements can become overtly informal. Within the context of a lack of formality and the gap between policy, building regulations and people doing their own thing at any rate, Klug and Vawda (2009: 42) recommend a change in the way of thinking about less formal standards and advocate 'less rigid adherence to norms, standards and stand sizes'. The point they make is that '[informal settlements] are a permanent feature of the urban landscape' and should be seen 'not as a housing problem requiring a technical solution, but as a feature of the structural changes occurring in South Africa' (*ibid*: 42, 47). With reference to standards and an alternative development paradigm, Galuszka (2019: 149) cautions against imposing

‘regulatory frameworks’ that ‘undermine community-based approaches’, noting that ‘imposed building codes … are simply counterproductive’ (*ibid*: 148).

As Klug and Vawda (2009: 47) observe, the now repealed Development Facilitation Act, 1995 (DFA) made provision for building regulations to be ‘set aside’ to allow for incremental upgrading (and by implication self-help). The Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA) that replaced the DFA does not specifically refer to the setting aside of building regulations, although Chapter 2 s 8 (2) stipulates that ‘norms and standards must (a) reflect … national policy priorities’ … [and] … (b) promote social inclusion, spatial equity, desirable settlement patterns … [and] … sustainable development’. Although open-ended and at the discretion of Municipal Planning Tribunals (MPTs), it is possible that SPLUMA’s provision for ‘norms and standards’, even though not specifically referring to self-help housing, could be applied to argue for a relaxation of standards.

The necessity for appropriate standards in low-income areas is advocated by Choguill (2007), who observes that the imposition of unrealistic, unachievable and unaffordable standards prevents suitable housing solutions from being found. While recording that ‘some standards are necessary … to ensure good health [and safety]’, he advises that ‘at the lower end of the housing market, it would seem that few other standards are really required’ (*ibid*: 148).

Bredenoord (2016: 2) cites Choguill’s (2007) vision for planning and constructing sustainable self-help housing as follows:

> ‘1.) Involving local communities with urban planning and housing;
>
> 2.) Providing self-builders and building companies with access to good quality and affordable building materials;
>
> 3.) Developing building standards, for example in earthquake prone areas, for the prevention of fires, and for the protection of health through water and sanitation, etc;
>
> 4.) Providing sufficient financing mechanisms; and
>
> 5.) Making sufficient land available.’

Bredenoord (2016) notes the ‘strong connection between housing sustainability and affordability’ and draws attention to the importance of ‘energy [efficiency] … the use of solar energy … and natural ventilation … for cooling’ (Bredenoord, 2016: 2). He also advises of the importance of ‘construction quality control’ in informal areas where it is often overlooked (*ibid*: 2). Making use of ‘local building traditions … [and] … low-tech and low-cost technologies’ is seen as more sustainable and environmentally friendly than conventional, cement-based products, which require large amounts of energy in manufacturing. Bamboo, wood, compressed earth blocks and adobe bricks are used as alternatives in several countries, but require expertise and training and are better suited to rural settings than in cities. The author notes that ‘[i]n general, people do not want to use building materials that are associated with poverty’ (*ibid*: 8).

Alternative materials have not been extensively taken-up in South African urban townships, where metal sheeting is widely used for roofing on brick structures and for walling in shacks. Schermbrucker, Patel and Keijzer (2016: 88) advise that in Mtshini Wam informal settlement in Cape Town, the community aspires to 'permanent, brick houses'. Small workshops fabricating steel windows, doors and burglar bars, as well as sites for the manufacture of cement blocks, are familiar features in townships. Although it is unlikely that locally made materials have SABS or Agrément certification, which is a requirement for conventional subsidy houses, the production of these materials points to a market for inexpensive, self-help materials.

4.4.2 A collective approach to funding for house construction

Access to finance at low interest rates for building materials and other improvements is important for self-help housing. NGOs, housing federations and cooperatives fulfil a crucial role in assisting the poor to apply for loans and in leveraging funding from state or municipal resources. According to Schermbrucker, Patel and Keijzer (2016: 83), the Urban Poor Fund International (UPFI) is a 'key financial vehicle through which communities can access funds' specifically for housing. Established by Slum Dwellers International (SDI) in 2007, the UPFI makes grants and loans available at low interest rates of approximately '2% per month' to federations affiliated to SDI in 33 countries for communities to collectively save for incremental upgrading. Beginning with 'female pavement dwellers of Mumbai', the 'Mahila Milan' ('Women Together') is a federation of savers in India comprised of 'roughly 1.2 million members' who can access loans of up to 10 times their savings as their 'creditworthiness' improves (*ibid*: 86). The 'emphasis on the collective' facilitates funding for 'organised communities rather than individuals' and fosters 'cooperation around repayment' and the building of partnerships that extend 'beyond project time frames'. However, as the UPFI depends on donor funding as well as community savings, 'more comprehensive project planning that leads to affordable infrastructure and housing loans for the poor' would improve financial sustainability for the fund and help to 'unlock government budget lines' (*ibid*: 89).

The collective approach is corroborated by Bredenoord (2016: 8) who advises that it is 'more efficient to provide technical [and financial] assistance' to 'cooperatives and/or family groups' as opposed to individuals. Through the formation of 'savings groups', 'financial education' and 'budgeting', NGOs like Saveact also assist the poor by encouraging members to save and by providing loans at lower interest rates than those charged by loan-sharks (McLoughlin, 2019: un-paginated).

In South Africa, the 'SA SDI Alliance' has involved 'tens of thousands of informal residents in upgrading activities and the improvement of housing' since pre-1994 through its affiliates the 'Community Organisation Resource Centre' (CORC), 'the Federation of the Urban and Rural Poor' (FEDUP), the 'Informal Settlement Network' (ISN) and the uTshani Fund (Fieuw and Mitlin, 2018: 216). Although the Alliance engaged with government 'for more inclusive financing instruments to co-produce self-build housing', unfortunately the uTshani Fund ran into serious financial trouble around 2000 'due to the poor repayment' of 'bridging loans to beneficiaries' while waiting for subsidies to be secured, with the result that 'construction was stalled' (*ibid*: 218, 220). Further problems were experienced when 'higher standards and extensive quality

control' were introduced due to 'poor construction quality of subsidy houses delivered by the commercial developers'. Because some of the houses 'did not comply with these standards', the fund was 'unable to claim the "pre-financed" subsidies', with the result that 'only 300 houses [were built] between 2004 and 2007' (*ibid*: 220, emphasis in original). This is a serious indictment of the difficulties in drawing down funding from government and the 'requirement to pre-finance and claim back subsidy monies', with the authors recording that in 2015 the fund was owed R15.4million (*ibid*: 227). The response from government has been to 'intensify professional standards … [further reducing] … community participation' (*ibid*: 226). It is thought-provoking to read that the authors come to the conclusion that 'professionally determined standards, whatever the intention … [are] … exclusionary' and make self-help at grassroots level 'difficult to achieve'. They recommend that '[t]here is a need to embrace the informal and resist the emphasis on standards and professionalism … at the expense of local community enterprise' (*ibid*: 228, 230).

Collective funding via savings groups, federations or cooperatives helps to mobilise projects, but as Fieuw and Mitlin (2018: 220) observe, the underwriting of 'bridging loans' to funds like uTshani depends on back-to-back pre-payment of subsidies, which has been shown to be problematic with subsidies either not being paid or in arrears. Yet in spite of efforts to find 'new funding mechanisms for capacity building' and by 'adopting an area-wide or community, as opposed to individual approach' (in terms of government's 2004 *Breaking New Ground (BNG)* strategy), the implementation of 'true community-led development' has been overtaken by 'contractor-driven PHP … [with private sector interests] … overshadowing the potentially empowering elements of the PHP' (*ibid*: 219, 222).

4.4.3 Public land must be made available for human settlements

Legal problems encountered during pre-construction are identified by the Development Action Group (DAG) (2012) from their work in unblocking PHP projects in Khayelitsha. They write that 'complicated legal processes' are 'time consuming' and 'require special expertise' to resolve before projects can proceed (DAG, 2012: 15). Further 'land-related challenges' like 'illegal occupations, remote locations, geo-technical conditions, land transfers … [and] … the provision of bulk infrastructure' cause projects to be stalled or blocked (*ibid*: 14, 15).

The article written by Saal and Rourke from DAG (2021: un-paginated) on rapid land-release highlights the 'challenges municipalities experience in accessing and pipelining well-located land for human settlements'. Without losing sight of the 'potential to fast-track access to land for the landless', they note that 'well-located land … [will need to be] … made available at scale and at a much more rapid pace than what is currently the case' (Saal and Rourke, 2021: un-paginated). While in-fill sites are seen as important, Saal and Rourke (2021: un-paginated) point-out that the Department of Public Works has not yet made available any of the '9,736 vacant land parcels' under its control, which might signify either that rapid land release for housing is not a high priority or there is a lack of coordination between government departments. According to them, 10,951 hectares of land could be accessed country-wide for human settlements (*ibid*), which equates roughly to 438,040 stands of 250m² each.

Although *in situ* upgrading of existing informal settlements will assist with regularisation, orderly development and alleviating land invasions (as being undertaken at Bottom Compound and Naledi Camp, for example), it is reactive to a large extent and does not proactively plan for land to be occupied in an orderly manner. It is for these reasons that Saal and Rourke (2021: un-paginated) advise that 'national state departments have an important role to play in supporting municipalities to implement the rapid land release programme … by unlocking public land to facilitate land release for human settlements'.

4.4.4 Difficulties with delivery, regularisation and transferring ownership

Although substantial funding has been earmarked for serviced sites in the medium term, blockages and holdups in approval processes, as well as mismanagement of funds, can curtail expenditure and cut short supply. Delays in the allocation of funding, red tape and bureaucratic obstacles are identified by Kumar, Royston and Clark (2020: un-paginated) who note that 'it is not necessarily resource constraints that hamper housing delivery', but rather 'inefficacy of the underlying processes and instruments that have plagued housing delivery to-date'. The slow pace of upgrading at Bottom Compound is a case in point, where interim services installed in 2013 have not yet been upgraded.

Kumar, *et al* (2020: un-paginated) refer to a 'title deed registration backlog in the order of one million subsidised properties' as not only restricting property transactions and the raising of finance (for a top-structure), but make the point that the objective of full ownership with title deeds can have the unintended consequence of making people poorer and more indebted. A further obstruction to regularisation is the capacity of municipalities to confer legal recognition to settlements and to 'administer' and keep up to date alternative tenure arrangements (such as 'certificates of occupation', for example) without accompanying reform to the 'national land information system' (*ibid*).

4.5 Conclusion

In spite of the limitations of the study, the research findings show support for a resurgence of the sites and services model from both the side of the community and the officials. Yet, when one looks deeper into the technicalities and from reading about the limited uptake of PHP in post-apartheid South Africa, it is apparent that additional consultation is required at a grassroots level. Although many issues must still be dealt with, from a theoretical standpoint, the findings substantiate self-help as a way for the poor and marginalised to access housing, as advocated by John Turner's *'Freedom to Build'* (Turner, 1972). The effectiveness of self-built housing in providing accommodation is illustrated in the photograph below of Moroka Emergency Camp (Figure 4.9) where creative solutions have been found by the owners.



Figure 4.9 Children outside self-built homes in Moroka Emergency Camp c. 1947. (Photography by Margaret Bourke-White.) (Source: Alex Lichtenstein, 2013)

Although not built to high standards, the houses shown above demonstrate that owners have taken control of the process and resolved the problem of construction themselves. The following quote by Clark (2021) adds support to the finding that self-help is a viable approach:

> ‘At face value, the programme has the potential to reach millions of people who do not have adequate housing or equitable access to land’ (Clark, M., 2021: cited by Charles, M., 2021: un-paginated).

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In attempting to find out the potential of a site and service approach to provide housing for the poor, the research has tried to confirm whether self-help is a feasible alternative to conventional housing. John Turner's advocacy of 'dweller control' and 'housing as a process', has undoubtedly been the theoretical basis for the research, specifically regarding the hypothesis that sites and services is a practical way for government to assist those most in need of housing. Though the theory of owner-building has been justifiably incorporated into South African housing policy, it is to some extent out of place given the state's emphasis on conventional project-linked housing, with the result that PHP has not been widely implemented and for the most part has been regulated by the state with limited 'dweller control'. This quandary is supported by the findings of the research, which show that while self-help is without doubt a feasible alternative, it requires greater policy certainty, political buy-in and grassroots support to become really effective. That self-help has been left behind in the South African housing context is possibly because of the complexity in answering the question below:

> '[I]s self-help housing not appropriate or relevant in post-apartheid South Africa, or is the process too difficult to implement and manage?' (Landman and Napier, 2010: 1, 2).

Although advocates of PHP show that self-help makes it possible for 'bigger, better homes [to be built]' through the pooling of resources, savings and sweat equity, it has not been taken-up to a great extent, except in the case of informal settlements where considerable 'unaided growth' occurs (*ibid*: 1, 3). Part of the answer to finding out whether *a less-formal approach is effective in providing housing for the poor* lies in the question raised by Landman and Napier (2010: 1, 2) below:

> '[A]re there other options for low-income households that are more viable and sustainable, including unaided self-help?'

The above questioning points to the reality that for those not qualifying for a subsidy (and even for those that do), 'a shack in informal settlements remains one of the limited alternatives' (*ibid*: 5) and shows that informal housing, whether suitable for regularisation or not, is the most accessible option for the very poor. Such an observation supports the finding that a change of mindset is (urgently) needed. It is for this reason that government's recent shift attempts to find a middle ground between unlawful land occupations on the one hand and planned, orderly development on the other, which is what the research has tried to unpack.

5.2 Summary of Key Findings

The research findings substantiate important themes found in the literature. Notably that well-located land is very difficult to acquire, higher standards are not affordable and that the reliable disbursement of state subsidies is crucial to the success of assisted self-

help. Technical and financial challenges for the beneficiary emerged from the interview with the community members as major obstacles to owner-building. While the interviews with the officials indicated renewed support for the approach and that funding is available, holdups, delays and obstructions were seen as stumbling blocks. It is also apparent that a lack of clarity on just how assisted self-help projects should be rolled-out could hold back the approach.

In the absence of a dedicated policy, the PHP and the UISP have surfaced as the principal mechanisms to be put into operation for self-help, but need backing from all levels of government. While the interviews with the officials appeared to show support for an alternative paradigm, Huchzermeyer (2006, un-paginated) notes that housing authorities are reluctant to implement non-conventional upgrading because of complications associated with *in situ* regularisation. Problems like having to break down shacks, provide temporary accommodation and adapt layouts to the existing arrangement are difficult to deal with, but are not insurmountable (as can be seen at Bottom Compound and Naledi Camp).

There also seems to be very little enthusiasm on the part of officials to compromise on specifications, regardless of the literature having established that high standards cannot be complied with by the very poor. The reluctance to ease standards almost certainly stems from the past experience of the highly regulated South African subsidy housing programme, which places emphasis on stringent technical requirements to prevent poor workmanship, structural failures and the misuse of state funding. The need to relax standards to a minimum level of safety is therefore one of the main recommendations coming out of the study.

The reality of self-help on the ground is shown in the example of Mayfield Ext. 45 in Benoni (see Figure 5.1 below) where informal structures are being erected alongside the toilet / wet core. From visiting the Mayfield project, it can be seen that permanent structures have not yet been built. However, despite the fact that the erection of shacks on serviced stands demonstrates the incremental nature of assisted self-help, it also brings into question whether the very poor can afford to build top-structures. Affordability therefore emerged from the study as a fundamental challenge to a change in approach.



Figure 5.1 Serviced stands have been supplied with a toilet structure (wet core) at Mayfield Ext. 45, Benoni. (Author's photograph, 26 November 2021)

The interviews showed that blockages result in a lack of delivery and are caused not only by complicated administrative and approval processes, but also by deliberate maladministration, misconduct and interference on many levels. This was confirmed by the literature, in particular Watson (2019) who reported that the toilets constructed in Mayfield Ext. 45 stood unused and unallocated for over a year while the allocation of units was contested in court, causing construction to be halted, increased crime in the area and the toilets being vandalized, all unnecessary problems that could be avoided to improve service delivery. Importantly for the findings, the site and service scheme in Mayfield Ext. 45 shows that after three years of characteristic delays and impasses over the allocation and occupation of the stands (Watson, 2019), the wet cores (containing showers) have been handed over and people are gradually consolidating their shacks.

The Mayfield Ext. 45 case thus reinforces the findings that the approach does deliver land and basic services and shows how self-help unfolds on the ground by way of gradual consolidation and incremental improvement. Yet, while land and essential services have been delivered, the housing consolidation phase is still to follow. It therefore remains to be seen whether houses will be constructed, specifically in terms of NHBRC requirements? This example and the Bottom Compound case study strengthen the findings from the interviews and the literature review that site and service is a realistic and workable solution, but adds to the uncertainty of whether formal houses will be built. Importantly, it shows the critical need for continued state funding and for subsidy approval processes to be simplified.

5.3 Recommendations

Against the backdrop of government's extensive involvement, the criticism of conventional 'state-driven' subsidy housing is hard to dispute, viz. that it is 'too expensive', is located on 'peripheral location[s]' and '[doesn't] provide enough units'

(Marais, Ntema and Venter, un-dated: un-paginated). Yet, although the research reinforces the theory that self-help and site and service can reduce the shortage, the 'aided self-help' model 'initiated and controlled by the state' only pays lip service to 'dweller control' as advocated by John Turner (*ibid*: un-paginated). On this point, the literature is an important signpost to a fundamental change in the way of thinking about housing.

It is a predicament that must be resolved: on the one hand the funding, policy and technical assistance is desperately needed, but on the other, reduced state control and more emphasis on 'community-driven self-help' (*ibid*: un-paginated) will help the approach to advance. The emphasis on state-control and a 'contractor-driven' model is attributed by Huchzermeyer (2001) to the White Paper of 1994, which although supportive of a progressive (incremental) approach to housing, was 'not explicit in respect of its support for community-driven self-help'. By prescribing a 'serviced stand and a core house through a contractor-driven approach', the White Paper set the standard for a 'permanent residential structure' to be built, in that way '[distinguishing the policy] from site and service schemes' (*ibid*: un-paginated).

Highlighting the 'distinction' between '"true" community-led development and contractor-driven PHP', Fieuw and Mitlin (2018: 222) draw attention to the need to restore 'beneficiary participation' into the process. Advising that '[t]here is a need to embrace the informal and resist the emphasis on standards and professionalism [specifically on the part of authorities]', the authors advocate a pro-poor change in mindset from one 'that favours commercial contractors at the expense of local community enterprise' to one of less state control and reduced focus on commercial interests (*ibid*: 222, 230), which is a significant recommendation that supports the findings. However, they make the point that unless there is a 'stronger articulation of the failure of professional approaches to address housing needs', a change in focus 'appears unlikely in a context where commercial interests continue to be recognized over the interests of low-income households' (*ibid*: 229). The need for a change in the way of thinking is consistent with the analysis of the interviews and investigation into the case study.

Marais, Ntema and Venter (un-dated: un-paginated) similarly recommend a change in approach, noting that to bring about innovation, wider choices for beneficiaries and improved delivery, the renewed interest in self-help should be based on not only reducing the 'bureaucratic regulatory framework' and giving prominence to community-based initiatives, but also '[a belief] in its potential to deliver good housing' (*ibid*). They note that '[the] guidelines provided [for PHP] … [are] … similar to those of the normal contractor-driven approach', which is a standpoint that came out strongly from the interviews with the officials, who were reluctant to move away from stringent regulations.

While one can understand government's requirement that 'houses should be technically sound', the provision of technical assistance through Housing Support Centres can become '[a mechanism]' of state control' … [as opposed to] … dweller control'. The attempt to control the PHP / self-help process comes down to the 'inability on the part of government to accept dweller-control rather than state control as a basic principle' and calls for a more 'flexible approach' to be put into practice (*ibid*: un-paginated). As an

underlying principle of self-help, ‘dweller control’ has emerged as a fundamental principle of the research and corresponds with recommendations found in the literature.

5.4 Conclusion

Coming to a definitive, unambiguous conclusion as to whether the governments’ proposed shift in approach could be an effective delivery mechanism to reduce the backlog is very difficult. The limited uptake of PHP, inflexible pursuit of high standards, lack of affordability and legal complications in assembling well-located land are the main challenges to be overcome. These problems require the state to step in with an appropriate level of oversight. Complex approval processes and bureaucratic red tape in accessing subsidies indicate that although self-help is in theory capable of tackling the backlog, unless these obstacles are resolved to the benefit of the very poor, the approach will not deliver on expectations.

However, having said that, the positive theoretical basis and academic endorsement for the principles of self-help signals that the approach is worth pursuing wholeheartedly and should be supported. While the location of low-income housing is the subject of much criticism and debate, when visiting settlements like Bottom Compound one is struck by the desperate need for some kind of upgrading, even though the site is poorly located. Progressive policies like the UISP and the regularisation strategy have identified that informal settlements are where the requirement for basic services, legal recognition and adequate shelter either come together or into conflict with technical criteria and market forces. Despite government’s sincere commitment to improve the lives of people without homes and a notable track-record, the conventional RDP/BNG model is not financially sustainable in its current commercially-oriented form and is unlikely to deliver at the required scale.

Therefore, to make informal but regularised, orderly housing opportunities available in sufficiently large quantities, the rapid land release programme must be fast-tracked so that stands can be serviced and allocated. Not only will this prevent further land from being informally occupied, but it will also prevent infrastructure from being vandalised. The research has shown that a simpler and more flexible system of identifying and approving projects, less state control and a commitment to ‘true-[PHP]’ and community-driven initiatives (Fieuw and Mitlin, 2018: 222) should produce results. Reducing reliance on contractor-driven housing would expand the uptake of self-help and make it possible for residents of informal settlements to participate more actively in the building process themselves without having to wait for the state.

As the requirement for land, services and housing is persistent, the site and service approach ought to be a way for government to help the poor take control of their housing needs. Although the study has been forced to be realistic in respect of the problems experienced by the PHP, it has tried to find a balance between the historical perspective and the extremely difficult circumstances that people without shelter face.

‘Each shack evidenced the owner’s individuality and quest for dignity and respectability’ *Wendy Anneke, Black Sash* (found in Cryws-Williams, J., 1994: 192).

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Appendix 1

Synopsis of applicable spatial planning and housing legislation and policies

The table below provides a synopsis of the applicable spatial planning and housing policies facilitating the process of regularisation at Bottom Compound:

KEY SPATIAL PLANNING AND LAND USE LEGISLATION AND POLICIES			
Legislation / Policy / Planning Instrument	**Statutory Level / Competent Authority / Implementation Agency / Department**	**Principles** (applicable to land for upgrading of informal settlements and sites and services)	**Objective** (relating to spatial planning, land use management and adequate housing)
Constitution of the Republic of South Africa Act 108 of 1996	Constitutional Court	• Section 24 – environmental protection and land use planning; • Section 25 – protection of property rights and access to land; • Section 26 – access to adequate housing and equitable spatial pattern.	Provides for Constitutional matters related to Environment, Land and Housing Provides for Regulation of Provincial and Municipal Planning and Land Uses.
Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA)	Act of National Parliament National Planning Department Provides for Municipal Planning Tribunals (MPTs) Minister of Rural Development & Land Reform	• Redress spatial imbalances of the segregated past; • Non-segregated / integrated, inclusionary spatial planning; • Sustainable human settlements; • Integration of informal settlements through flexible and appropriate planning mechanisms.	Comprehensive system of spatial planning and land use management. Provides for inclusive, developmental, equitable and efficient spatial planning at the different spheres of government; Monitoring, coordination and review of spatial planning. Sustainable development and land use.
Provincial Spatial Development Framework (PSDF)	Provincial Executive Council Provincial Planning Department	As above.	Management of land use development in the Province and City Region
Regional Spatial Development Framework (RSDF)	Regional Executive Council Regional Planning Department	As above.	Management of land use development in designated Regions
Municipal Spatial Development Framework (MSDF)	Municipal Council Development Planning and Urban Management Department Municipal Planning Tribunal (MPT)	• Transformation Agenda; • Inclusive City; • Compact City; • Spatial Vision; • Compact Polycentric City; • Transit Oriented; • Social Services;	Location of housing closer to employment opportunities. Comprised of Transformation Zones (e.g. in-fill and inner city regeneration) and Consolidation Zones (e.g. deprivation areas). Focus on employment opportunities, Transit Oriented Development (TOD).
Integrated Development Plan (IDP)	Municipal Council Development Planning	Directs the Municipality's strategic economic activities, growth, services and budget.	Housing demand and supply are included in the IDP.
Town Planning Schemes /	Municipality: Dept. of Town Planning in conjunction with Province	Legal / regulatory basis derived from SPLUMA, Provincial Ordinance and LEFTEA.	Legal framework / rules for land use zoning rights and density.

Annexure 9999 / Provincial Ordinance / Less Formal Township Establishment Act (LEFTEA)	Town Planning and Development Planning		Incorporates Transitional Residential Settlement Areas and physical addresses or shack numbers into city's GIS and billing systems
Upgrading Plans e.g. CoJ's Region D Draft Upgrading Plan (2018) (e.g. Bottom Compound)	Municipality: Dept. of Sustainable Human Settlements Implementation through the National Upgrading Support Programme (NUSP)	Upgrading of Informal Settlements / Sites and Services / Community Participation	Implementation of NUSP projects in terms of UISP phases and Annexure 9999 conditions.
KEY HUMAN SETTLEMENTS LEGISLATION, POLICIES AND PROGRAMMES			
Human Settlements Legislation / Policies and Programmes	**Statutory Level / Competent Authority / Implementation Agency / Department**	**Principles** (applicable to the upgrading of informal settlements and sites and services)	**Objective** (relating to human settlements, provision of housing opportunities and informal settlements)
Housing Act 107 of 1997 (Legislation required by Section 26 of the Constitution.)	Act of National Parliament Minister of Human Settlements National Department of Human Settlements Facilitates the Housing Code and Housing Subsidy Scheme (HSS)	Recognition that housing, as adequate shelter: • fulfils a basic human need; • housing is both a product and a process; • housing is a product of human endeavour and enterprise; • housing is a vital part of integrated developmental planning; • housing is a key sector of the national economy; • housing is vital to the socio-economic well-being of the nation.	Provides for 'pro-poor' policies that make a variety of tenure options available. Provides for housing to be integrated socially and economically.
National Housing Code, 2009	Minister of Human Settlements + MECs for Human Settlements = MINMEC National & Provincial Departments of Human Settlements	Policy applying to various housing programmes. *'The Housing Code is the home for all National Housing Policy, current and future'* (former Housing Minister Mthembi-Mahanyele). Empowers communities to 'take charge' of their settlements. Recognises fragile nature of informal settlement communities.	Sets out underlying principles, guidelines and norms and standards available in the National Housing Code. Facilitates the Integrated Residential Settlement Development Programme (IRDP), People's Housing Process (PHP) and Upgrading of Informal Settlements Programme (UISP), amongst others.
Part 3 of the National Housing Code: Upgrading of Informal Settlements Programme (UISP)	MECs National Upgrading Support Programme (NUSP) Municipality: Identifies informal settlements to be upgraded. Requires enrolment with the NHBRC.	Promotes Tenure Security, Health Security and Empowerment. Community-wide focus. Applies mostly to *in situ* upgrading in phases, of which an important component is sites and services. Only provides funding for informal settlements located on suitable land.	Programme aimed at the *in situ* upgrading of informal settlements. Provides for relocation or re-settlement elsewhere in the event of sites or terrain not being suitable for human settlement (owing to flooding, shallow undermining conditions, etc.). Beneficiaries may then apply for housing construction assistance (for top-structures) through other National Housing Programmes (e.g. Individual Subsidies,

	Aims to prevent the re-invasion of land and requires shacks to be demolished when consolidation subsidies are implemented. Does not apply to backyard shack dwellers.	Layout plans and stand sizes are to be determined in consultation with communities. UISP provides for interim and permanent services. UISP only finances the creation of serviced stands. To qualify for housing assistance, such as registered ownership and a consolidation subsidy, beneficiaries need to comply to the requirements of the relevant programmes.	PHP, Consolidation Subsidies, etc.). Programme recognises illegality and informality as a permanent state of legal-social insecurity due to lack of legal recognition from unlawful occupation and illegal construction of dwellings. Aims to provide for formal planning, tenure security and incremental improvement. Options for Phase 4 (house construction) include PHP, contractor built houses and may include rental or individual ownership.
Department: National Treasury: Cities Support Programme, 2017. A programme management toolkit for metros.	National Treasury National Upgrading Support Programme (NUSP) City-wide approach.	Prepares to scale up informal settlement upgrading in South Africa. Focus on *in situ* upgrading over conventional approaches. Promotes functional tenure security and essential services. City-wide approach tries to assist as many informal settlements as quickly as possible with incremental improvements. Relocation as a last resort: Avoids relocation of settlements and disruption of livelihoods / community networks.	Allows for HSDG and USDG funding. Allows for Informal Settlements Upgrading Grant.
Upgrading Plans e.g. CoJ's Region D Draft Upgrading Plan (2018) (e.g. Bottom Compound)	Municipality: Dept. of Sustainable Human Settlements Implementation through the National Upgrading Support Programme (NUSP)	Upgrading of Informal Settlements / Sites and Services / Community Participation Settlements categorised according to standard Rapid Assessment & Categorisation (RAC) of NUSP / HDA – e.g. Bottom Compound = B1: incremental upgrade with essential services.	Implementation of NUSP projects in terms of UISP phases and Annexure 9999 conditions.

Table 3.1 Spatial Planning and Human Settlement legislation and policies geared towards regularisation, upgrading of informal settlements and sites and services.

Appendix 2

Ethics Clearance Certificate: SOAP 150/06/2021.



UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF ARCHITECTURE PLANNING

09 February 2022

Faculty of Engineering and the Built Environment:

Ethics clearance letter:

Dear Mark Ward

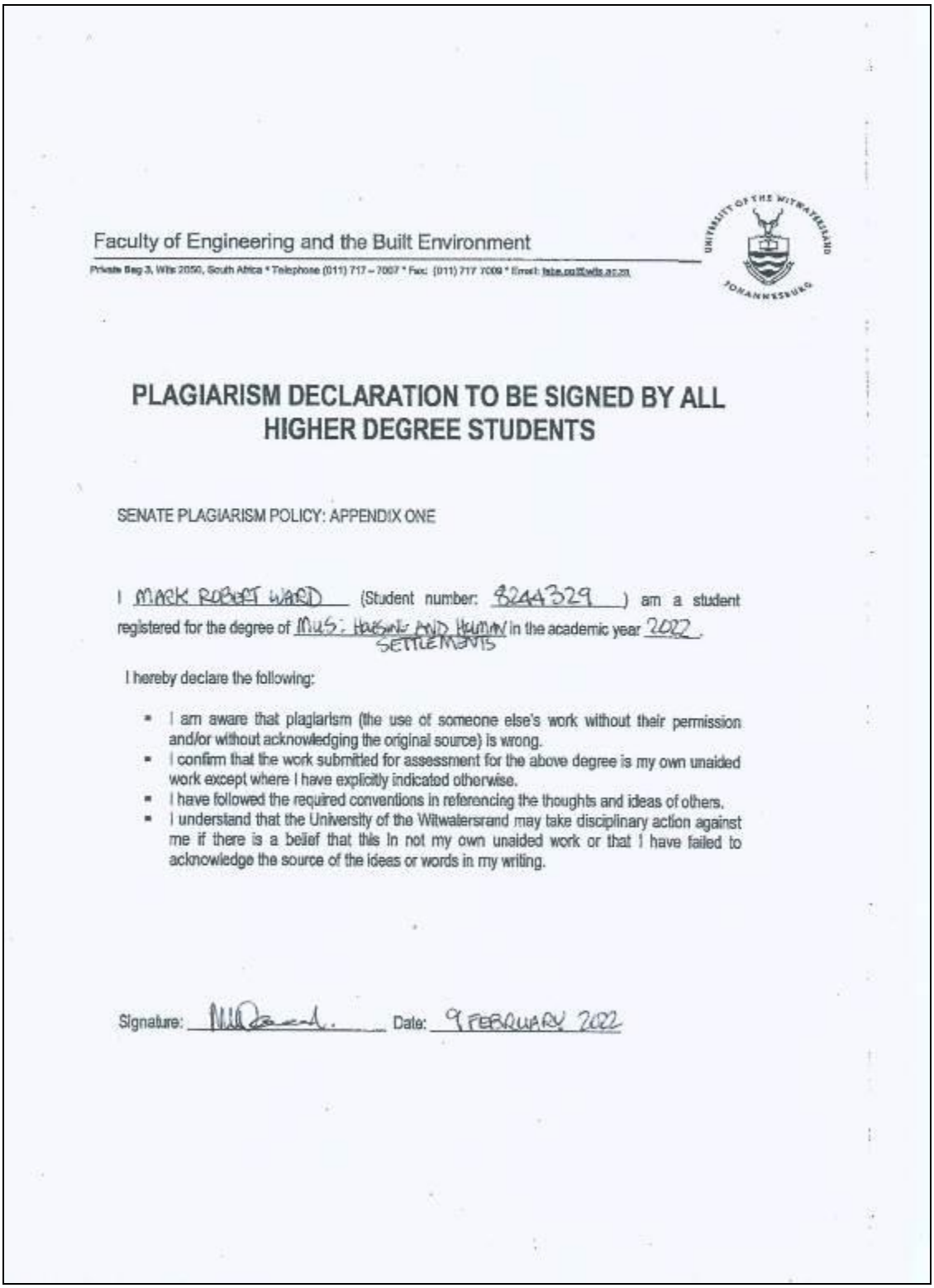
Student number (8244329), this letter confirms that your ethics application has been cleared. Your clearance/protocol number SOAP 150/06/2021

Yours sincerely

Lerato Nkosi

School of Architecture and Planning, Faculty of Engineering and the Built Environment, John Moffat Building, Wits, 2050, South Africa
Tel: +27 11 717- 7692| Email: lerato.nkosi@wits.ac.za | www.wits.ac.za

Appendix 3 Plagiarism Declaration.



Faculty of Engineering and the Built Environment

Private Bag 3, Wits 2050, South Africa * Telephone (011) 717 – 7007 * Fax: (011) 717 7009 * Email: fabe.op@wits.ac.za

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

PLAGIARISM DECLARATION TO BE SIGNED BY ALL HIGHER DEGREE STUDENTS

SENATE PLAGIARISM POLICY: APPENDIX ONE

I MACK ROBERT WARD (Student number: 824329) am a student registered for the degree of MUS: HABITAT AND HUMAN SETTLEMENTS in the academic year 2022.

I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
- I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this in not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.

Signature: [signature] Date: 9 FEBRUARY 2022