



DEPARTMENT OF HUMAN SETTLEMENTS
DEPARTMENT OF PLANNING, MONITORING AND EVALUATION

Report on

**A BASELINE ASSESSMENT FOR FUTURE IMPACT
EVALUATION OF INFORMAL SETTLEMENTS TARGETED
FOR UPGRADING**

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ABBREVIATIONS

ABT	Alternative Building Technologies
ADB	Asian Development Bank
AIDS	Acquired Immunodeficiency Syndrome
ANC	African National Congress
BIB: PUP	Building in Partnership: Participatory Urban Planning Project
BNG	Breaking New Ground
CBO	Community Based Organisations
CLT	Community Land Trust
COGTA	Cooperative Governance and Traditional Affairs
COHRE	Centre's on Housing Rights and Eviction
CORC	Community Organisation Resource Centre
CPI	Controlled studies with only Post-Intervention data
CSOs	Civil Society Organisations
CUFF	Community Upgrading Financing Facility
CWP	Community Work Programme
DFI	Development Finance Institutions
DHS	Department of Human Settlements
DPME	Department of Performance, Monitoring and Evaluation
EC	Eastern Cape
EPHP	Enhanced People Housing Process
EPWP	Expanded Public Works Programme
FBO	Faith Based Organisations
FBS	Free Basic Services
FEDUP	Federation of Urban and Rural Poor
FFC	Financial and Fiscal Commission
FGD	Focus Group Discussions
FS	Free State
GAD	Gender and Development
GP	Gauteng Province
GTZ	Gesellschaft für Technische Zusammenarbeit
HDA	Housing Development Agency
HIV	Human Immunodeficiency Virus
HSDG	Human Settlements Development Grant
HSRC	Human Sciences Research Council
HSS	Housing Subsidy Scheme
IDP	Integrated Development Plan
IDT	Independent Development Trust
IMF	International Monetary Fund
ISN	Informal Settlement Network
IV	Instrumental Variables
JSE	Johannesburg Stock Exchange
KENSUP	Kenya Slum Upgrading Program
KII	Key Informant Interviews
KZN	KwaZulu-Natal (RSA Province)
LP	Limpopo Province
MDG	Millennium Development Goals

MEC	Member of Executive Council
MINMEC	Minister of Housing for all nine provinces; Members of the Executive Council
MP	Mpumalanga
MTEF	Medium Term Expenditure Framework
MTO	Move To Opportunities
NC	Northern Cape
NDH	National Department of Housing
NDOHS	National Department of Human Settlements
NDP	National Development Plan
NGO	Non-Government Organisation
NHBRC	National Home Builders Registration Council
NHC	National Housing Code
NHFC	National Housing Finance Cooperation
NUSP	National Upgrading Support Programme
NW	North West
PANDA	Participatory Appraisal of Needs and the Development of Action
PDs	Provincial Departments
PIE	Prevention of Illegal Eviction and unlawful occupation of land Act.
PRA	Participatory Rural Appraisal
RCG	Reconstructing Capital Grants
RCTs	Randomised Controlled Trials
RDD	Regression Discontinuity Designs
RDP	Reconstruction and Development Programme
RFI	Retail Finance Intermediaries
RHIG	Rural Households Infrastructure Grant
RSA	Republic of South Africa
SANCO	South African National Civil Organisations
SDG	Sustainable Development Goals
SDI	Slum Dwellers International
SERI	Socio Economic Rights Institute
SHI	Social Housing Institute
SHRA	Social Housing Regulatory Authority
SIP	Slum Improvement Programme
SNA	Safe Node Areas
SSBs	Stabilised Solid Blocks
Stats SA	Statistics South Africa
SUP	Slum Upgrading Programme
TB	Tuberculosis
TOC	Theory of Change
TOR	Terms of Reference
UBA	Uncontrolled Before and After
UISP	Upgrading Informal Settlements Programme
UN	United Nations
UPF	Urban Poor Funds
USA	United States of America
USDG	Urban Settlement Development Grant
VAT	Value Added Tax
WB	World Bank

WC	Western Cape
WHO	World Health Organisation

Executive Summary

Introduction

The baseline assessment study for the future impact evaluation of informal settlements targeted for upgrading set out to collect data for use by the Department of Human Settlements (DHS) to address the following:

- Strengthen implementation and improve the performance of the UISP
- Determine the nature and sustainability of the UISP outcomes
- Determine measureable impacts on beneficiaries and communities in the UISP

The key question that the baseline study posed was: *What is the current status of informal settlements targeted for upgrading?*

The specific objectives of the study were:

1. To establish the current state of selected informal settlements
2. To identify key indicators for use in the assessment and future evaluation of informal settlements
3. To unravel the TOC underlying the UISP in responding to informal settlements needs
4. To assess whether the TOC underlying the UISP is appropriate and valid for the South African context of informal settlements
5. To contribute to the existing body of literature on the state of informal settlements in South Africa

Methodology

This baseline study used a mixed methods approach where both quantitative and qualitative data was collected at household level and at the informal settlement level. The instruments and logistics used in the study were tested in a pilot study which collected data in three informal settlements in Gauteng. The necessary adaptations in the instruments and logistics, were made prior to initiating the baseline study itself. Of note during the pilot was the apparent lack of consistent data on informal settlements. The study employed purposive sampling in the selection of informal settlements targeted for upgrading. The selection resulted in 119 informal settlements and 11 mining towns. The total number of households targeted was 5336, with 45 households targeted for interviews in each settlement. Due to financial and temporal constraints, the actual number of settlements visited was 78, and a total of 3 330 household questionnaires were completed. The qualitative data was collected using Key Informant Interviews (KII), Focus Group Discussions (FGDs), photography and environmental scanning. In total, 23 KIIs with community leaders and 26 in-depth interviews with municipal officials were conducted. A total of 25 FGDs were conducted, and environmental scanning was completed in all 78 informal settlements. A total of 236 photographs of informal settlements were taken.

Findings

The current state of selected informal settlements

The findings of the baseline study indicate that informal settlements are places of multiple deprivations. The national averages on key development indicators on health, safety, income and unemployment revealed poor levels of health and nutrition, high unemployment and under-employment levels, as well as high levels of risk and vulnerability in informal settlements.

Although the majority of informal dwellers indicated that they had a form of ownership recognition from the municipality, most residents had no documentation to prove the legitimacy of their claims. Informal dwellers were vulnerable to evictions. However, in the settlements sampled, few residents reported attempted evictions or relocations.

Key indicators for use in the assessment and future evaluation of informal settlements

The baseline study used a range of indicators to collect data on the baseline status of informal settlements. The selected and agreed upon indicators sought to assess: demographic and household characteristics; education; economic activities; health, food and nutrition security; borrowing and credit; microenterprise; housing and tenure; infrastructure and service delivery; satisfaction; social capital, social networks and community participation; crime and safety; and attitudes towards foreigners. Within each of these dimensions, the key indicators can be used in the future impact evaluation of informal settlements targeted for upgrading.

The theory of change (TOC) underlying the UISP in responding to informal settlements

The TOC for the UISP was developed using the Housing Code which contains the principles of the UISP and other documents of the DHS related to the upgrading of informal settlements. Ideally, the TOC should be developed *ex ante* but the TOC for the UISP was developed *ex-post* through a collaboration of the Department of Planning, Monitoring and Evaluation, Department of Human Settlements (DHS) and the research team. This study developed the TOC and logical framework explaining the expected change and envisaged pathways of change underlying the UISP.

Validity and appropriateness of the TOC underlying the UISP

Informal settlements are a global challenge and upgrading of informal settlements has been advocated as a way of ensuring the health and safety of informal dwellers, securing their tenure and empowering vulnerable communities that live in deprived contexts. The findings in this study indicated that informal settlements had been increasing rather than decreasing. The settlements were not a temporary measure but rather places that residents called home. More than 60.0% of residents had lived in informal settlements for more than five years. The theory underlying the UISP, whose ultimate goal is to improve the quality of life of residents, is therefore valid and appropriate. The UISP postulates that by providing security of tenure, ensuring health and safety and empowering communities through the upgrading will result in improved health, lower child morbidity and mortality and economically viable communities.

Contribution to the existing body of literature on the state of informal settlements in South Africa

The findings of this baseline evaluation study provide a more comprehensive set of data on informal settlements targeted for upgrading. While previous studies have been conducted to assess the impact of upgrading, few of these studies had the advantage of a baseline with a wide range of indicators. Previous studies depended on general data in assessing the impact of upgrading informal settlements. In such instances, attribution of impact was difficult. This study provides data on baseline indicators for 78 informal settlements targeted for upgrading. Out of these, it is possible to conduct an impact evaluation using more robust methods (such as case and control studies) to determine the actual impact of upgrading in the treatment cases and provide a comparison with the non-treatment areas.

Recommendations

The recommendations from this study relate to the status of informal settlements targeted for upgrading, the theory of change and areas for further research:

1. The UISP, as it currently stands, needs to be revised to address existing gaps such as lack of a clearly articulated vision, mission and the end goals of the programme.

2. The baseline study partially assessed the design of the UISP. Policy/programme design assessment should ideally be conducted at least two years after implementation of the programme. The current attempt at assessing the design of the UISP occurred ten years after its implementation and in this baseline study the design assessment was only partial. This baseline assessment also calls for a comprehensive design assessment of the UISP.
3. The UISP needs to include smart objectives, intended outputs and outcomes based on agreed upon norms and standards of informal settlement upgrading. There is a need for specific UISP targets to ensure that the envisaged change is measureable and that specific timelines for achieving the envisaged change are also specified in the programme.
4. Data on informal settlements in some instances does not exist, or it is inconsistent and inaccurate. The labelling of RDP projects as informal settlements distorts the available information; the sharing of names among informal settlements presents counting and tracing problems. There is a need to ensure that:
 - a. Municipalities have a record of all informal settlements within their jurisdiction.
 - b. The informal settlements are clearly identified with unique names to avoid miscounting.
 - c. Data related to key variables on informal settlements in each municipality is collected.
5. It is recommended that the National Department of Human Settlements (DHS) should:
 - a. Create a template for the information required on each informal settlement so that the information collected across municipalities and provinces is consistent to create a national database.
 - b. Use GIS teams from the DHS to verify the data on informal settlements to ensure that the information in the database of informal settlements is always up-to-date.
 - c. Consider that while the conceptual definition of an informal settlement is clear from the UN definitions and the UISP, the size is not clear. The need for scope therefore arises from the fact that settlements that had less than 50 households were left out of the sample for the study. There is a need for both municipalities and the DHS to clarify at what point a settlement qualifies to be considered an informal settlement eligible for upgrading.
6. With regard to future impact evaluations, the baseline assessment developed a wide range of indicators based on the UISP and established the status of informal settlements before upgrading. The same indicators need to be used for establishing the effectiveness and impact of upgrading the sampled informal settlements:
 - a. With such a large number (n=78) of informal settlements where baseline data is available, the DHS can employ the experimental design evaluation where some settlements are used as treatment and controls in assessing the impact of upgrading the sampled informal settlements.
 - b. The indicators developed need to be utilised in the impact evaluation to determine the level of change that is attributable to upgrading in general, and the UISP in particular.
7. The magnitude and levels of deprivation in informal settlements suggest that:
 - a. The DHS needs to formulate a policy that addresses growth of informal settlements and their upgrading in South Africa.
 - b. The Treasury/DHS needs to increase funding for the UISP, in particular, and to municipalities to help deal with the challenges in informal settlements, and improve the quality of life of residents who live there.
8. The demographic profile of informal settlement residents who are predominantly African, female and young (below 35 years) has implications for the disaggregation of national data into key variables such as race, gender and age. Such a disaggregation is important in the design of appropriate interventions and the effective targeting of such interventions in order to have the greatest impact in addressing the significant challenges faced by informal settlement residents.

9. Most informal dwellers are long-term residents in such areas with up to three generations living in the informal settlements. Lack of and inadequate services in the settlements puts residents at risk of illness and injury.
 - a. Municipalities need to provide communities with adequate infrastructural services to ensure health and safety.
 - b. There is a need to employ a decongestion policy during upgrading to allow for decent structures, spaces and services to be provided to the targeted (*in situ*) households.
10. Informal dwellers share sites and dwellings with tenants and sub-tenants. The UISP needs to clearly outline the processes for ensuring that such residents are also provided for during the upgrading and consolidation of top structures.
11. The fact that government was identified as the main funder for adequate housing points to the need to create awareness about other sources of funding that households can access to reduce the dependency on the housing subsidy programme. The DHS in partnership with the National Housing Finance Corporation and retail banks need to provide financial education to ensure that households are aware of the housing finance options available. In partnership with the National Home Builders Registration Council (NHBRC), the DHS also needs to create awareness about the available range of affordable housing construction technologies that can shelter households at a much lower cost than the conventional “brick and mortar” approach to housing provision
12. The revised UISP needs to effectively involve the relevant stakeholders in informal settlements. These include grassroots organisations that work with informal dwellers, private developers involved in implementing the UISP, the different tiers of government that have specific roles such as financing (DHS), provincial DHS (accrediting municipalities to implement UISP), national DHS (custodian of human settlement policies and programmes), agencies such as the Housing Development Agency (HDA), and the NHBRC that regulate building norms and standards.
13. The lack of knowledge about municipal by-laws and whether these were applicable to the informal settlements points to the existence of an information gap among residents. Municipalities must ensure that informal residents within their jurisdiction know and understand the municipal by-laws and the relevance of these to the residents. Such engagements will also contribute to building better relationships with informal dwellers.
14. Although informal dwellers acknowledged that they had a recognised form of tenure, they had no proof of their tenure status. The regularisation of tenure for informal dwellers needs to be completed on a progressive basis to ensure that dwellers have security and that their sites are not immediately tradable to people with a higher income. An incremental approach to tenure and documentation that legitimises security of tenure for informal residents is required.
15. Lack of documentation that proves tenure makes informal residents vulnerable to eviction by individuals or institutions that might lay claim to their land. Where municipalities have granted tenure, whether in the form of permission to occupy the land or other such proof, residents need to be issued with the necessary documentation that proves their tenure in order to contribute to a better sense of security and safety.
16. There is a need for the UISP to also consider security of tenure of informal dwellers living on land under traditional authority.
17. The existence of different forms of land ownership in the same province suggested that, if upgrading is to occur, municipalities would need to negotiate with different land owners before any development can be implemented.
18. In terms of identifying land suitable for settlement, the “one-size-fits-all” approach cannot be adopted in the upgrading of informal settlements as the conditions in each settlement are different and/or unique. Settlement specific conditions need to be considered in establishing whether a settlement is suitable for upgrading or relocation. Where informal settlements are located on farms,

for example in KZN, the local government needs to establish eco-villages to ensure that residents have a source of livelihood through farming.

19. Confirmation of land ownership is not an adequate criterion on which upgrading can be decided upon and the following is necessary:
 - a. There is a need to establish the suitability of the land for human settlement, which is a function of the NHBRC.
 - b. Local government together with the NHBRC should investigate the geo-technical conditions in informal settlements targeted for upgrading to avoid disasters in areas that are characterised by shale and dolomite.
 - c. Where reinforced strip foundations for dwellings are required, these should be approved by the NHBRC.
 - d. Where relocations are required, these should be expedited through the assistance of the Housing Development Agency which needs to identify alternative land for relocation. The latter should be done in a way that does not destroy the social networks and cohesion of communities.
 - e. Informal settlements located in areas prone to flooding require that the drainage system is functional and that water is diverted away from the dwellings.
 - f. Informal settlements located in areas prone to mudslides need to be relocated to avoid the loss of life and injury.
20. Informal settlements experience a range of environmental challenges ranging from strong winds that destroy dwellings and furniture, littering, unhealthy living conditions due to being located near or on dumping sites, unstable soil conditions due to being located on mine dumps, vulnerability as a result of being located on flood plains and areas prone to mudslides. In such cases, the following are recommended:
 - a. Littering should be addressed through the provision of waste disposal bins at strategic points in the informal settlements.
 - b. However, a more sustainable solution would be to accompany the provision of waste disposal facilities with an environmental education programme to ensure that residents understand the importance of keeping their environment clean and the link to their general health and wellbeing.
21. The majority of informal dwellers do not borrow money to improve their dwellings. The only improvements informal residents make to their dwellings (e.g. roofing) are those critical to their health and safety. The inability of informal dwellers to make any improvements to their dwellings suggests that there is a need for local government to assist residents with building materials to ensure their personal and environmental health, safety and security. Building technologies that foster job creation and labour-intensive building should be encouraged. Construction methods that allow non-destructive and expansion techniques are recommended so that the changing household requirements can be taken into consideration and provide flexible housing.
22. Informal settlements represent high levels of deprivation and pockets of poverty on the fringes of affluent urban areas with limited basic services, and therefore:
 - a. The upgrading process should put greater emphasis on ensuring that informal dwellers have access to basic services such as water, sanitation and electricity and hence reduce their vulnerabilities to diseases and conditions of poverty. This needs to be supported through norms and standards and closer monitoring of upgrading plans.
 - b. The provision of infrastructural services to informal dwellers needs to take into account the densities and distances between the dwellings as this can make a difference in reducing gender-based violence targeted at women, and also help reduce illnesses related to the lack of and poor sanitation.

23. The UISP identifies *in situ* upgrading as the option for most settlements. There is a need to consider physical and environmental challenges and the density of informal settlements in determining the upgrading options. *In situ* upgrading cannot be implemented in settlements located on mine dumps or areas where waste from cities is dumped. In such instances, relocation would be the more viable option. Informal settlement upgrade programmes should consider all factors related to a community before embarking on upgrade. These factors include proximity to services and schools, work opportunities, residents' skills and sustainable development.
24. With regards to the health, food and nutrition status of informal settlements residents, the following is recommended:
 - a. For informal settlements that are far away (more than 5 km) from the nearest health facility, the Department of Health should establish points for regular mobile clinic visits and/or increase community outreach programmes by the Ward Based Community Outreach Teams.
 - b. The Department of Education through its school health programme should not only provide supplementary feeding but also screen children for all basic health ailments, and include health education.
 - c. The Department of Social Development needs to intensify its outreach activities in informal areas so as to identify households that are eligible for government support and make referrals in cases that require health or police interventions.
 - d. Depending on the location of the informal settlement and the availability of land, the Department of Agriculture should introduce the idea of community food gardens to enhance food availability and accessibility to informal dwellers.
25. Informal dwellers have access to bonding social capital. Bonding social capital is valuable in ensuring that informal residents have a sense of connectedness to those among whom they live. Bridging social capital in informal settlements is valuable in ensuring that residents are connected to resources within the settlement. However, the connection to resources outside the informal settlements remains limited. There is a need to link informal dwellers to more valuable forms of bridging social capital.
26. Linking social capital in informal settlements is limited. The linking institutions accessible to informal settlement dwellers are state-related and specifically designed to support upgrading. Beyond this, informal dwellers have little social capital that can unlock opportunities beyond the informal settlement. There is a need to link informal settlement residents to more non-state institutions for sustainable development in their contexts.
27. The current UISP seems to be tightly aligned with the macroeconomic policies (neo-liberal free market) but not with the national development plans or agenda, which is more developmental. Communities need state support before they can begin to help themselves. There is a need to create linkages with the relevant national development policies and programmes to enhance the potential impact of upgrading of informal settlements as envisaged in the underlying theory of change and programme logic.
28. DHS should establish multi-agency working groups to deal with issues of integration and social solidarity/cohesion among foreign national and local South Africans as a preventive measure to potential scapegoating and xenophobic violence. This should include diversity and attitudinal training on xenophobia as well as dissemination of information to informal settlement dwellers about the foreign nationals' contributions to the community. The key stakeholders in such an agency would include the immigrants, NGOs that work with immigrant populations, local leaders, the United Nations High Commission for Refugees (UNHCR), local and national government led by the Department of Home Affairs, among other stakeholders.
29. The provision of power (electricity/solar/wind) is critical in addressing the perennial winter fires which are often the result of using candles for lighting and paraffin stoves for space heating. The provision of electricity/solar/wind power is not just a function of local government. The

Department of Energy needs to devise solutions to ensure that solar power is harnessed for use in informal settlements where it can have the greatest impact in saving lives while also providing a clean and affordable source of energy. How solar power is implemented in informal settlements and other resource-poor settings should be a function of collaborative efforts between the Departments of Energy, and DHS.

30. The increase in crime in informal settlements has not been accompanied by a similar increase in police response, which might be explained by the conditions in the informal settlements. Where informal settlements exist, there is a need for local government to ensure that paths between the dwellings in informal settlements are wide enough for emergency vehicles to pass through.
31. The level and risk of crime is generally higher in informal settlements because of the population densities, poverty and lack of basic services such as street lighting and shared water and sanitation facilities. Introducing basic services and supporting community initiatives for reducing and reporting crime, will assist in reducing crime and the incidence of mob-justice.
32. Much of the borrowing informal settlement residents seek is for accessing consumer goods, including food. Informal settlements represent the areas of highest levels of deprivation within cities and towns. Local government together with NGOs need to set up food and nutrition support programmes to ensure that no one in informal settlements is without food, which is a basic human right.
33. A range of networks and groupings exists in informal settlements and these should be identified in each informal settlement targeted for upgrading in order to reach as many residents as possible for participation in the upgrading process and ensure sustainability in the settlement.
34. Unemployment rates are high in informal settlements and the rate is higher for women compared to men. There is a need for the state to create employment opportunities that target informal dwellers, and women in particular.
35. The Expanded Public Works Programme (EPWP) and (Community Work Programme) CWP seem to have minimal impact on employment in informal settlements. Therefore, the focus should rather be on constructing dwellings using building technologies that are labour-intensive in order to create jobs and empower communities.
36. The participation of informal dwellers in ward committees represents a partial element of participation in making decisions regarding their settlements. It is important to ensure the participation of communities in the whole value chain of informal settlement upgrading, as doing so would ensure that dwellers own both the process and the products of upgrading thus contributing to their empowerment as well as the sustainability of the resulting developments.

1. INTRODUCTION

This report presents the baseline status of informal settlements targeted for upgrading throughout the nine provinces – Eastern Cape (EC), Free State (FS), Gauteng Province (GP), Mpumalanga (MP), Limpopo (LP), Northern Cape (NC), North West (NW), KwaZulu-Natal (KZN) and Western Cape (WC). The report begins by providing the background context to informal settlements in South Africa and by problematizing the challenge of informal settlements in the country. In this chapter the aim and objectives of the study are presented and an outline of the entire report is also provided, indicating the content of each chapter.

1.1 Background to the Study

The Housing Code (2009) stipulates that the objective of the Upgrading of Informal Settlements Programme (UISP) is to “facilitate structured *in situ* upgrading of informal settlements as opposed to relocation” (DHS, 2009:13), in order to achieve security of tenure, and promote the health, security and empowerment of communities. Security of tenure is provided when the tenure rights of informal dwellers are recognised and formalised. Health and safety are enhanced through the provision of basic infrastructural services such as water, sanitation, roads and lighting, among other municipal engineering services. Community empowerment emphasised in the UISP is realised through ensuring that informal dwellers can achieve social and economic integration, build social capital and at the same time address their social needs in their own areas.

Different analysts have discussed informal settlement upgrading in South Africa (Barry et al, 2007; Del Mistro & Hensher, 2009; Ndinda, 2006; Skuse & Cousins, 2007). Ndinda (2006; 2007; 2009) in discussing the upgrading of the settlements, reported on security of tenure, the choice and level of services per settlement, community participation and the extent of empowerment during the upgrading process in eThekweni and Pietermaritzburg. Skuse and Cousins (2007) in the dynamics of upgrading at the Nkanini (City of Cape Town) informal settlement argued that although the informal dwellers in the settlement all claimed to have come from Makhaza, the majority were from the RDP settlement of Kuyasa, others were migrants from the Eastern Cape and yet others were from African countries. The analysts considered the invasion of Nkanini and its formalization as a land-grab in the City of Cape Town but to the residents the invasion was legitimate and aimed at accessing housing, hence their engagement with the political powers to formalize their invasion.

In comparing the set target for the eradication of informal settlements in South Africa with reality, Del Mistro and Hensher (2009) concluded that the target was highly unlikely to be met. In the study on Sweet Homes informal settlement in Cape Town, Del Mistro and Hensher (2009) identified attributes or level of services critical to the upgrading of informal settlements. The attributes included water, sanitation, roads, utilities and housing. With regard to water and sanitation, informal settlement dwellers had the option of choosing between communal or in-yard level of services. The options availed for roads were tracks, gravel or paved, and the upgrading approaches availed were *in situ*, roll-overs and green fields.

The findings from the Sweet Homes informal settlement showed that 90.0% of the residents invariably chose the in-yard option of water and sanitation (Del Mistro and Hensher, 2009). The analysts postulated that in the context of limited financial resources, the upgrading options selected should be ones that have the greatest benefit. They noted that upgrading can take an incremental or full approach. In the incremental approach, services are provided in phases. In the full approach, all the services, both engineering and top-structure consolidation, are provided all at once. Where financial constraints are severe, the provision of the most basic services that benefit the majority is the preferred option. Upgrading does not have to be a once-off event but can be incremental with each phase contributing to an improvement in the lives of the

residents. Whereas the full approach to upgrading takes more than seven years, the incremental approach appears to yield greater benefits within a shorter period.

Attempts to incrementally upgrade informal settlements have not been without challenges. South Africa has been hit by a wave of service delivery protests with residents of informal settlements protesting against the slow pace of service delivery in their areas. While the full approach to informal settlement upgrading is often preferred by the informal dwellers, financial constraints have meant that most informal settlements are upgraded incrementally through the provision of engineering services first and, later, the consolidation of the top structures with the support of the National Housing Programme.

1.2 Study Purpose and Questions

The purpose of the study was to collect data for use by the DHS to address the following:

- Strengthen implementation and improve the performance of the UISP
- Determine the nature and sustainability of the UISP outcomes, and
- Determine measureable impacts on beneficiaries and communities of the UISP

The study, as articulated in the terms of reference (TOR), aimed to collect baseline data on informal settlements targeted for upgrading. Such baseline data should be useful in future for the following: a) assessment of the implementation process followed, and b) effectiveness and impact of the programme.

1.3 Study Objectives

1. To establish the current state of selected informal settlements
2. To identify key indicators for use in the assessment and future evaluation of informal settlements
3. To unravel the TOC underlying the UISP in responding to informal settlements
4. To assess whether the TOC underlying the UISP is appropriate and valid for the South African context of informal settlements
5. To contribute to the existing body of literature on the state of informal settlements in South Africa

As a baseline assessment, the fundamental question posed was: *What is the status of informal settlements targeted for upgrading?*

The baseline study had a number of sub-questions including the following:

1. Is the TOC for UISP valid and appropriate for the South African context?
2. Who are the stakeholders critical to the implementation of upgrading?
3. What are the current institutional arrangements in the community?
4. What are the possible upgrading options in each settlement?
5. What is the level of community participation in each settlement?
6. What are the current tenure arrangements in the informal settlement?
7. What are the available financing options for informal settlement upgrading?
8. What infrastructural and basic services are available and what is their state?
9. What are the levels of security and safety in the informal settlements?
10. What social capital and social networks exist in the specific informal settlement?
11. What is the level of social cohesion?

The sub-questions allowed the study to address the following:

1. Establish state of tenure security and households sense of belonging as it relates to the city/municipal jurisdiction
2. Determine the extent of personal investment that households make in their residential space
3. Establish the level of access to basic services, and quality of life of informal settlement dwellers
4. Explore households' sense of security, and

5. Examine the state of social capital

1.4 Report Outline

Section 1 describes the background context of this study, the purpose of the study, aim and objectives of this study and methodology. Section 2 describes the UISP and the TOC underlying the programme. Section 3 presents the study findings on security of tenure, access to basic services, physical and environmental vulnerabilities, health and food and nutrition security, crime and safety, economic activities, social capital and community empowerment, and attitudes towards foreigners. The report then concludes on the key issues and offers some recommendations. The report also has five Annexures: Annexure 1a provides the more detailed methodology for the study (as agreed with DHS), Annexure 1.b provides the more detailed data preparation and sampling process, Annexure 2 provides a more detailed background to the baseline study, Annexure 3 provides data on findings that are only described in summary, but not presented in the text of the report, Annexure 4 contains the household questionnaire and Annexure 5 contains the cited literature.

1.5 Methodology

This was a cross-sectional baseline study that employed both quantitative and qualitative approaches because (Annexure 1a) of its complexity and multi-components. The quantitative methods included a household survey conducted using a structured questionnaire and an initial environmental scanning of the selected informal settlements. The qualitative component included documents review, FGDs and KIIs that were conducted using a semi-structured FGD guide and KII guide respectively. The study's instruments were pilot tested (Annexure 1a) before conducting the study in all nine provinces of South Africa with informal settlements (and by extension households) that had been targeted for upgrading as the target population.

2. THE UPGRADING OF INFORMAL SETTLEMENTS PROGRAMME

The development of the South African Housing approach to informal settlement upgrading has been influenced by local and global debates. Housing provision and upgrading of informal settlements in particular, have been among the priorities of the democratic government as is evident in policies, legislations, strategies and programmes, such as the Reconstruction and Development Programme (RDP) (1994) the Housing White Paper (1994), the South African Constitution (1996), the Housing Act (1997) and Breaking New Ground (BNG) (2004). The upgrading of informal settlements, which was previously subsumed in the general provision of subsidised housing, took on a different dimension when the upgrading of informal settlements programme (UISP) (DHS, 2009) was designed. Subsequent human settlements strategies such as Outcome 8 (2010) and national plans (Vision 2030) have continued to lay emphasis on the importance of upgrading informal settlements. Although the upgrading of informal settlements under the RDP was underlain by welfarist notions, the upgrading programme was influenced by neo-liberalism, which has become dominant as it aligns strongly with the national macroeconomic policies. In the sections that follow the theory underlying the UISP is unravelled.

2.1 The Upgrading of Informal Settlements Programme (UISP)

The UISP was designed to implement *in situ* upgrading of existing settlements in both urban and rural municipalities. Where *in situ* upgrading cannot be done due to technical or other challenges the programme provides for the relocation of communities. The UISP (DHS, 2009:16) characterizes informal settlements using a range of indicators as follows:

- Illegality and informality;
- Inappropriate locations;
- Restricted public and private sector investment;
- Poverty and vulnerability; and
- Social stress

The programme covers settlements that exhibit one or more of these characteristics throughout the country. The Housing Code does not explicitly provide the vision or goal of the UISP but refers to the “Key objective” which is stipulated as “to facilitate *in situ* upgrading of informal settlements as opposed to relocation” (DHS, 2009:13) with the objectives of achieving security of tenure, health and security; and empowerment.

Informal settlements are different from townships. McGaffin et al (2015) noted that “The term ‘township’ is a legal term that refers to a formally promulgated urban area”. However the term is also used to define areas that were historically created through central planning to racially segregate South African Cities and to create labour pools for the broader colonial and apartheid economies”. While McGaffin et al (2015) argue that the term township has come to refer to subsidised housing, we argue that the term can be used to describe both the historical townships and the formal subsidised housing developed in the post-apartheid period. Key characteristics of townships are as follows:

- “Most township economies still currently serve the dual purpose of providing cheap labour to established nodes and cities, and of absorbing growing numbers of ‘surplus’ labour
- They are often relatively poorly located and are spatially disadvantaged in terms of facilitating economic activity and accessing other economic nodes and job opportunities

While townships are formally established, planned and serviced with infrastructural and social services, informal settlements are spontaneously established, unplanned and un-serviced; They generally have a disproportionate concentration of lower income households and lower skills levels” (McGaffin et al, 2015:10).

The purpose of the UISP is therefore to ensure that the spontaneously established settlements are incrementally improved to ensure security of tenure, health and safety and while upgrading, to empower communities that live in informal settlements.

2.2 Theory of Change (TOC) of the UISP

Weiss (1995) defines the theory of change as a theory of how and why an initiative works. It is a systematic and cumulative way of linking activities and outcomes, and ultimately impact (Logic model). There were three steps in undertaking this project:

1. Surfacing and articulating a theory of change (Logic model)
2. Establishing the robustness of the programme (Plausibility)
3. Establishing the alignment of UISP to DHS mandates and other government policies.

This baseline assessment study examines the design of the UISP by analysing the legislative intent, goals and desired program outcomes. Specific activities in the assessment of the UISP design included the identification of the goals and objectives of the program in order to determine the plausibility of the programme and assess the theoretical coherence of what the program design intended to achieve; and to explore the alignment of the UISP design to the DHS mandate and other national policies.

Ideally, the TOC for any programme is not developed *ex post* but *ex ante*. However, it can be revised *ex post* as experience with programme implementation, and most importantly outcomes, demonstrate what is feasible and achievable in a particular context. It is known that defining outcomes of a programme is not easy, and more so if it is a programme such as UISP that has been in existence for some time with no written or explicit TOC, even in its narrow sense as a programme logical framework. Thus, TOCs are designed to explain expected change and more importantly the pathways of change.

Because there was no explicit TOC for UISP, in this study the TOC was retrospectively constructed based on existing policy and strategy documents from the Department of Human Settlements over the years such as The National Housing Code (2009); the White Paper – A New Housing Policy and Strategy for South Africa (1994); the Housing Act of 1997; Breaking New Ground (BNG) – A Comprehensive Plan for the Development of Sustainable Human Settlements (2004) amongst others. The BNG strategy specifically speaks about the eradication of informal settlements on an incremental basis. The document specifically speaks about the eradication of informal settlements through “*in situ* upgrading in desired location, coupled to the relocation of households where development is not possible or desirable. The upgrading process is not prescriptive, but rather supports a range of tenure options and housing typologies. Where informal settlements are upgraded on well-located land, mechanisms will be introduced to optimize the locational value and preference will generally be given to social housing (medium-density) solutions” (DOH, 2004:12). While the BNG makes the overarching policy statement regarding the upgrading of informal settlements, the National Housing Code (DHS, 2009) programmatizes the BNG. The UISP is one among the programmes operationalized in the Housing Code. While the BNG speaks to the possibility of relocating informal residents, the UISP opposes the idea of relocation and considers it as only a last resort when all other options have been exhausted. The UISP considers relocation as costly and a recipe for conflict as it results in the disruption of social capital and social networks where residents depend on each other for their survival and livelihood. The TOC usually emerges from a facilitated process of open inquiry and dialogue (Keystone, 2009). The design of a logical framework for UISP was subjected to a technical review workshop facilitated by the DPME and DHS teams and consultants. The purpose was to draft a working TOC for the UISP which was then to be refined and reviewed based on the empirical evidence from the baseline.

2.2.1 Ultimate outcome of UISP

The ultimate of objective (outcome) of UISP is “Improved quality of life of communities” (Table 2.1). According to the BNG, the outcome of the UISP should be to eradicate informal settlements. The Housing Code envisions three outcomes for the UISP: security of tenure, health and security, and empowerment. The vision of the housing policy (1994) is adequate housing which aligns with the objectives of the UISP. While the UISP has been in existence for more than 10 years (since 2004), policy pronouncements contained in subsequent Human Settlements strategies, such as Outcome 8, and national policies, such as the National Development Plan (NDP, 2010), underscore the importance of informal settlement upgrading.

What becomes apparent in unravelling the TOC is that when the UISP was designed, few targets were set in terms of the attainment of its objectives. The UISP should have clearly specified the type of change required in terms of security of tenure, health and safety and empowerment of communities and individuals within a specified time-frame. The UISP should have set targets and time-frames and indicators for monitoring and evaluation.

Absence of targets in the UISP means that assessing the impact of the programme is likely to be complex and problematic. As Habicht et al (1999) argues, ‘Inferences about adequacy of programme outcomes depend on the comparison of the performance or impact of the project with previously established criteria’ (Habicht et al, 1999:11). In terms of the plausibility of a programme, a useful question to raise would be, “Did the programme seem to have an effect above and beyond other external influences?” (Habicht, 1999:13). Establishing plausibility of a programme requires that the evaluators move beyond adequacy assessment and “rule out external factors – called ‘confounding factors’ – which might have caused the observed effects” (Habicht, 1999:13). “Plausibility assessments attempt to control for the influence of confounding factors by choosing control groups before an evaluation is begun, or afterwards during the analyses of the data” (Habicht, 1999:13). While notions of plausibility seem not to have been built into the design of the UISP, the requirement for conducting a baseline study on informal settlements targeted for upgrading will contribute to some extent in addressing the question of the plausibility of the UISP.

2.2.2 Intermediate outcomes of UISP

In order to effectively contribute to understanding the status of informal settlements targeted for upgrading wide interventions, informal settlement residents and key policy objectives of UISP must be achieved. According to the National Housing Code, the key policy objectives of upgrading informal settlements are:

1. **Tenure security:** to enhance the concept of citizenship, incorporating both the rights and obligation, by recognizing and formalizing the tenure rights of residents within informal settlements;
2. **Health and Safety:** to promote the development of healthy and secure living environments by facilitating the provision of affordable and sustainable basic municipal engineering infrastructure to the residents of informal settlements. This must allow for scaling up of such services in future; and
3. **Empowerment:** to address economic and social exclusion by focusing on community empowerment and the promotion of social and economic integration, building social capital through participative processes and addressing the broader social needs of communities (DHS, 2009:13). This is an important aspect of the UISP. The programme is to be implemented in a way that causes the minimum possible disruptions to communities. It should enhance communities’ social capital and economic opportunities and not diminish them. Therefore the programme logic is that in order to achieve this, one needs to include communities in the implementation of the programme. This is backed up by specific funding dedicated to community facilitation.

Unpacking the pathways or how these objectives are to be achieved is indeed a key part of assessing what specific activities are implemented to ensure that communities are empowered; attain security of tenure and

live in a secure and safe environment under the UISP. The specific activities to achieve these intermediate outcomes are described in Table 2.1 and Figure 2.1.

2.2.3 UISP activities

To achieve security of tenure, community empowerment and healthy and safe environments, several interventions are envisaged, some of which are cross cutting and others specific to each policy objective (or intermediate outcome). The critical activities are highlighted for each objective in turn:

a) Tenure security

To realize security of tenure, several activities are implemented under UISP and involve various partners:

- Formalizing land occupational rights and resolution of disputes
- Land acquisitions: purchase of land if privately owned or transfer of land to informal dwellers if it is publicly owned
- Land rehabilitation (levelling, retaining unstable ground and related option)
- Site layout and subdivision, and
- Site allocation to identified beneficiary households.

b) Health and safety

Similarly, several activities need to be carried out that contribute to the achievement of health and safety environments:

- Installation of basic infrastructural services, that is, water, electricity, sanitation, waste removal, and related services
- Provision of roads, proper drainage systems, and
- Construction of social amenities, economic and community facilities




c) Empowerment and community participation

Community involvement occurs in various forms, depending on what structures already exist in these informal settlements. Community structures such as residents' committees or associations, sometimes with the support of local NGOs or civil society organizations, engage with the municipalities and other spheres of government:

- Communities involved in the design phase, implementation and post implementation activities
- Skills transfer – by employing community members in the provision of services in their own communities, e.g. construction of roads, sanitation, building of dwellings, and related initiatives
- In collaboration with partners to ensure economic activities through micro-finance, cooperatives, providing spaces for trading and market places.

Cross-cutting activities include socio-economic and demographic profiling of the settlements to inform planning for upgrading, mobilization of funds and establishing project management capacity. These relate to all the planning and project management activities that must be in place if the programme is to be successful. An underlying assumption is that municipalities have the incentives and capacity to implement the UISP, which is a national programme.

Table 2.1: Upgrading informal settlement programme (UISP), Department of Human Settlements

PROGRAMME	UPGRADING INFORMAL SETTLEMENT PLAN (UISP), DEPARTMENT OF HUMAN SETTLEMENTS		
ULTIMATE OUTCOME	Improved quality of life of communities 		
INTERMEDIATE OUTCOME	Beneficiary communities realize security of tenure, empowerment and live in healthy and safe environments 		
OUTPUTS	Upgraded Informal Settlements: Plans developed within IDP, funds for infrastructure and top structures secured, land subdivided, services (water, sanitation, electricity) provided, houses built/consolidation 		
ACTIVITIES	Security of tenure <ul style="list-style-type: none"> • Formalising land occupational rights and resolution of disputes • Land acquisitions: purchase of land if privately owned, or transfer of land to informal dwellers if it is publicly owned • Land rehabilitation (levelling, putting retaining to unstable ground, etc.) • Site layout and subdivision • Site allocation to identified beneficiary households 	Health and Safety <ul style="list-style-type: none"> • Installation of basic infrastructural services – water, electricity, sanitation, waste removal, etc. • Provision of roads, proper drainage systems • Construction of social amenities, economic and community facilities 	Empowerment <ul style="list-style-type: none"> • Communities involving in the design phase, implementation and post implementation • Skills transfer – by employing community members in the provision of services in their own community, e.g. construction of roads, sanitation, building of dwellings, etc. • In collaboration with partners, ensure economic activities through micro-finance, cooperatives, providing spaces for trading and marketing
	<ul style="list-style-type: none"> • Socio-economic and demographic profiling of settlements • Establishing project management capacity in the context of cooperative governance (municipality, provincial department and national) • Mobilising of funding for upgrading informal settlements 		

* IDP: Integrated Development Plan

Figure 2.1: Proposed UISP logical model

Outputs			Outcomes -- Impact		
Activities	Activities	Activities	Immediate & Short term	Intermediate	Long term
Health and Safety <ul style="list-style-type: none"> Installation of basic infrastructural services – water, electricity, sanitation, waste removal, etc. Provision of roads, proper drainage systems Construction of social amenities, economic and community facilities 	Security of tenure <ul style="list-style-type: none"> Formalizing land occupational rights and resolution of disputes Land acquisitions: purchase of land if privately owned, or transfer of land to informal dwellers if it is publicly owned Land rehabilitation (levelling, putting retaining to unstable ground etc.), Site layout and subdivision Site allocation to identified beneficiary households 	Participation & Empowerment <ul style="list-style-type: none"> Involving communities in the design phase, implementation and post implementation Skills transfer – by employing community members in the provision of service in their own community, e.g. construction of roads, sanitation, building of dwellings, etc. In collaboration with partners, ensure economic activities through micro-finance, cooperatives, providing spaces for trading and marketing, 	Upgraded Informal Settlements <ul style="list-style-type: none"> plans developed within IDP*, funds for infrastructure and top structures secured land subdivided, services (water, sanitation, electricity) provided, houses built or consolidation <p>* IDP: Integrated Development Plan</p>	Beneficiary communities realize <p>Security of Tenure</p> <p>Empowerment and live in healthy and safe environments</p>	Improved quality of life of communities
Assumptions			External factors		
<ul style="list-style-type: none"> Socio-economic and demographic profiling of settlements is conducted That communities are coherent and will participate in the programme over a period of time without losing patience (if incrementalism is the underlying principle of the programme/plans) That municipalities and provincial departments will continue to allocate resources for incremental upgrading over a period of time. That municipalities have the capacity to implement the UISP That robust institutional frameworks exist at community level to help in upgrading of informal settlements 			<ul style="list-style-type: none"> That HDA is able to identify land suitable for upgrading of informal settlements in each municipality Establishing project management capacity in the context of cooperative governance (municipality, provincial department and national) Mobilising of funding for upgrading informal settlements Drought causing severe hardship and vulnerability of informal settlement residents Depreciation of the Rand resulting in increased price of building materials 		

The TOC for UISP is supported by a set of assumptions to facilitate the achievement of the anticipated outputs and outcomes.

Local government or municipalities whose responsibility it is to plan for upgrading in the context of Integrated Development Planning (IDP) are better placed to at least identify and prioritise informal settlements for upgrading. At the settlement level, a range of principles underlies the upgrading of informal settlements in South Africa (DHS, 2009:14). These include:

- The provision of grants to municipalities,
- Extension of services to areas where informal dwellers are relocated,
- The use of a holistic approach to ensure that social cohesion is maintained,
- Relocation that requires the consent of residents to be relocated in line with the municipal IDP,
- The fact that all residents, regardless of their eligibility of the housing subsidy scheme, benefit,
- Scope where the focus of the UISP is on the provision of the engineering services,
- The programme is based on the notion of “public to public partnership” rooted in the notion of co-operative governance. Within such a framework, local government is the implementer of the UISP; where a municipality has no capacity to deliver, the provincial department is required to build capacity and provide support to municipalities to ensure the upgrading of informal settlements within their jurisdiction,
- The consolidation of the top structure remains the role of the National Housing Programme,
- Suitable land, approved in the municipal IDP, for upgrading,
- Adherence to implementation of Norms and Standards
- Stand sizes – these are not uniform in informal settlements, but their size is determined in consultation with residents,
- Service Standards – Funding for the implementation of upgrading is allocated by the UISP. The provision of interim and permanent municipal engineering services is considered the first phase of upgrading with a view to providing more permanent services, which are agreed upon by the municipality in consultation with informal settlement residents,
- Tenure – while acknowledging it “as the foundation of future individual and public investment” (DHS, 2009:14), the UISP underscores that “secure tenure may be achieved through a variety of tenure arrangements and these are defined through a process of engagement between local authorities and residents”,
- Housing Consolidation – the mandate of the UISP with regard to housing consolidation is limited to “access to land, basic municipal engineering services and social amenities and services”(DHS, 2009:15) does not provide the top structures but residents are required to access financing for the top structure either through the housing subsidy scheme (eligible residents) or other sources,
- Community partnership – in the UISP, community participation is considered critical to the upgrading process. Participation is conceptualized in terms of the involvement of the ward committees, stakeholders and vulnerable groups in the community. The municipality is considered a facilitator in ensuring community participation in the upgrading of informal settlements,
- National Home Builders Registration Council (NHBRC) project enrolment – in terms of the Housing Consumers Act 107 of 1998, all houses built in the republic of South Africa must be registered with the Council. Where publicly funded housing is involved, the registration is two-phased and involves project enrolment and later unit enrolment. The enrolment of houses with the NHBRC ensures that consumers are provided with a 5 year warranty and, should structural defects occur, the units can be rectified without cost to the homeowner,
- Municipalities are required to put in place measures to ensure that once informal dwellings are demolished, beneficiaries who access the housing consolidation subsidy do not revert to further land invasion.

The Housing Code recommends that identification of Informal Settlement Upgrading projects must be guided by the following objectives and principles:

- To maximize the impact of the programme by reaching *as many households as possible* and to achieve the national goal of upgrading all informal settlements by 2014,
- The primary focus should be on settlements located in *areas posing a threat to health and safety*,
- Projects should promote the objective of *spatial restructuring and integration*,
- Settlements that are *threatened with eviction* or have been *the subject of a court judgment* must be prioritised, and
- Responsible authorities should adhere to the principle that *community participation* is the key to success and that *relocation of communities should be the last resort* (DHS, 2009:25).

If the various steps in the implementation of the UISP take these principles and objectives into account, it is highly likely that the quality of life of communities will improve through better housing and provisions of associated basic services.

2.3 Institutional Arrangements for the Implementing of the UISP

Government, the private sector and non-government institutions play an important role in the upgrading of informal settlements. These institutions are found in all three spheres of government, namely national, provincial and local government. The roles and functions of national, provincial and local government are based on the principles of co-operative governance and the creation of partnerships between the different spheres of government. This implies that normally a role or function should be performed at the level most suitable for the circumstances.

At the local/municipal level, the responsibility of a municipality is to consider whether living conditions in an informal settlement that is located in its area of jurisdiction merits the submission of an application for assistance under this programme, and if so, the relevant municipality should (DHS, 2009):

- Initiate, plan and formulate applications for projects relating to the *in situ* upgrading of informal settlements, which in the case of municipalities that are not accredited, must be in collaboration with and under the supervision of the Provincial Department (PD's),
- Request assistance from the PD on any of the matters concerned if the municipality lacks the capacity, resources or expertise,
- Submit the application to the relevant PD,
- Implement approved projects in accordance with agreements entered into with PDs,
- Assume ownership of the engineering services installed,
- Manage, operate and maintain settlement areas developed under this programme,
- Ensure as far as possible the availability of bulk and connector engineering services,
- Provide basic municipal engineering services such as water, sanitation, refuse removal services and other municipal services,
- A district municipality must provide inputs and assistance to a local municipality, and vice versa, in appropriate circumstances.

The PDs are responsible for the funding and implementation of the programmes in partnership with municipalities. The following are some of the responsibilities that Provincial Government should perform:-

- Collaborate with and assist municipalities in the initiation, planning and formulation of applications for projects under this programme,
- Assume the development responsibility of the municipality in cases where the municipality is clearly not able to fulfil its obligations under the programme,

- Forward applications to the MEC together with its comments and recommendations, including its views on the eligibility for assistance and the capacity of the municipality concerned to undertake and complete the project successfully,
- MECs will have decision-making authority,
- Take appropriate steps in accordance with section 139 of the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996), to ensure the performance of the duties and obligations provided for in section 7 of the Housing Act, 1997, if the municipality is unable to do so,
- Reserve, reprioritize and allocate funds from its annual budget allocation, and manage, disburse and control funds allocated for an approved project in accordance with an agreement with a municipality,
- Assist municipalities with the use and implementation of accelerated planning procedures, and
- Monitor the implementation of a project by a municipality.

The National Department's role includes the following:

- Actively participate in project conceptualization, assist with project applications and evaluations and participate in project management with the PDs and municipalities,
- Maintain the policy and programme, and assist with interpretation,
- Monitor programme implementation,
- Negotiate the apportionment of funding for the programme, and allocate such to provinces for project execution and release allocated funds on a cash flow basis, and
- Provide implementation assistance.

While each of the different levels of government has its own clearly defined responsibilities, the design of the UISP suggests that these different tiers have to operate in line with the principles of co-operative governance. The institutional framework also includes institutions such as the NHBRC (for enrolment of projects and units), ward committees, stakeholders in the community, the Provincial Departments of Human Settlements (PDHS), the DHS, the Housing Development Agency (HDA) and the National Upgrading Support Programme (NUSP), among others.

The NUSP provides support to the DHS in the upgrading of informal settlements. According to the BNG (DOH, 2004), municipalities are identified as the key implementers of the UISP. With technical support from the HDA, the NUSP helps to co-ordinate upgrading at the municipal level (NUSP, 2014). There are 49 municipalities nationwide that receive support from the NUSP, which has developed a toolkit that municipalities can use for the upgrading of informal settlements. Within such an institutional arrangement, the role of the HDA is to identify suitably located land for the upgrading of informal settlements within a municipality.

2.4 Financing of the UISP

2.4.1 Settlement level

Funding for upgrading is allocated through the Urban Settlements Development Programme (USDP) for the development infrastructure in informal settlement upgrading and the Human Settlement Development Grant (HSDG), by the DHS for the consolidation of top structures. The three streams of project funding for the UISP are summarized as follows:

1. **Allocation by the Minister:** Funding is allocated to provincial governments for prioritized programmes,
2. **Project funding:** Such funding is used for planning, co-ordination of the upgrading process and in this regard projects prioritized for upgrading in the Medium Term Expenditure Framework (MTEF)

are required to begin the planning process for upgrading. Progress payments to Municipalities are also made in line with the achievement of the approved milestones,

3. **Grant funding:** This is allocated by the Director-General and may cover upgrading activities such as land acquisition, -pre-planning, interim engineering services, detailed town planning, land survey examination fee, civil engineer's fee, permanent engineering services, project management, community residents' survey, registration, participation, facilitation, dispute resolution and related issues,
4. **Municipal counter-funding:** This covers costs for upgrading activities by the municipality.

2.4.2 Financing for housing consolidation

Targeted beneficiaries of the UISP (DHS, 2009:16) are required to meet certain criteria (Table 2.2).

Table 2.2: Targeted beneficiaries of UISP*

<ul style="list-style-type: none"> • Households that comply with the Housing Subsidy Scheme qualification criteria, • Households/persons with a monthly income exceeding the maximum income limit as approved by the Minister from time to time, • Households headed by minors, who are not competent to contract in collaboration with the Department of Social Development, • Persons without dependents, • Persons who are not first-time home owners, • Persons who previously received housing assistance, • Illegal immigrants on the conditions prescribed by the Department of Home Affairs, • Persons classified as elderly who are single and without financial dependents may also apply for subsidization. Such persons can be classified as male and female persons who have attained the minimum age set to qualify for the government's old age social grant.
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**Source: DHS 2009: Housing Code. Pretoria: Department of Human Settlements*

2.5 Summary

Drawing on the existing policy documents, this section has attempted to unravel the design of the UISP and the TOC that underlies it. The chapter has identified the ultimate outcomes, intermediate outcomes and project activities and the required outputs of the UISP. Although the objectives of the UISP are valid, there is a need for specificity in articulating the desired impact of the UISP. At a broad level, the institutional framework and the roles and responsibilities of different stakeholders required in the implementation of the UISP have also been identified. It is to be noted that although the activities of the UISP are clearly identified, the programme design needs to be improved by clearly articulating the ultimate goal of the UISP and broadening the range of its stakeholders such as other government departments, non-governmental organisations and grassroots organisations who should be involved in the implementation of the programme.

3. FINDINGS

The key objectives of the UISP are to ensure security of tenure, health and safety and community empowerment for informal dwellers, the underlying principle being “to enhance the concept of citizenship, incorporating both rights and obligations, by recognising and formalising the tenure rights of residents within informal settlements” (DHS, 2009:13). This chapter presents the demographic profile and tenure status of informal dwellers in settlements targeted for upgrading. It also explores the housing careers of informal dwellers by tracing how they came to be in their current settlement. The state of tenure is discussed by describing the current living arrangements, type of occupation rights that the residents have to their dwellings/land, proof of the right to occupy the site, obstacles to land ownership, knowledge of municipal by-laws and application of such by-laws in the informal settlements, as well as eviction and relocation attempts in the sampled informal settlements.

3.1 Demographics of Settlements

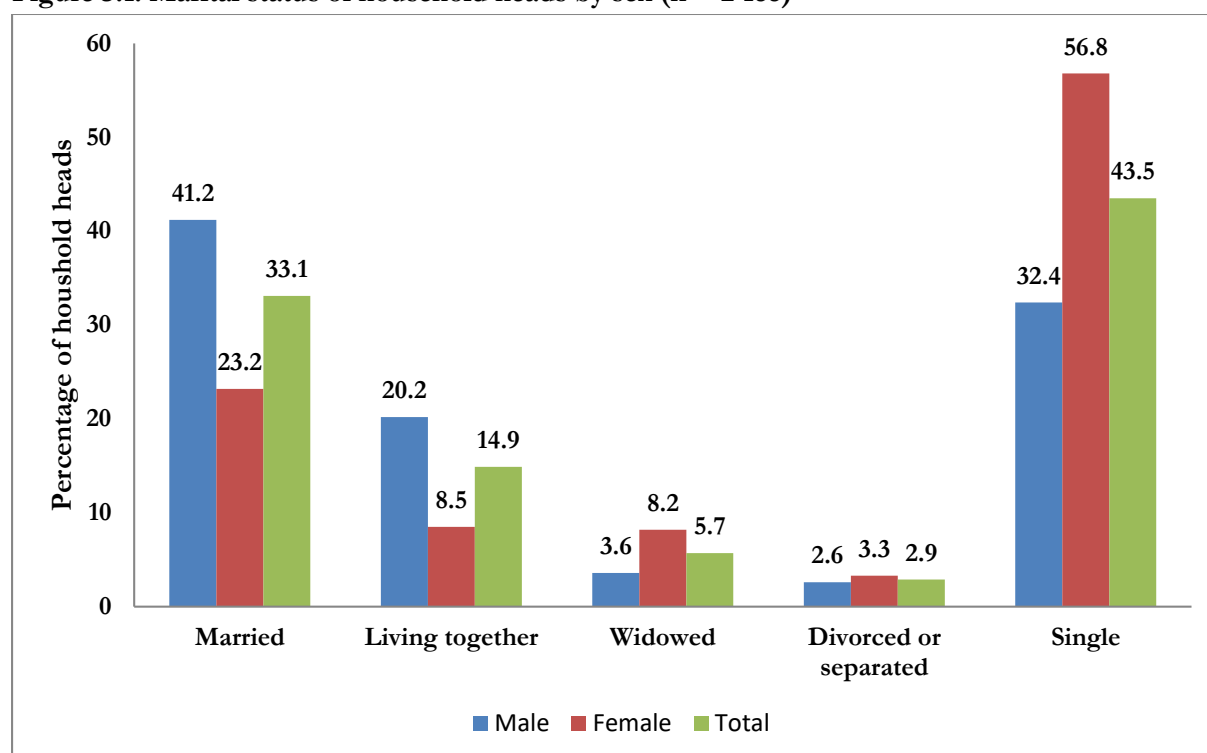
This section provides a summary description of the demographics of the selected and interviewed households ($n = 2\,380$; Annexure 1a, Table A1.3) in the baseline study. The residents of these households were primarily African ($n = 7\,246$) followed by Coloured ($n = 1\,007$) residents. A very small number of households (less than 10 per ethnic group) reported residents of the White, Indian/Asian or “other” ethnic groups living in the household. In terms of nationality, 95.2% of household members were South Africans, with only 4.3% being “other Africans” and 0.5% being “other”. Interviewed households had more female household members than male counterparts across all provinces (Annexure 3, Section 3, Table A3.1). However, in five of the nine provinces, more than fifty percent of households were headed by a male. The province with the highest female headship (61.0%) was the Free State, with Northern Cape, KwaZulu-Natal and Eastern Cape having more than 50.0% of female-headed households (56.2%, 54.7% and 53.5%, respectively) (Annexure 3, Section 3, Table A3.2). Also of note was the finding that the average household size was 3.75 members, which was higher than the national average of 3.4 according to the 2011 census. Provincially, KwaZulu-Natal had the highest average household size of 4.53, followed by the Northern Cape with 4.03. The Free State recorded the lowest household size of 3.35.

Table A3.3 (Annexure 3, Section 3), highlights that 1.3% of those household members aged 20 to 24 years old did not have any schooling. The highest percentage of household members without any formal schooling was recorded in those age 65 years and older (33.1%), and that of high school attainment (greater than 40.0%) in the 20–44 year age groups. In terms of literacy levels, the majority (85.5%) of people residing in the visited settlements were reported to be able to read and write (Annexure 3, Section 3, Table A3.4). Provincially, the Western Cape recorded the highest literacy rate at 94.4%, followed by the Free State at 88.9%. Mpumalanga and Limpopo had the highest percentages of people who could not read and write, 21.8% and 20.4 respectively. In essence, those household members who were reported to have no schooling also had the lowest percentage (16.3%) of literacy. In terms of enrolment for those younger than 19 years of age, 78.7% were likely to be either in a crèche or primary/high school (Annexure 3, Section 3, Table A3.5). About 35.1% of those aged between 0 and 4 years were reported to be enrolled in a crèche. Over 90.0% of those aged between 5 and 12 years of age were likely to be enrolled in primary school, while 85.6% of those between 13 and 19 years were likely to be enrolled in high school. Mpumalanga recorded the highest percentage (85.2%) of household members aged 19 and younger who were reported to be enrolled in a crèche or school. In the Western Cape, the three main reasons reported for not attending school were being sick (20.8%), suspended (16.3%) and not keen to attend (11.5%). For the Northern Cape, the three main reasons were could not get into school (29.9%), suspended (23.6%), and long distance to school (20.9%).

Marital status included those who were in civil marriage, as well as traditional marriage (Figure 3.1). Females were less likely to be married and more likely to be divorced or separated than their male counterparts. In addition, males were more likely than females to be in companionships, either being married or living together. By household headship and by age analysis (Annexure 3, Section 3, Table A3.6) indicated that the

highest percentage (23.9%) of household heads living together (not married) was reported in those aged between 25 and 34 years, followed by those aged from 35 to 44 years, and from 18 to 24 years old with 16.8% and 13.5%, respectively.

Figure 3.1: Marital status of household heads by sex (n = 2 188)



KwaZulu-Natal (56.2%) and Limpopo (46.1%) had the highest percentage of household heads that were single or never married. The Free State recorded the highest percentage of married (civil and traditional marriages) with 43.5%. Furthermore, divorces or cases of separated couples were highest in the Free State (7.2%), Northern Cape (5.8%) and North West (4.6%). The Western Cape had the highest number of cohabitation at 17.9%, followed by Gauteng and Mpumalanga at 16.2% each. Mpumalanga also recorded the highest percentage (11.8%) of household heads that were widowed.

The majority of people (2 587) residing in the interviewed households were aged 0 to 14 years old. There were 1 324 households which had at least one child aged between 0 and 14 years. Furthermore, there were about 688 households which had at least one child aged from 0 to 4 years old, while 972 households had at least one child aged from 5 to 12 years old.

3.2 History, Age and Location of the Settlements

Community leaders in the areas where key informant interviews were conducted had a sense of when the settlements were established but there were also many areas where the date of establishment remained unknown. Among the informal settlements where information on the age of the settlements was collected, the oldest informal settlement was indicated as Nyanga (Western Cape), established in 1980. Three settlements were established in the 1980s, the majority (11 settlements) was established between 1994 and 2009, with a few settlements having been established between 1990 and 1994 (4 settlements).

The question on the period that residents had lived in the informal settlements across provinces had a high response rate (n = 2200). Most (46.8%) of the households had lived in the informal settlement for more than eleven years, while 28.6% had lived there for between 0-5 years and 24.6% had lived there for between 5 to 10 years. In other words, the majority of informal dwellers (71.4%) had lived in their settlements for more than five years (Annexure 3, Section 3, Table A3.7). The provincial breakdown indicated that only

three provinces (Limpopo = 78.7%; Free State = 53.3% and Western Cape = 40.0%) had a majority of residents who lived in informal settlements for less than six years. By contrast, the majority of residents in KwaZulu-Natal (58.1%), Eastern Cape (61.0%), Gauteng (50.8%), North-West (50.4%) and Mpumalanga (43.6%) had lived in the informal settlements for more than eleven years. This suggests that informal dwellers do not live there as a temporary measure but rather that a lot of the households are long-term residents of the informal settlements. As the study participants confirmed, there are people who have lived in the informal settlements for so long that they have raised their families there and a third generation is also being raised in those informal settlements.

With regard to how did the informal settlement dwellers come to live in their current settlements, most of the respondents cited “Forced to relocate”, “Availability of land” and “Better chance of receiving RDP housing” as the three main reasons for coming to live in their present settlements, with 40.6%, 32.6% and 31.0% of cases, respectively (Annexure 3, Section 3, Table A3.8). Better access to government services (26.6%) and proximity to employment (24.6%) were also among those reasons which were recorded in over 20.0% of cases. It is worth noting that infrastructure and housing services such as proximity to clinics/schools, electricity, transport, water and sanitation were less likely to be cited (recorded in less than 5.0% of cases) among the three main reasons for coming to live in the current settlement.

In terms of whether the residents were the first ones to occupy their current dwelling (n = 2 352), most households (53.8%) responded in the affirmative (Annexure 3, Section 3, Table A3.9). The provinces where most households were the first to occupy the current dwelling were Mpumalanga (79.8%), Limpopo (77.3%), the Free State (75.0%), KwaZulu-Natal (74.0%) and the Western Cape (56.3%). These provinces, except for KwaZulu-Natal, were also the provinces where most residents had lived in the informal settlements for less than six years. Households that indicated that they were not the first ones to occupy the informal dwelling were largely in Eastern Cape (65.7%), North- West (73.3%), and Northern Cape (49.7%) (Annexure 3, Section 3, Table A3.9).

Of a total of 2 320 respondents, most of them indicated that they had previously lived in a brick/concrete block structure on a separate stand or yard (n = 947) and these were followed by those who had lived in shack/plastic/semi-permanent material/cardboard/corrugated iron type of dwelling (n = 763) with fewer respondents having lived in traditional dwellings/huts/structures made of traditional materials/wattle and daub (448) (Annexure 3, Section 3, Table A3.10). The fact that the majority of residents previously lived in a brick/concrete block structure, points to a trend where people in formal housing are currently living in informal settlements. The move from formal brick housing to informal settlements could be the result of overcrowding in townships/formal housing or the result of new household formations. Whatever the case, the move from formal housing to an informal settlement points to acute shortage of adequate housing, the inability to access affordable adequate housing in the open market and the acute housing shortage driving people into informal settlements. The majority of those who had previously lived in shacks/semi-permanent type of dwellings were in Limpopo (72.2%) followed by the Eastern Cape (44.3%) and Western Cape (42.1%). Most of those who had previously lived in dwellings/houses or brick/concrete structures were concentrated in the Northern Cape (69.8%), Mpumalanga (45.8%), the Free State (41.5%) and Gauteng (40.2%). Among those who previously lived in traditional type of dwellings, the majority were in KwaZulu-Natal (58.8%), Mpumalanga (33.8%) and North-west (28.8%) (Annexure 3, Section 3, Table A3.10).

In terms of where their previous dwellings were located, most households indicated that they had lived in an urban area (44.3%) (Annexure 3, Section 3, Table A3.10). Disaggregation by province indicated that the majority of those who previously lived in urban areas were in the Eastern Cape (60.5%), Limpopo (49.2%), Gauteng (49.2%) and the Northern Cape (48.1%). Such findings suggest that informal dwellers were not only drawn from rural areas or farms but those who ended up in informal settlements were also from urban areas, thus substantiating the phenomenon of urban-to-urban migration among informal dwellers. Participants who indicated the location of their previous dwelling as a rural area were mostly in the Western

Cape (66.2%), KwaZulu-Natal (55.0%), North-West (48.1%) and Gauteng 38.9%). These responses suggested that the rural-urban migration was largely in these provinces, and when people left rural areas, some end up in the informal settlements. Respondents who indicated that their previous dwelling was on a farm were largely from the Free State (21.3%), Mpumalanga (15.7%) and North-West (15.7%). This suggests that people who lived on farms, either willingly or through eviction ended up in the informal settlements within their provinces. (Annexure 3, Section 3, Table A3.11).

To understand the housing careers of informal dwellers, the study also sought to establish where in terms of place residents lived before their residence in the current settlement (Annexure 3, Section 3, Table A3.12). The majority of participants indicated that they had lived in a different city within the same province (26.6%), others had lived in another town in the same province (17.8%) and yet others indicated that they had lived in a different town in different province (13.3%). Although the category of “other” was also cited (26.7%), the nature of the response could not be determined. These findings suggest that migration among informal dwellers is from city to city within the same province and that inter-provincial migration is less frequent (Annexure 3, Section 3, Table A3.12).

3.3 State of Tenure Security

3.3.1 Dwelling sharing and settlement on public/private land

To understand the type of tenure, respondents were asked whether their dwelling or stand was shared with another household (Annexure 3, Section 3, Table A3.13). Among those who responded ($n = 2\,302$), the majority (79.1%) indicated that their dwelling/stand was not shared. Among the households who shared the dwelling or stand, the majority were in KwaZulu-Natal (26.5%), Western Cape (25.7%) and Gauteng (22.1%). (Annexure 3, Section 3, Table A3.13). These are the provinces with large metros and also high concentrations of informal settlements. The sharing of dwellings or stands can be seen to reflect high densities in the informal settlements, the acute shortage of housing and the need for decongesting informal settlements in these regions during the implementation of the UISP.

To establish whether the residents of the informal settlements sampled had security of tenure, respondents were asked about the type of occupation rights they had (Annexure 3, Section 3, Table A3.14). Of the respondents who answered this question ($n = 2\,290$), most ($n = 1\,329$) indicated that they occupied their sites/dwellings rent-free (56.0%), followed by those who had recognition of rights from the city ($n = 387$; 19.5%), and those who occupied fully owned and fully paid off sites ($n = 237$; 11.6%). The provinces with the largest proportion of residents whose tenure was “occupied rent-free” were the Western Cape (80.7%), KwaZulu-Natal (71.1%), the Free State (70.6%) and Gauteng (58.3%) (Annexure 3, Section 3, Table A3.13). Provinces that had a high proportion of “recognition from the city” type of tenure were Limpopo (39.6%); North-West (38.1%) and the Eastern Cape (28.7%). The types of tenure categorised as occupied rent-free and recognition from the city, points to the attempts by local government to regularise tenure once households have settled on land that is suitable for settlement. Among those respondents who indicated the type of tenure as owned and fully paid, most were in Mpumalanga (36.0%), Northern Cape (25.8%), and Gauteng (14.4%). The notion of occupying fully paid off land suggests that attempts have also been made to accord title or ownership of the land to the residents of informal settlements in these provinces. Among those who had permission to occupy from the chief, the majority were in Mpumalanga (28.2%) and the Eastern Cape (5.3%) (Annexure 3, Section 3, Table A3.14). The permission to occupy land by traditional authorities is the customary form of tenure among indigenous South Africans, and as such, local government needs to negotiate with traditional authorities and communities to implement *in situ* upgrading on a progressive basis.

Despite informal residents indicating that they had specific forms of tenure, the majority (58.9%) had no documentation to prove that they had the right to occupy their sites (Annexure 3, Section 3, Table A3.15). Among those who had documentation proving their right of occupation, the majority (31.6%) had a letter

from the municipality; 22.5% had an “other” document; 19.9% had a title deed; 10.5% had a letter from the chief, and 8.3% of the respondents had no such documentation (Annexure 3, Section 3, Table A3.16). Given that most households had a letter from the municipality to prove legality of their occupation of their sites, the provinces that reported large proportions of households with a letter from the municipality were Northern Cape (77.1%), the Free State (76.6%), Western Cape (68.5%) and North-West (63.0%). KwaZulu-Natal had the largest proportion of households (94.4%) which reported possessing title deeds. It was not clear what possessing a title deed meant in the case of KwaZulu-Natal, because in the same province the majority (63.4%) of respondents indicated that they were not in possession of any document that showed their right to occupy their sites (Annexure 3, Section 3, Table A3.15).

In the two Eastern Cape settlements (Cambridge and Joe Slovo) where FGDs were conducted, the issue of land tenure was not a straightforward one. In response to probing about land tenure, Cambridge participants reported that they did not know what was happening in their settlement as they rarely saw their councillor:

Participant #: I think that the people here are living with the permission of the municipality, the reason why I am saying this is because there are other locations besides this informal settlement. This informal settlement is within these locations and when the people from Human Settlements arrived here, they did not tell us that we are occupying land that we should not be occupying, they are promising that they might build us houses, but they always speak of F-numbers that we need to have (EC_FGD_CambridgeStudy).

Participants in Cambridge reported that the land on which their settlement was located, belonged to the municipality. They lived on the land based on the permission granted by the local municipality. Although there had been promises to upgrade the settlements, the community was uncertain when the upgrading would be implemented.

In Joe Slovo, participants reported that they had signed some legal documents and then they were issued with cards as proof that the land had been allocated to the residents, hence they did not pay rent to anyone:

Participant #: There are some documents that we signed, and then we were given cards as proof that the land was allocated to us, we do not rent, and it is just our place (EC_FGD_Joe_Slovo).

Participant #: It belongs to the municipality. But the reason why I say that the municipality does not care about us, it has just given us small plots of land where we are not even able to make a garden (EC_FGD_Joe_Slovo).

When probed on whom the land belonged to, the participants confirmed that the land belonged to the local municipality and they did not pay rent for occupying it. Residents were dissatisfied with the small size of the plots of land allocated to them. Informal settlements in the Free State discussed tenure security in terms of land ownership. In Unit 3, participants clearly indicated that they had no rights to the land on which they were living and that was because the municipality was the ultimate decision-making power. Participants in MK Square noted that:

Participant #: Government wrote down the names of people who live in this informal settlement so it has been long time none has happened so you cannot ask for a place to stay while you see that there is nothing and the Cllr and his ward committee are living in good condition they are there not feeling any pain and those on top they also feel nothing (FS_FGD_MK_Square).

There was no certainty regarding the ownership of the land where MK Square was located. Some participants were of the view that the land belonged to a private developer.

Participant #: (It) is the municipality (FS_FGD_Unit_3).

Others argued that the land belonged to the municipality. The lack of clarity with regards to land ownership suggested that the residents lived in fear of being evicted by either the person who owned the land or the municipality, if the land was zoned for non-residential purposes. The tenure situation in Gauteng was somewhat different from that in other provinces. In Diepsloot, participants reported that the land on which they were living was theirs. They claimed ownership even though they did not provide proof of ownership. When probed regarding actual ownership of the land, participants in Diepsloot gave conflicting responses:

Participant #: I was told that this place belongs to Shoprite (GP_FGD_Diepsloot).

Participant #: What I known, this whole area was owned by ALCON (GP_FGD_Diepsloot).

Like in the Free State (MK Square), there was no certainty regarding land ownership in Diepsloot (GP). Residents of Diepsloot speculated that the land was owned by two different entities, and both happened to be private developers. The lack of certainty regarding the land ownership points to the precarious nature of informal residents' existence. Informal dwellers lived with the apprehension of being evicted and rendered homeless should the rightful land owner claim the land. The land in Freedom Square and Orlando was reported to be owned by the municipality and the government respectively. In particular, the Freedom Square participants reported that:

Participant #: Here we are under the municipality but we do not see any progress, I have twenty years staying here. I have a child who was born in this settlement and now has a child and now he is also looking for a shack. So life here is difficult here (GP_FGD_Freedom_Square).

Another settlement – Tswaing (GP), reported that they did not know who owned their land. Participants speculated that their land either belonged to the Traditional Leader or to the municipality but there was no certainty:

Participant #: We are not sure but there has been talk that it belongs to traditional leadership and we know it as belonging to the municipality. We just heard this after having moved here (GP_FGD_Tswaing).

The participants at Madelakufa were certain that their land was owned by the municipality. Although the participants in the New Glaudina informal settlement in the North West claimed that they had a right to their dwellings, no proof of ownership was provided to the research team. The residents lived in dwellings that were in their own stands and had yards. Participants at the Kanana informal settlement in North West also claimed that they owned their dwellings. Whether this ownership was by virtue of having invaded the land and settled there or by virtue of having been allocated land by the chief was not clear.

Among the respondents who answered the question (n = 2 328) on whether there were any obstacles to land ownership (Annexure 3, Section 3, Table A3.17), the majority indicated that there were none (61.7%). Most of the respondents (n = 472) who identified the nature of the obstacle(s), indicated the category of "other" (n = 253; 60.4%) as a key obstacle to land ownership. There is a need for further exploration to understand the key obstacles to land ownership among informal dwellers. Among those who responded in the affirmative, income was cited among the key obstacles to land ownership by a large proportion of households in the Free State (73.0%), Western Cape (32.7%), and Mpumalanga (27.4%) (Annexure 3, Section 3, Table A3.18). The second most cited obstacle to land ownership was the constant threat of eviction, which was cited largely in KwaZulu-Natal (44.0%), the Free State (12.0%), and Eastern Cape (9.4%) (Annexure 3, Section 3, Table A3.18).

3.3.2 Settlements unauthorised/permission to occupy/recognized by local by-laws

The land on which the Matsulu informal settlement was located was owned by the chief. Anyone who wanted to build, had to seek permission from the chief. The chief was also responsible for allocating land for burial to the community. At KwaZanele in Ermelo (MP), participants reported that there had been people who took their details down but nothing had come of that exercise. Basically, this community was living on the land without security of tenure. Whereas the residents of Matsulu who lived on land under traditional authority expressed a level of certainty about their tenure, the same could not be said about KwaZanele residents who were uncertain about their security of tenure, yet they too occupied land under traditional authority.

Where land was owned by traditional authority, it remained under communal ownership, and individuals did not get title to their parcels of land. Households had to get permission to occupy land from the chief but not title deeds. Among the objectives of the UISP is to provide security of tenure through the issuing of title deeds. Land under traditional authority is communally owned, and the chiefs are the custodians of such land. If the outcomes of the UISP are to be achieved, there will be a need to negotiate the upgrading of informal settlements under traditional authority and also resolve the issuing of title deeds as an outcome of the UISP.

The informal settlement in the Northern Cape reported that they had been provided with water and electricity but they still did not have permanent dwellings, and the semi-permanent structures in which they lived, were prone to being destroyed by the strong winds. These winds swept the sand into their dwellings and as a result they could not invest in quality household items such as furniture. The fact that the settlement was being provided with water and electricity points to the fact that the process of regularizing tenure had started in this informal settlement.

The process of regularizing tenure in Madelakufa informal settlement in Gauteng seemed to have started. Study participants reported that they had been provided with Form C, which is usually allocated to residents eligible for RDP housing. The participants lamented that with that form they had no chance of extending their dwellings. In KwaZulu-Natal, three of the informal settlements (Fairleigh, Babanango and Zamani) reported that their land was owned by the municipality. However, Poortjie residents reported that they were unsure who owned their land.

The land on which informal settlements were located in Limpopo was owned by different landlords. In Mhlabaneng, participants reported that the land belonged to Cooperative Governance and Traditional Affairs (COGTA), which implies that the settlement was located on land belonging to traditional authority. The participants reasoned that because their land owner, COGTA, had declined to hand over the land to the municipality, the residents were denied access to basic services such as water, sanitation and electricity.

However, residents in Vaalwater informal settlement (LP) seemed certain that their land belonged to the municipality. Residents of Roossenekal reported that their land belonged to a farmer. In areas where there was commercial farming such as Limpopo and Mpumalanga, the reference to “the farmer” had racial connotations, and often referred to the White farmers. The different forms of land ownership in the same province suggested that, if upgrading is to occur, municipalities would need to negotiate with different land owners before any development can be implemented. Where the municipality does not own the land, the negotiation could take a lengthy period before an agreement is reached and the land is released and packaged for development:

Participant #: I think that’s a question that we as a community cannot answer, because from what we heard COGTA did not hand over this land to the municipality, that’s why we cannot get services from the municipality. What we know is that, this land belongs to COGTA (LP_FGD_Mhlabaneng).

3.3.3 Household sense of belonging as it relates to the city/municipal jurisdiction

To understand the sense of belonging that informal dwellers had in terms of how the settlement related to the city (nearest town/urban centre), participants were asked questions regarding their knowledge of municipal by-laws in general; their knowledge on whether such by-laws applied to their settlements and whether they knew whether their settlements had been approved for upgrading. Among those who responded to the question of knowledge about municipal by-laws ($n = 2\,354$), the majority indicated that they had no knowledge of the laws (68.7%). The provincial break-down indicates that most of those without knowledge of municipal by-laws were in Eastern Cape (83.1%), Limpopo (71.8%), KwaZulu-Natal (69.7%), and Gauteng (69.4%) (Annexure 3, Section 3, Table A3.19).

Asked whether municipal by-laws applied to their specific settlement, of those who responded ($n = 805$) 43.9% indicated that they had no such knowledge (Annexure 3, Section 3, Table A3.20). The difference between those who were aware (39.0%) that the municipal by-laws applied to their areas and those who did not know, was rather small. The provincial breakdown indicated that a lack of knowledge of whether municipal by-laws applied to the specific settlement was high in the Western Cape (74.2%), Eastern Cape (55.3%), Free State (49.5%), and Gauteng (43.7%) (Annexure 3, Section 3, Table A3.20). Notable was the fact that a large proportion indicated that they did not know (17.0%) about municipal by-laws. The lack of knowledge about the by-laws points to a low level of engagement between municipalities and the informal dwellers, as well as the need to create awareness about the municipal by-laws in areas where informal settlements are located.

Respondents were also asked to indicate whether they were aware of any attempts by the municipality to evict residents (Annexure 3, Section 3, Table A3.21). Among those who responded ($n = 2\,344$), the majority of the households indicated that there had been none (72.0%). The provincial breakdown indicated that among the few who confirmed that there had been attempts to evict them, the majority were in Gauteng (21.6%), Mpumalanga (19.0%), the Western Cape (17.9%) and Eastern Cape (12.0%) (Annexure 3, Section 3, Table A3.21). Participants were further asked to indicate whether there had been any attempts to relocate residents of the informal settlements. Among those who responded ($n = 2\,353$) 64.8% indicated that they were not aware of any such attempts. The provinces which indicated high rates of relocation attempts were Gauteng (27.5%), the Western Cape (24.8%), Eastern Cape (22.7%) and (KwaZulu-Natal (24.2%) (Annexure 3, Section 3, Table A3.22).

Participants who responded to whether they knew that their area had been approved for settlement ($n = 2\,324$), the majority confirmed that they were aware (48.0%); fewer participants (24.4%) indicated that they were not aware, and 27.6% responded “do not know” (Annexure 3, Section 3, Table A3.23). The provincial breakdown indicated that knowledge of the area being approved for settlement by the municipality was high in North-West (65.5%), KwaZulu-Natal (55.5%) and the Free State (52.4%).

3.3.4 Financing options for informal settlement upgrading

The baseline study asked about the sources of housing finance and if households wanted to improve their dwellings. Among those who responded, the majority indicated that they would not borrow to improve their dwellings ($n = 1\,418$; 68.9%). The other common responses were government subsidy (10.2%), formal bank (6.3%) and “other” (8.5%). The disaggregation by province showed the large proportions of households which would not borrow: Gauteng (74.4%), the Eastern Cape (72.2%), and North-West (65.7%) (Annexure 3, Section 3, Table A3.24). These findings are consistent with the qualitative findings which indicated that the informal dwellers do not borrow money to improve their dwellings but rather to meet their basic needs such as food, school fees and healthcare.

In the North West (Mafikeng settlement) residents noted that lay-by was a method by which they improved their dwellings. That meant that residents could purchase materials which were then left to remain in the shop and only when the final payment for the materials was made, did the purchaser receive the goods. Lay-

by is a form of credit for those without cash and it is a common practice among retailers as it helps them to move their stock and recoup their profits:

Participant #: according to me, my shack is built it by layby of zines for 12 months and I used the money for grant, to pay for them according to me, my shack is built it by layby of zines for 12 months and I used the money for grant to pay for them (FS_FGD_Mafikeng)

Participant #: my shack were build long time ago, so I was working at the white farmers so they were paying us with the zinc to build our shacks and people of nowadays they use laybys for zinc and pay month by month. You can't afford to pay your layby what happens? we do have challenges, like me I getting R900 for 3 children, so you pay the money for debts, so sometimes when sleep without eating because of those layby, at the school also they pay school fees and the baby products should also be bought, so it is very difficult.

In the Free State, the residents of MK Square noted that although most of them generated income through recycling, they also borrowed money from *Mashonisas*. *Mashonisas* were a key source of housing for informal dwellers in Gauteng (Diepsloot and Orlando). The *Mashonisas* were reported to be accessible as they did not ask for too many documents, and all that borrowers needed to provide was their national identity (ID) book. The *Mashonisas* were particularly handy as with it came a way of meeting financial needs for emergency situations. The common mention of *Mashonisas* throughout the different informal settlements suggested that informal dwellers cannot access formal credit, which leaves them with the informal credit lenders as the only choice. This is very costly because of the high interest rates they charge. Indeed, apart from living in deprivation, the poor also pay the high cost of credit because they are “unbankable” due to their small and irregular incomes:

Participant #: I see mostly is mashonisa, because they do not require lot of stuff from you, like 3 month bank statement and all that, they want your ID book and that's it. Sometime they do not have fee for transport or maybe it's an emergency thing at home, or to buy food (GP_FGD_Diepsloot).

Participant #: We go to the mashonisa to buy material, others go to the veld to cut the woods but it is a risk because you have to skip the freeway but because you are suffering you have no choice (GP_FGD_Freedom_Square).

Participant #: We are not really into credit because right now the old man here is getting pension this one is self-employed I work with people (GP_FGD_Freedom_Square).

While acknowledging the value of *Mashonisas* in extending credit to them, the participants were however not blind to the risks of borrowing such credit. Madelakufa participants described *Mashonisas* as being so dangerous that they could take children away in a bid to ensure they got paid for their credit. The residents of Madelakufa were also specific in indicating that even among the informal credit lenders, borrowers could only access credit if they had employment. Although the process of accessing credit from the informal lenders was short and the paperwork minimal, the interest rate was rather high. However, informal settlements seemed to appreciate the role *Mashonisas* play in extending credit to residents:

Participant #: We go to the mashonisa they are very strong and rude they will take your child. They are there but that is for people who can afford it, those who have an income and month end they save R200 and take others to burial society. We do not even have money for the burial society (GP_FGD_Madelakufa).

Participant #: They will take your Identity document. But they help us cause we go there hungry (GP_FGD_Madelakufa).

Although informal credit lenders were accessible, they were perceived as detrimental, as the credit provided by *Mashonisas* was expensive and the interest rates were exploitative. The high interest rates charged by informal lenders keep the poor trapped in a vicious cycle of debt. Thus, despite being accessible, informal credit lenders were also a problem to the poor.

Study participants in Tswaing, however, argued that without a job it was difficult to access credit from any source. In the absence of credit, residents of Tswaing reported using their social grants to meet their most urgent needs (school uniform and clothes) but noted that it was difficult to use such funds for home improvements:

Participant #: How would you borrow money if you do not work? Nobody will loan you money if you do not have a job. How will you make improvements if you do not have a job? Some households only survive from the government social grants and that money is only to buy the children school uniform and clothes and to buy light and that's that. It will not be possible to even buy paint. It is not possible (GP_FGD_Tswaing).

Like the Tswaing residents in Gauteng, participants at the Poortjie informal settlement in KwaZulu-Natal reported that it was difficult to access credit for housing improvements when so many residents were unemployed. What helped in meeting their housing construction needs were the reciprocal relationships that they had established with fellow residents. Participants reported that assisting a fellow resident would put them in good standing to receive assistance when they needed it. Participants in Poortjie argued that without jobs and any form of income, their members had to devise ways of coping with regard to making repairs and improvements to their dwellings. Crossing into the farms to cut planks for building their dwellings, reflected the level of deprivation in which informal residents of Poortjie found themselves. Cutting down trees was a last resort for residents who had neither the funds nor the income to meet their housing needs.

Some participants in Zamani traded in fruit and vegetables to raise money for repairing their dwellings. Being based in eThekweni meant that the residents of Zamani could either grow fruit and vegetables or buy at low cost and trade at a profit within the city. In Limpopo, discussants indicated that although they got loans from *Mashonisas*, residents did not necessarily improve their dwellings. As indicated in the preceding sections, informal settlement residents live in such extreme deprivation that borrowing is often done to meet basic needs. Still in Limpopo, residents in Roosenekal indicated that they borrowed small amounts (R100) among fellow residents. However, for larger loans the residents went to the banks. The notion of large loans was not deconstructed in the context of the informal settlements. Large borrowing was used for extending the informal dwellings as the households became larger so as to ensure privacy of its members. In Mpumalanga, just as in the Northern Cape and North West provinces, most participants cited *Mashonisas* as a key source of finance. In addition to the informal credit lenders, stokvels were repeatedly mentioned as a source of finance in the informal settlements.

To understand the baseline status of informal settlements, it was important to establish whether residents had ever applied for the housing subsidy. Among those who responded ($n = 2\,316$), few (35.1%) confirmed that they had applied for a housing subsidy. The majority (62.7%) indicated that they had not. The provinces with households that had ever applied for the housing subsidy were: North West (59.0%), Western Cape (54.7%), Mpumalanga (47.4%), Eastern Cape (33.8%), and Northern Cape (45.0%) (Annexure 3, Section 3, Table A3.25).

3.3.5 Extent of personal investment made by households in their residential space

To understand the extent of investments made by households in their residential space, respondents were asked if they had made any improvements to their dwellings for the 12 months preceding the interview. The majority (87.0%) indicated that no improvements had been made (Annexure 3, Section 3, Table A3.26). Most of the improvements made were to the roof ($n = 120$; 35.3%), additional rooms ($n = 94$; 24.4%) and other improvements ($n = 50$; 11.9%) (Annexure 3, Section 3, Table A3.27). On average, households spent about R3 255,23 on the improvements per year (Annexure 3, Section 3, Table A3.28).

In the different informal settlements sampled participants explained how they had invested in their dwellings using a range of housing finance sources. Additional types of investment emerged from the discussions with the residents of different provinces. Informal dwellers in the Eastern Cape reported that they borrowed credit not only for food but also for the purchase of building materials. In the Cambridge informal settlement, participants reported that investing in the dwellings occurred when dwellings were destroyed by fires. Credit was also used for the purchase of furniture:

Participant #: People do use credit here, first for food because a lot of the time they don't have money and they are forced to borrow money to buy food. They also use it for building material, for example if your shack has burnt down and the material you have cannot be used again, you're forced to borrow money to build it back up again. Even for furniture, when you want furniture, you go out and borrow (EC_FGD_Cambridge)

In the Joe Slovo informal settlement participants reported having received some funds (R5 500). Details of the source of the funds or how these were meant to be used were not discussed. The participants, however, alluded to the fact that upgrading was about to happen in their settlement in terms of the top structures being built:

Participant #: The province gives us that money, each person gets R5 5000. We were never given a chance to talk about what happens when you want to extend your house, they are just going to build on top of that slab, that's all (EC_FGD_Joe_Slovo).

Participants in the Madelakufa informal settlement responded to the question of the level of investment in their informal dwellings by identifying *Mashonisas* as their main source of credit which was used for their household needs:

Participant #: We go to the mashonisa they are very strong and rude they will take your child. They are there but that is for people who can afford it, those who have an income and month end they save R200 and take others to burial society. We do not even have money for the burial society (GP_FGD_Madelakufa).

Participant #: They will take your Identity document. But they help us cause we go there hungry (GP_FGD_Madelakufa).

Participants argued that households make very pragmatic choices. Torn between meeting basic needs such as food, school fees and clothing, making investments in the dwellings became a luxury that did not come close to their priorities. Such views were strongly expressed in the Tswaing informal settlement in Gauteng:

Participant #: How would you borrow money if you do not work? Nobody will loan you money if you do not have a job. How will you make improvements if you do not have a job? Some households only survive from the government social grants and that money is only to buy the children school uniform and clothes and to buy light and that's that. It will not be possible to even buy paint. It is not possible (GP_FGD_Tswaing).

Participant #: To buy that nail or that plank is not possible. I have to buy food for school and uniform for school, other times even that is short and I still have to buy mealie meal in the house (GP_FGD_Tswaing).

Thus investment in housing for informal dwellers did not come on their list of priorities when they have to provide the basic needs of their households. The high poverty levels among informal dwellers confirmed that they depended on the social grants to meet their basic needs, such as food. Hunger was a reality in the informal settlements, and as participants in Tswaing indicated, sometimes they did not even have enough money to purchase mealie meal, which in the South African context is considered a basic commodity and is priced to be affordable to the poorest of the poor. Yet, as the FGD discussants confirmed, the poverty levels were such that investing in housing improvement was not a priority when accessing food was a challenge.

Participants in the North-West who indicated that they had invested in home improvements mentioned that they did so with the help of wellwishers, others made arrangements for credit with building material suppliers and used their grants to pay off the credit:

Participant #: According to me, my shack is built it by layby of zincs for 12 months and I used the money for grant, to pay for them according to me, my shack is built it by layby of zincs for 12 months and I used the money for grant to pay for them (FS_FGD_Mafikeng).

Participant #: My shack were build long time ago, so I was working at the white farmers so they were paying us with the zinc to build our shacks and people of nowadays they use laybys for zinc and pay month by month. You can't afford to pay your layby what happens? we do have challenges, like me I getting R900 for 3 children, so you pay the money for debts, so sometimes when sleep without eating because of those layby, at the school also they pay school fees and the baby products should also be bought, so it is very difficult .but the problem is lack of job opportunities, so the child support grant is not enough, I use it to pay school fees, pay the insurance, buy clothes and food so you can see that we are struggling (FS_FGD_Mafikeng).

Even for those who choose to take credit from building material suppliers, it was difficult to pay for the credit. As the participants noted, their incomes were low and these were used to support their children. The funds available were used to meet immediate needs such as food, clothing and school fees. Without assistance, informal dwellers were unable to invest in the improvement of their dwellings.

In Limpopo, borrowing money was usually done when there were emergencies. The sources of credit were mainly banks and *Mashonis*. The participants in particular specified that people who borrowed to improve their dwelling were individuals who had employment. The improvements mainly focused on extending the number of rooms to ensure that there was privacy and space for household members:

Participant #: We go to town, here at home we just borrow R100, if it's an emergency, but we take serious loans at the banks. Yes, they do. Those who work are able to go the bank and get loans to extend and improve their houses. We are forced to extend, because we have many children and there is no privacy in the shacks (LP_FGD_Roosenekal).

Participant #: No, we don't have such in Roosenekal. We do not have a place where we can take loans, we do not have Mashonisa, those that are here, are not registered. They fly by night, so we do not have any place or anyone who can assist us with money (LP_FGD_Roosenekal).

Some participants also noted that borrowing credit was difficult as there were no banks or informal lenders in the informal settlement. The nearest informal credit lenders were not registered and that posed a risk to them. The participants thus argued that access to credit was an obstacle to making improvements to their dwellings. In Mpumalanga, the Northern Cape and North-West, participants also reported that their main source of credit was the *Mashonisas*. What emerged clearly was that the borrowing by informal settlement residents was usually for meeting immediate needs such as food and school fees.

The financial situation of informal residents was so dire that participants only improved their dwellings when it was very critical. This situation was illustrated by a participant from KwaZulu-Natal at the Zamani informal settlement who shared that:

Participant #: We can just decide to get additional income by selling fruit or vegetables just so that you can get some money to fix that window or something.

Thus making an improvement in the home is only done when it is absolutely necessary. In the Limpopo Province in the Mohlakaneng informal settlement, the community members' reported the following:

Participant #: We do get loans from Mashonisa to buy food (LP_FGD_Mohlakaneng).

Participant #: We do not improve our homes (LP_FGD_Mohlakaneng).

Like in the informal settlements in the different provinces, the informal residents of Mohlakaneng, Limpopo, shared that they borrowed credit to purchase the most basic human need – food. In particular, the Mohlakaneng residents underscored that they could not improve their homes and this was explained by the fact that the most pressing basic needs were unmet and therefore housing improvement did not feature on their list of immediate needs.

Home improvements in the Western Cape were done only when the dwellings were destroyed by fire, and this took the form of rebuilding the structure. The residents depended on outside assistance to rebuild their structures but the materials that were provided for rebuilding structures after disasters were usually not sufficient to rebuild their dwellings to their initial size:

Participant #: No, only when your place was on fire then and it may be burned down then they will come and give material but floods they don't even come and look. If you have a 4 apartment place they won't give you that amount back, they only give for 1 apartment (WC_FGD_Drakenstein).

Participant #: When my place burned down the last time they never helped me they wanted me to put up a shack again there but I told them I don't want to be there where they constantly have fires. Then I got my own material and build a shack elsewhere (WC_FGD_Drakenstein).

Thus in the Western Cape, it became evident that improvement of informal dwellings was only possible after an informal settlement had been through some disaster. Even so, rebuilding was not the same as improving the original structure as households were forced to build using new materials but the result was often smaller dwellings.

3.4 Summary

This chapter described the demographic profile of households, the age, history and location of informal settlements sampled in this study. A major finding was that most of the sampled informal settlements seem to have emerged after 1994, and this is perhaps explained by the removal of restrictions on urban and rural migration. Also presented were the forms of tenure in the different informal settlements. Most of the land

occupied by informal dwellers either belonged to the nearest municipality or the government. In the rural areas, the land belonged to private developers and traditional authorities. These different forms of land ownership suggested that the upgrading programme needs to take into account the different tenure options and negotiate with different stakeholders for upgrading to occur. A key finding in this chapter was that households in informal settlements are so poor that investment by the owners in their dwellings was not among their priorities. Investment in the dwellings occurred only when the household or settlement had been through a disaster such as fire or floods.

4. ACCESS TO BASIC SERVICES IN INFORMAL SETTLEMENTS TARGETED FOR UPGRADING

The UISP is designed to implement *in situ* upgrading of existing settlements in both urban and rural municipalities. The programme is focussed not only on providing the top structure but also to ensure that basic infrastructure and services are available for the informal dwellers. Therefore, this assessment sought to establish baseline indicators with regard to the following:

1. Access to drinkable water
2. Access to sanitation services
3. Access to refuse removal
4. Sources of lighting and heating
5. Access to emergency services
6. Experience with environmental challenges, and
7. Satisfaction with services

The current status of these highlighted basic services and social infrastructure was established by asking a set of related questions (Annexure 4).

4.1 Access to Drinkable Water

4.1.1 Main sources of drinking water

Table 4.1 shows household sources of drinking water by province. The majority (55.0%) of these households relied on public or communal taps for water, while 19.1% had access to piped water on site or in the yard. Only 12.8% enjoyed access to piped water in their dwellings. Access to piped water in the dwellings was highest in the Northern Cape (48.5%) followed by North West (31.7%) and then Gauteng (10.8%). The Northern Cape also had the highest proportion of households with piped tap water on site (44.4%), followed by the Free State (36.0%) and North West (32.2%). The most common source of water for informal settlements dwellers reported was public or communal taps, making up 55.0% of all water sources. The Western Cape had the highest proportion of households accessing water from communal taps (92.5%) while Gauteng, the Free State and KwaZulu-Natal had 54.3%, 50.6% and 56.3% respectively.

Table 4.1: Households' main source of drinking water by province

Province	Piped tap water in dwelling %	Piped tap water on site %	Public or communal tap %	Water carrier or tanker %	Other %	Total n
Western Cape	2.5	2.8	92.5	0.2	2.0	203
Eastern Cape	7.8	12.0	79.6	0.0	0.6	314
Northern Cape	48.5	44.4	3.7	2.1	1.3	156
Free State	11.7	36.0	50.6	0.0	1.7	251
KwaZulu-Natal	10.3	26.2	56.3	0.9	6.3	208
North West	31.7	32.2	12.6	16.9	6.6	197
Gauteng	10.8	19.1	54.3	3.5	12.3	855
Mpumalanga	7.0	0.3	20.6	33.4	38.7	57
Limpopo	16.5	13.8	51.3	17.3	1.2	88
Total	12.8	19.1	55.0	4.9	8.2	2329

4.1.2 Distance to water source

With regard to accessibility of water, 59.9% of the respondents said their water source was less than 200 metres away, while only 1.6% of the respondents had to travel a distance of more than one kilometre (Table 4.2). Over a fifth (22.2%) of the households had water sources within the dwelling.

In 7 of the 9 provinces, more than 50% (range: 52.0 %– 85.8%) of households had a water source within 200 metres. In the North West Province and the Northern Cape, however, this was reduced to only 41.1%

and 49.1%, respectively. Limpopo had the highest proportion of households (19.6%) that had water sources within 201-500 metres away, followed by the Eastern Cape (16.6%) and Gauteng, at 16.4%. In only three provinces, the Free State (4.0%), Gauteng (2.5%) and North West (1.7%), did respondents have to travel more than 1 km to fetch drinking water.

Table 4.2: Distance of water source from the dwelling or yard by province (n = 2 332)

Distance to water source	WC	EC	NC	FS	KZN	NW	GP	MP	LP	Total	
	%	%	%	%	%	%	%	%	%	%	n
Water source in dwelling	3.0	16.7	40.7	37.0	21.5	47.6	23.4	10.0	5.3	22.2	519
Less than 200 metres	85.8	64.0	49.1	52.0	65.0	41.1	55.4	82.3	74.9	59.9	1404
201-500 metres	11.2	16.6	2.6	6.2	11.0	6.7	16.4	7.7	19.6	14.3	284
501 metres-1 kilometre	0.1	2.1	0.0	0.1	2.1	2.9	2.2	0.0	0.1	1.8	55
More than 1 kilometre	0.0	0.6	0.0	4.0	0.4	1.7	2.5	0.0	0.0	1.6	52
Don't know	0.0	0.0	7.5	0.7	0.0	0.0	0.0	0.0	0.0	0.2	18

4.1.3 Quality of water

Residents in informal settlements were generally satisfied with the quality of the water that they were drinking (Table 4.3). They thought that the water was safe to drink (93.6%); clear in colour (93.5%), good in taste (93.5%) and free from bad smells (92.3%).

Table 4.3: Perceptions of quality of water they drink before treatment

Perception of water quality	Number (n)	Percentage (%)
Safe to drink	2 145	93.6
Clear (has no colour/free of mud)	2 004	93.5
Good in taste	2 041	93.5
Free from bad smells	2 004	92.3

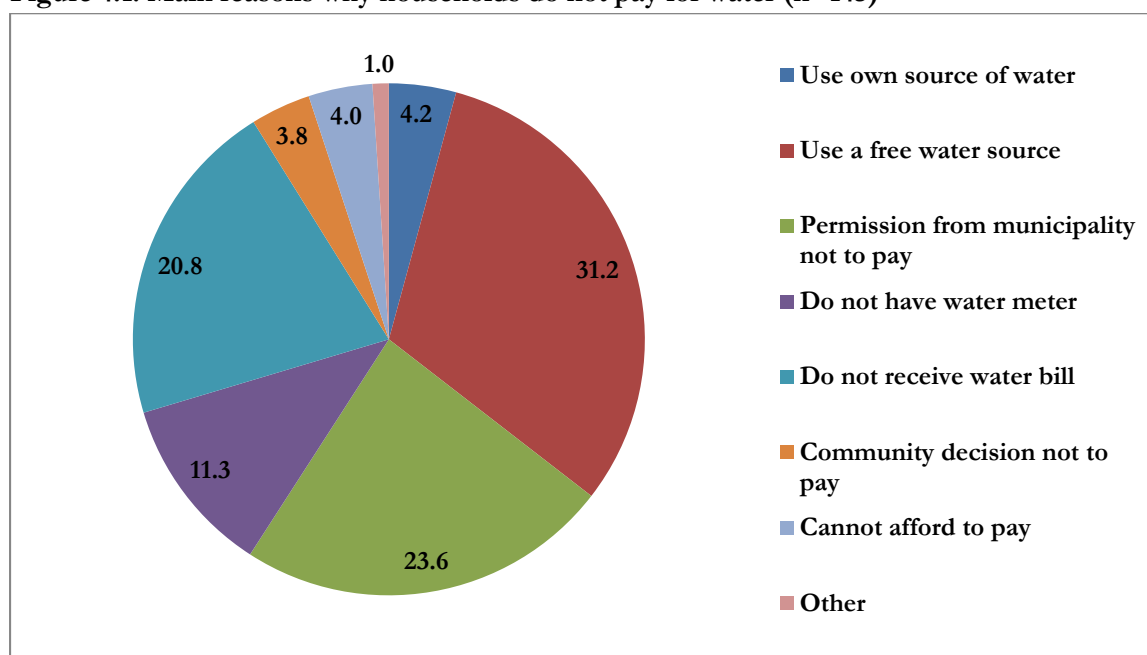
Residents were asked if they treated water before drinking it, and by far the majority (93.3%) said “No, never” (Table 4.4). Less than 10.0% of the residents treated their water before drinking, with 4.0% always treating the water before drinking. The most common method of water treatment was by boiling (79.4%), while a small proportion (14.8%) opted for chemical cleaning. The low levels of self-treatment of water are largely because of most communities had access to municipal water.

Table 4.4: Treatment of water before drinking (n = 2 317)

Perception of water quality	Number (n)	Percentage (%)
Yes, always	111	4.0
Yes, sometimes	99	2.7
No, never	2 107	93.3

4.1.4 Main supplier of drinking water

The reported main source of drinking water by the majority of respondents was the municipality (83.6%), while 10.3% of the respondents did not know the supplier of the water. The majority of respondents who were supplied with water by the municipality did not pay the municipality for it (68.4%) for a variety of reasons (Figure 4.1); only 15.6% of respondents paid for the water, while 15.9% were “not sure”. This is probably due to the free basic services policy particularly in communal areas.

Figure 4.1: Main reasons why households do not pay for water (n=145)

Of those households which identified the municipality as their main source of water, 47.6% reported interruptions to the municipal water supply in the last 12 months, and 66.6% reported interruptions that were longer than two days.

4.2 Access to Sanitation Services

4.2.1 Type of sanitation services

Table 4.5 presents the kinds of toilet facility used by households in informal settlements. Thirty-five percent of households used a “pit latrine without ventilation pipe” or “long drop”. In households that had access to communal flush toilets, the toilets were connected to a municipal sewage system (22.4%), with the majority being in the Western Cape (83.4%) (Table 4.6).

Table 4.5: Type of toilet facility used by households (n = 2 333)

Perception of water quality	Number (n)	Percentage (%)
Pit latrine without ventilation pipe (long drop)	736	35.0
Flush toilet connected to a municipal sewage system	597	22.4
Pit latrine with ventilation pipe (long drop)	252	17.9
Bucket toilet	310	8.2
None	118	5.7
Nearby veld	117	3.9
Other, specify	63	3.1
Chemical toilet	88	2.1
Flush toilet connected to a septic tank	52	1.6

The highest proportion of households that used pit latrines were in Limpopo (49.3% used pit latrines with ventilation pipes) and Mpumalanga (79.3% used pit latrines without ventilation pipes). The highest proportion of households (35.8%) using bucket toilets was in the Eastern Cape, followed by 10.7% in KwaZulu-Natal and 7.5% in Limpopo (Table 4.6). Some (less than 7.0%) informal settlements reported using the nearby veld to relieve themselves.

Table 4.6: Type of toilet facility used by households per province (n = 2 333)

Type of toilet	WC %	EC %	NC %	FS %	KZN %	NW %	GP %	MP %	LP %	RSA %	Total n
Flush toilet connected to municipal sewage	83.4	40.9	69.0	33.7	5.5	54.0	5.6	0.0	0.0	22.4	597
Flush toilet connected to a septic tank	3.0	0.3	8.5	5.1	3.8	1.8	1.1	3.8	0.0	1.6	52
Chemical toilet	1.0	0.7	2.1	0.0	6.0	0.0	2.7	0.0	0.0	2.1	88
Pit latrine with ventilation pipe	0.7	0.6	4.4	14.3	15.4	6.0	23.0	9.4	49.3	17.9	252
Pit latrine without ventilation pipe	0.0	8.6	5.0	30.7	37.5	28.5	49.3	79.3	24.3	35.0	736
Bucket toilet	2.6	35.8	7.4	6.4	10.7	3.0	5.3	0.3	7.5	8.2	310
Nearby veld	3.3	4.0	2.2	2.9	6.6	6.3	3.1	3.5	6.8	3.9	117
Other, specify	4.5	7.0	0.0	1.4	3.8	0.5	2.0	0.0	9.1	3.1	63
None	1.5	2.1	1.5	5.4	10.7	0.0	8.0	3.7	3.0	5.7	118

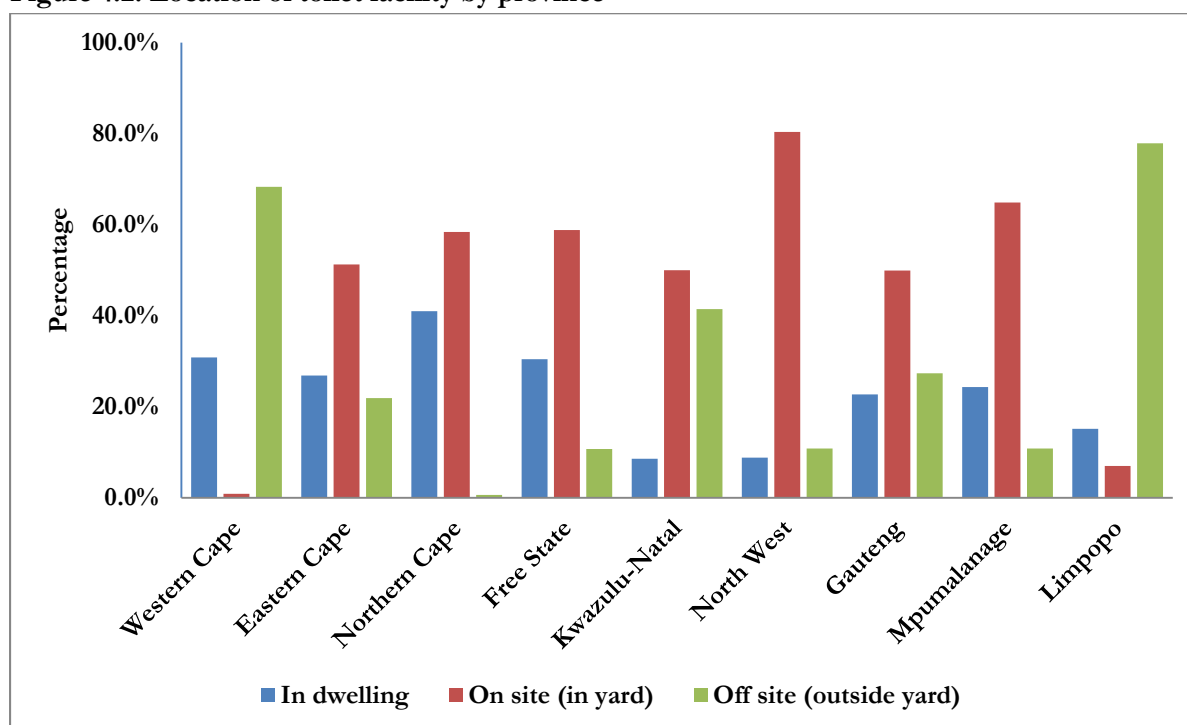
4.2.2 Sharing sanitation facilities

Approximately half (50.3%) of respondents reported that they shared their toilet facilities. The mean number of people sharing a toilet was 39 (ranging from 2 persons to 3 000 persons sharing). Limpopo had the highest mean number of households sharing a toilet facility (80.98 ± 160.55), [range of number of people sharing 2-1 000] and Gauteng the second highest mean (57.27 ± 249.88) (Table 4.7). The highest number of people sharing a toilet facility was recorded in Gauteng where one facility was shared by a maximum of 3 000 people.

Table 4.7: Number of people sharing toilet facilities by provinces

Province	n	Range	Min	Max	Sum	Mean	Std. Deviation
Western Cape	57	118	2	120	890	15.61	25.61
Eastern Cape	195	798	2	800	6880	35.28	93.82
Northern Cape	97	13	2	15	377	3.89	1.99
Free State	143	997	2	999	2740	19.16	86.94
KwaZulu-Natal	94	998	2	1000	4435	47.18	168.88
North West	87	98	2	100	1301	14.95	18.49
Gauteng	463	2998	2	3000	26517	57.27	249.89
Mpumalanga	28	220	2	222	346	12.36	41.15
Limpopo	44	998	2	1000	3563	80.98	160.55

Most of these facilities were located on-site (45.3%), outside the yard (33.0%) and only 21.8% were located within the dwelling. These rates varied considerably by province. Limpopo had the highest rate of the off-site type of toilet location, followed by Western Cape and KwaZulu-Natal (Figure 4.2).

Figure 4.2: Location of toilet facility by province

4.2.3 Challenges experienced with toilet facilities

Respondents cited “toilet unsafe to use due to health risks” as the biggest challenge they experienced with the type of facility used (46.9%) (Table 4.8). Forty-four percent of respondents reported that their toilet facility was unsafe due to risk of assault. More men (57.1%) than women (42.9%) reported challenges with the toilets. The gender of respondents interviewed for the study accounts for the difference.

Table 4.8: Problems with toilet facilities

Problems with regards to toilet facility	Yes %	No %	Total n
No water to flush toilet	20.1	34.8	2100
Toilet blocked up	17.3	41.2	2100
Toilet pit or chamber full	34.5	38.9	2111
Toilets not well-maintained and broken	30.1	50.5	2087
Poor lighting	36.7	33.5	2091
Unsafe to use the toilet due to risk of assault	44.0	41.9	2106
Toilet unsafe to use due to health risks	46.9	40.6	2110
Toilet not enclosed well or structure damaged	30.0	53.3	2073
Broken pipes or blockages in the municipal system	15.2	44.3	2075
Too many people, long waiting times	24.0	48.5	2078
No tap water point to wash hands after using the toilet	33.6	42.0	2079
Problem reported but not repaired within 5 working days	18.7	47.7	2022

4.2.4 Availability of a bathroom/shower

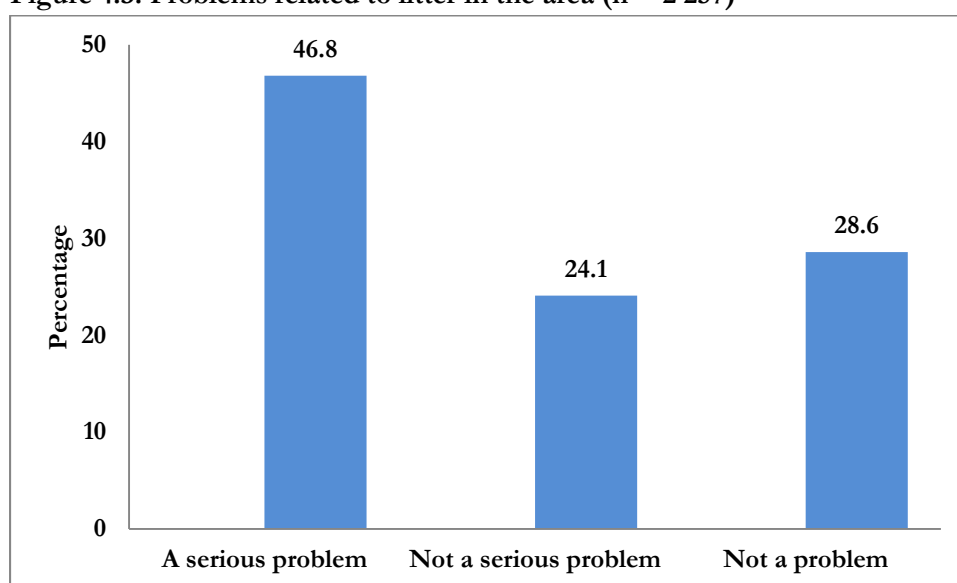
Only 3.4% of households reported having a bathroom or shower in their dwellings (Table 4.9). Of those who reported having a bathroom or shower in their dwellings, only 41.5% shared this facility with another household. The mean number of people sharing bathroom/shower facilities was 3.33, ranging from 1 to 15 people.

Table 4.9: Availability of bathroom or shower

Bathroom/shower in unit	Number (n)	Percentage (%)
Yes	74	3.4
No	2204	96.6
Total	2278	100.0

4.3 Access to Refuse Removal Services

In response to the question “Is rubbish or litter lying around a problem in this area?”, seventy-one per cent (70.9%) saw litter as a problem, with 46.8% of respondents indicating that it was a serious problem (Figure 4.3). What was also noticeable was that 28.3% of the respondents said that they did not have litter lying around in their area.

Figure 4.3: Problems related to litter in the area (n = 2 257)

Litter was reported to be a serious problem among residents in the Free State (65.9%), followed by the Eastern Cape (59.7%) and the Northern Cape (56.9%), Limpopo (47.9%) and North West (35.6%) (Table 4.10). In Mpumalanga, 31.8% of the respondents reported that rubbish lying around was not a serious problem, and a similar rate was reported in Limpopo (32.8%). On the other hand, 56.9% of the respondents in the Western Cape reported that rubbish lying around was not a problem in their area; corresponding figures for KwaZulu-Natal was 38.2% and 27.3% for Gauteng.

Table 4.10: Is rubbish or litter lying around a problem in your area?

Province	A serious problem		Not a serious problem		Not a problem		Total n
	%	95% CI	%	95% CI	%	95% CI	
Western Cape	27.4	[21.9-33.6]	15.7	[11.9-20.6]	56.9	[49.2-64.3]	200
Eastern Cape	59.7	[52.0-67.0]	21.1	[18.2-24.3]	18.4	[13.8-24.2]	304
Northern Cape	56.9	[45.7-67.4]	23.2	[15.7-32.8]	19.9	[15.9-24.7]	163
Free State	65.9	[45.7-81.6]	24.9	[15.9-36.7]	7.3	[1.9-24.8]	247
KwaZulu-Natal	44.5	[30.1-59.9]	17.3	[11.8-24.7]	38.2	[28.6-48.8]	206
North West	35.6	[21.6-52.7]	41.8	[33.0-51.1]	22.6	[15.1-32.3]	196
Gauteng	49.2	[43.6-54.8]	22.7	[17.5-29.0]	27.3	[19.9-36.2]	800
Mpumalanga	20.6	[20.4-20.9]	31.8	[18.7-48.6]	47.6	[33.1-62.4]	59
Limpopo	47.9	[32.3-63.9]	32.8	[25.5-41.2]	19.3	[12.1-29.3]	82
Total	46.8	[42.3-51.4]	24.1	[20.5-28.1]	28.6	[23.7-34.1]	2257

With regard to ways of disposing of rubbish, 30.9% of the respondents reported that the local authority/a private company removed the garbage at least once a week, 12.3% burnt it in a communal pit, 12.5%

dumped or left it lying anywhere, 17.4% said it was removed by the municipality once a week and 7.0% put it in their own refuse dump (Table 4.11).

Table 4.11: Ways of disposing rubbish/garbage (n = 2 287)

Household ways of dispose of rubbish/garbage	Number (n)	Percentage (%)
Removed by local authority/private company at least once a week	478	30.9
Removed by local authority/private company less often than once a week	61	2.6
Removed by community members, contracted by the municipality, at least once a week	343	17.4
Removed by community members, contracted by the municipality, less often than once a week	106	4.7
Removed by community members at least once a week	27	1.5
Removed by community members less often than once a week	17	0.5
Communal refuse dump/communal container	116	4.6
Own refuse dump	245	7.0
Dump or leave rubbish anywhere (e.g. roadside, river/pond, etc.)	356	12.5
Burn it (e.g. in communal pit, in the open, etc.)	396	12.3
Bury it	90	3.1
Other (specify)	52	2.9

4.4 Sources of Lighting and Heating

4.4.1 Access to or use of electricity

With regard to access to electricity, 51.3% of respondents reported that they did not have access to electricity (Table 4.12). In the Northern Cape, 92.2% of households had access to electricity, followed by Mpumalanga (84.9%), North West (66.2%) and the Western Cape with 63.2%. By contrast in Limpopo, 99.0% of respondents reported that they did not have access to electricity, followed by the Free State (69.3%), KwaZulu-Natal (62.3%), and Gauteng (51.9%) (Table 4.12).

Table 4.12: Access to electricity by households per province

Province	Yes		No		Don't know		Total
	%	95% CI	%	95% CI	%	95% CI	n
Western Cape	63.2	[38.1-82.7]	34.8	[16.5-59.0]	2.1	[1.0-4.3]	205
Eastern Cape	55.7	[45.4-65.6]	43.9	[34.0-54.3]	0.4	[0.1-2.7]	313
Northern Cape	92.2	[89.6-94.2]	7.8	[5.8-10.4]	0.0		160
Free State	30.6	[3.8-83.1]	69.3	[16.9-96.2]	0.1	[0.0-0.9]	257
KwaZulu-Natal	37.7	[20.5-58.5]	62.3	[41.5-79.5]	0.0		208
North West	66.2	[22.8-92.8]	33.5	[7.1-76.8]	0.4	[0.0-3.4]	198
Gauteng	47.6	[19.5-77.2]	51.9	[22.4-80.1]	0.5	[0.2-1.6]	854
Mpumalanga	84.9	[35.6-98.3]	15.1	[1.7-64.4]	0.0		60
Limpopo	0.0		99.0	[84.9-99.9]	1.0	[0.1-15.1]	90
Total	48.1	[30.3-66.4]	51.3	[33.0-69.2]	0.6	[0.3-1.3]	2 345

4.4.2 Type of connections

Of those who had access to electricity, 81.2% reported that the supply was via a metered connection to the house, while 9.5% of dwellings connected from a neighbour's house, and 7.5% connected from the street (Table 4.13). Provincially, the Eastern Cape had the highest percentage (25.3%) of households that had electricity connection from the street, followed by KwaZulu-Natal and the Western Cape with 24.7% and 22.8% respectively.

Table 4.13: Types of household electricity connections by province

Province	In-house meter %	From neighbour's house %	Connection from street %	Other %	Total n
Western Cape	43.4	32.1	22.8	1.6	145
Eastern Cape	45.7	25.4	25.3	3.6	168
Northern Cape	97.3	0.6	2.1	0.0	154
Free State	95.5	0.7	2.8	1.0	47
KwaZulu-Natal	70.3	0.0	24.7	4.9	90
North West	97.7	2.3	0.0	0.0	115
Gauteng	92.8	4.6	0.8	1.8	359
Mpumalanga	96.2	3.8	0.0	0.0	28
Limpopo	*	*	*	*	*
Total	81.2	9.5	7.5	1.8	1106

* No data for type of electricity connection, as there was no electricity in the visited areas in Limpopo.

4.4.3 Incidence of electricity blackouts/outages

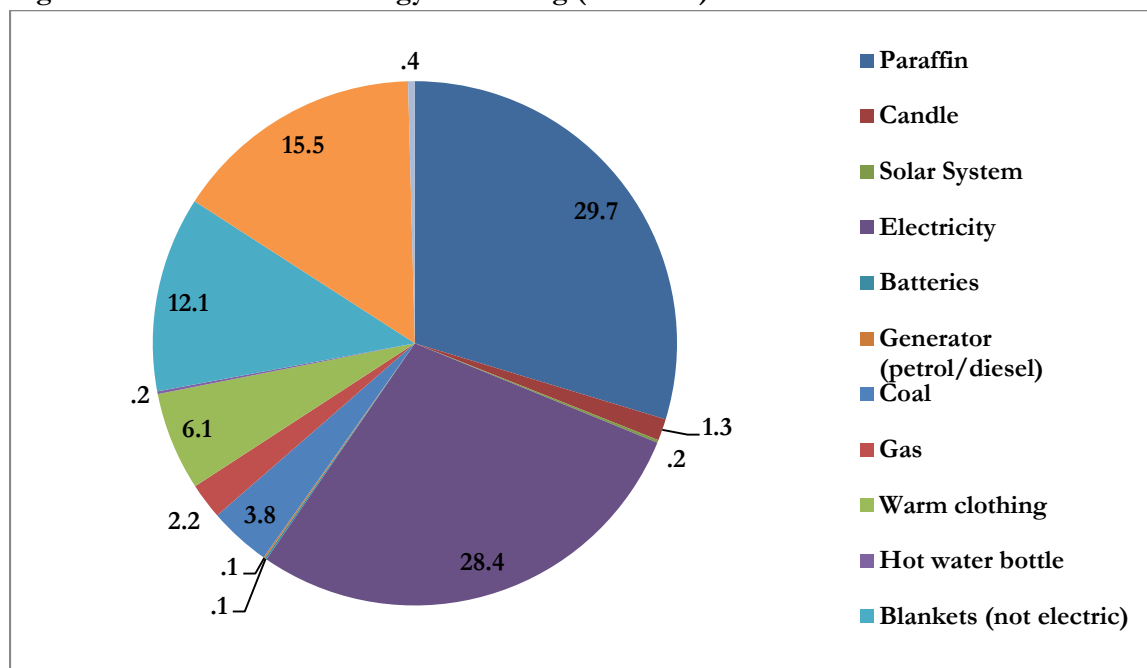
The average number of electricity outages experienced by households per week was 2.44 (\pm SD 2.52) days, ranging from 1 to 20 days (Table 4.14). Translated to hours per day, the mean number of hours without electricity per day was 16.55 (\pm SD 8.86), ranging from 1 to 24 hours.

Table 4.14: Incidence of electricity outages

	Number (n)	Minimum	Maximum	Mean	Std. deviation
How many blackouts/electricity outages do you experience per week?	914	0	20	2.44	2.52
How many hours per day do you get electricity?	957	1	24	16.55	8.86

4.4.4 Main sources of heating, cooking and lighting

Sources of energy in households were categorised into heating (Figure 4.4), cooking (Figure 4.5) and lighting (Figure 4.6). Results indicated that 29.7% of households in informal settlements targeted for upgrading used paraffin as their main source of heating. This was followed closely by electricity at 28.4% and wood at 15.5% (Figure 4.4).

Figure 4.4: Main source of energy for heating (n = 2 089)

The main source for cooking energy used by households in informal settlements was found to be paraffin (40.7%) and electricity (40.9%); combined, these accounted for 81.6% of respondents using these sources of energy (Figure 4.5). About 9.4% of the households used wood. A smaller proportion of the households used gas (less than 7.0%) and even less frequently generators (diesel) or coal.

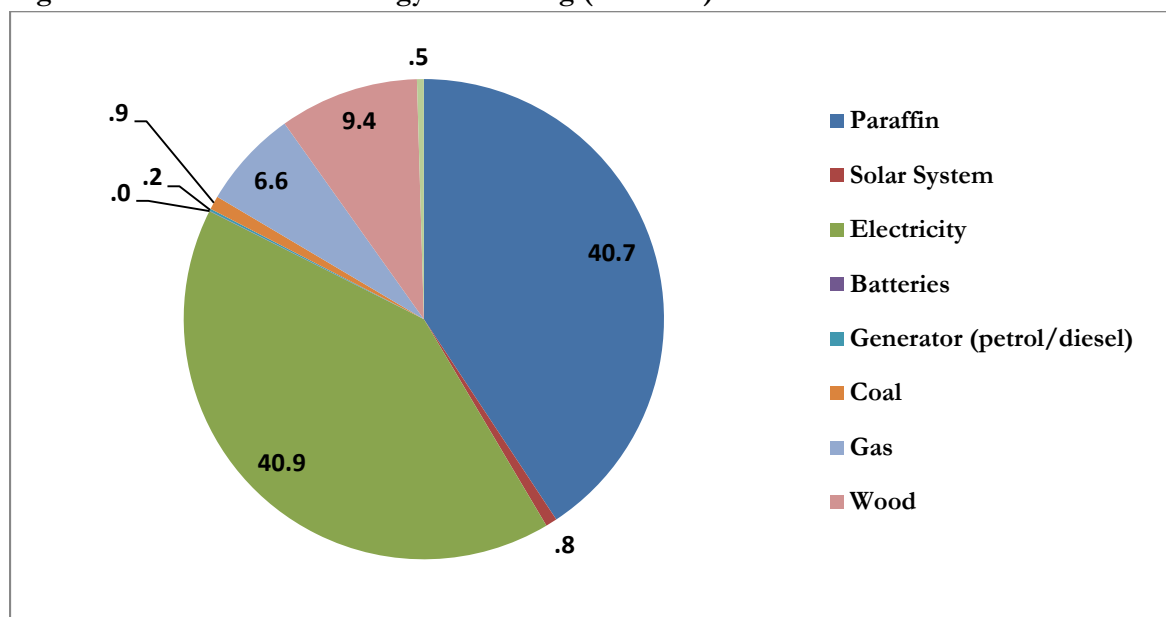
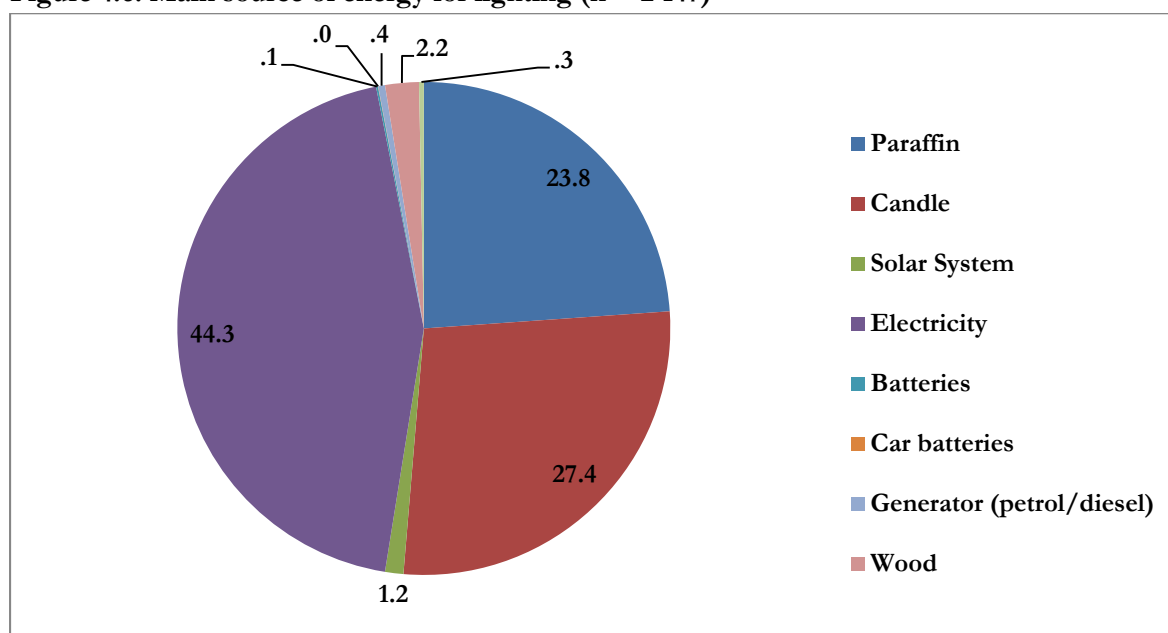
Figure 4.5: Main source of energy for cooking (n = 2 210)

Figure 4.6 presents the main source of energy used by households for lighting. Most of the households (44.3%) used electricity as the main source for lighting, and less frequently paraffin (23.8%) and candles (27.4%).

Figure 4.6: Main source of energy for lighting (n = 2 147)



4.4.5 Adequacy of household energy needs

With regard to adequacy of household energy needs, 48.2% reported that they had an adequate source of lighting, followed by 48.5% for cooking and 47.6% for heating (Table 4.15).

Table 4.15: Adequacy of energy sources

Sources	Adequate		Not adequate		Total n
	n	%	n	%	
Lighting	1 122	48.2	1 184	51.8	2 306
Cooking	1 090	48.5	1 192	51.5	2 282
Heating	1 039	47.6	1 213	52.4	2 252

The majority (74.3%) of respondents reported that they did not have enough money to pay for the energy they needed, followed by the scarcity of firewood (5.0%), unavailability of gas or paraffin in the shops (4.7%), and a limited supply of electricity to the households (3.9%) (Table 4.16).

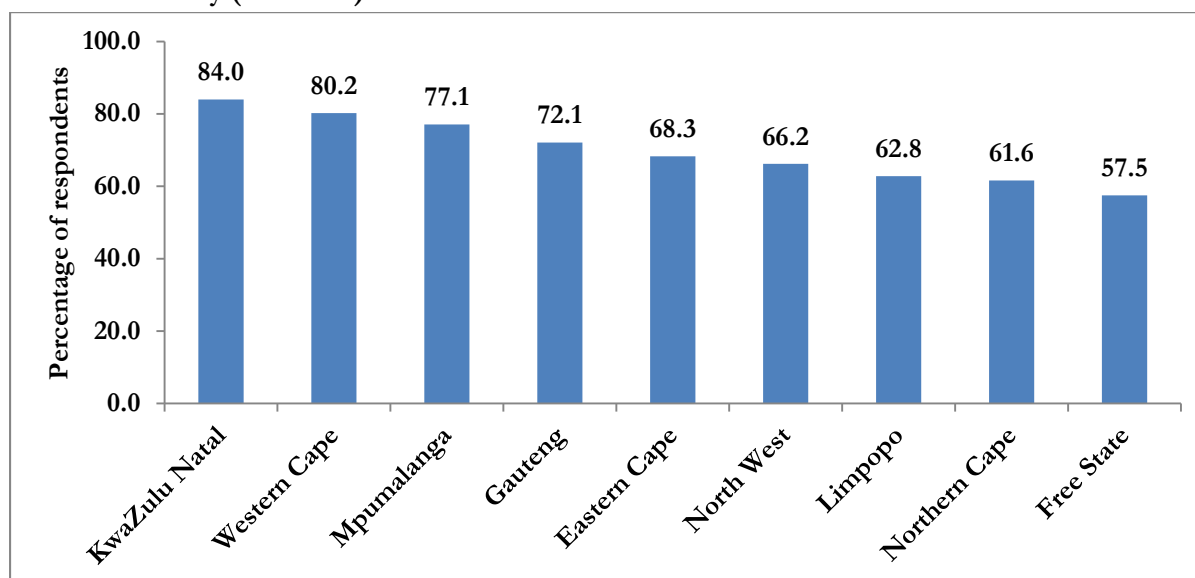
Table 4.16: Main reason why respondents felt that the amount of energy was inadequate to meet their households' needs

Main reason	Number (n)	Percentage (%)
Not enough money to pay for the energy we need	957	74.3
There are many electricity power cuts in my area	39	3.1
The supply of electricity to my household is limited	70	3.9
Firewood is very scarce	71	5.0
Gas or paraffin not always available in the shops	79	4.7
Other	60	4.1
Don't know/uncertain	54	4.9
Total	1330	100.0

4.5 Access to Emergency Services

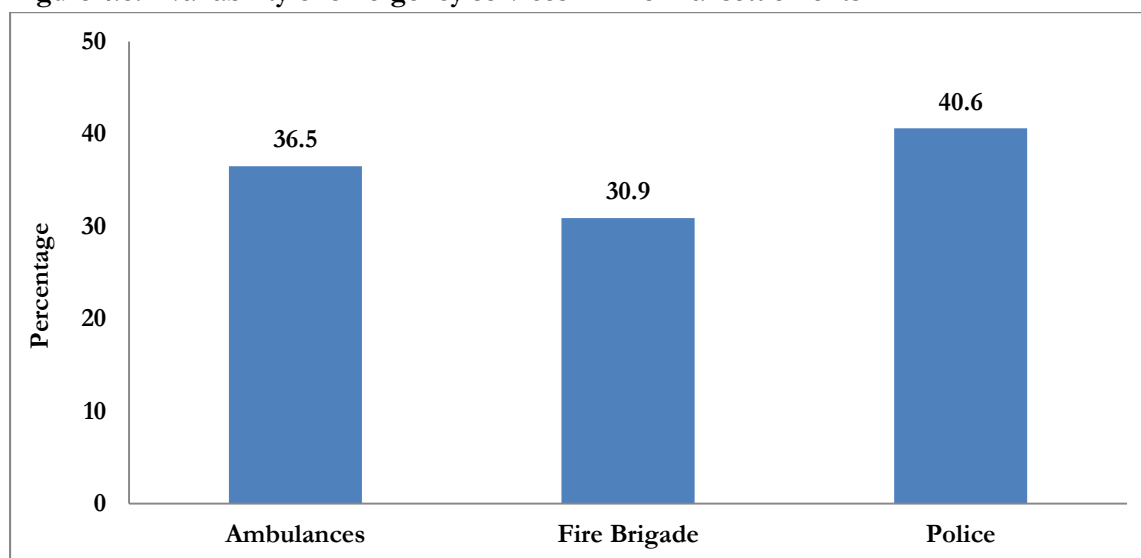
Provincially, the ability of respondents of informal settlements to access emergency services without difficulty exceeded the 80% rate in two provinces, namely KwaZulu-Natal and the Western Cape (Figure 4.7). The lowest percentage of access (57.5%) was reported in the Free State.

Figure 4.7: Proportion of reported accessibility of informal settlements by emergency services without difficulty (n = 2 297)



Household residents were asked to rate the responsiveness of the emergency services in their settlements, when such were needed. The police was more available to respond (40.6%), followed by ambulances (36.5%) and lastly fire brigades (30.9%). What was significant was that none of the services exceeded 50.0% availability (Figure 4.8).

Figure 4.8: Availability of emergency services in informal settlements



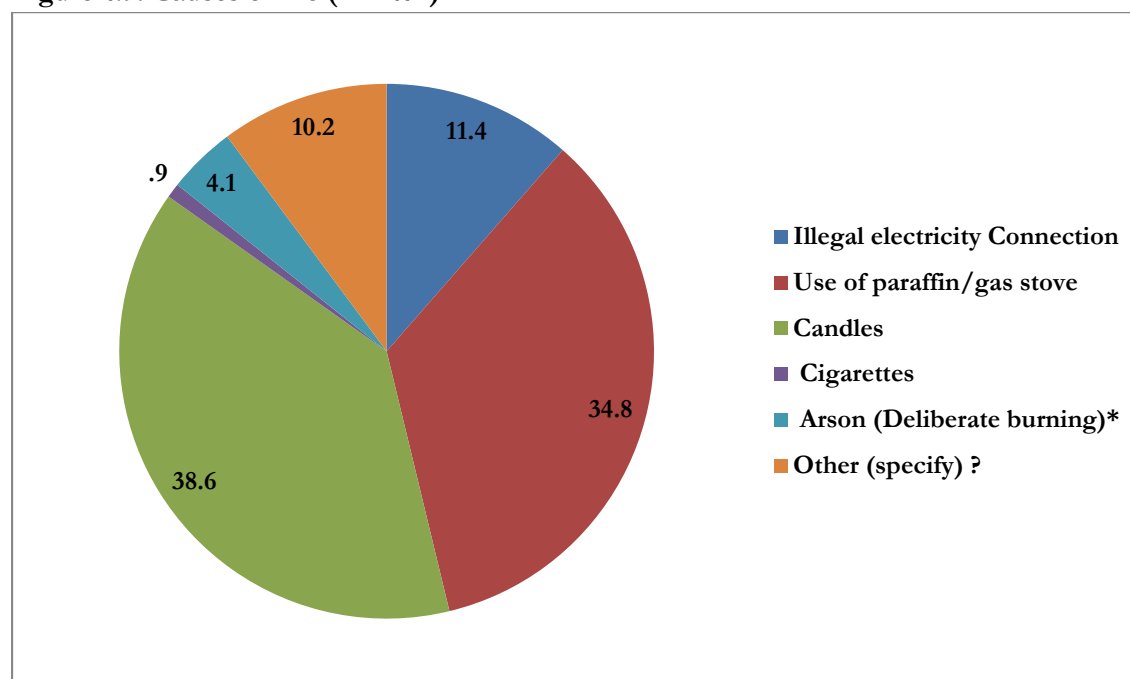
4.6 Environmental Challenges in Settlements

Respondents were asked to highlight environmental challenges in their settlements with regard to fire. Table 4.17 shows reported experiences with fire in the dwelling by province. Overall, almost one out of three household respondents had experienced a fire in their dwelling while living in the current informal settlement. The Eastern Cape (45.5%) and Gauteng (37.5%) had the highest percentages, while Mpumalanga had the lowest rate (4.6%), followed by Western Cape with 17.5%.

Table 4.17: Percentage of household respondents which experienced fire in the dwelling while living in their current settlement by province

Province	Yes		No		Total n
	%	95% CI	%	95% CI	
Western Cape	17.5	[13.5-22.5]	82.5	[77.5-86.5]	197
Eastern Cape	45.5	[27.3-65.0]	54.5	[35.0-72.7]	305
Northern Cape	25.3	[14.8-39.8]	74.7	[60.2-85.2]	147
Free State	29.8	[14.8-50.8]	70.2	[49.2-85.2]	253
KwaZulu-Natal	20.4	[10.9-35.0]	79.6	[65.0-89.1]	200
North West	30.2	[20.3-42.2]	69.8	[57.8-79.7]	189
Gauteng	37.5	[22.2-55.8]	62.5	[44.2-77.8]	813
Mpumalanga	4.6	[4.4-4.7]	95.4	[95.3-95.6]	42
Limpopo	31.9	[19.8-47.0]	68.1	[53.0-80.2]	86
Total	33.4	[24.2-44.0]	66.6	[56.0-75.8]	2232

Most of the fires in their dwellings were related to the use of candles (38.6%), paraffin or gas stoves (34.8%), and illegal electricity connections (11.4%), or arson (10.2%) (Figure 4.9)

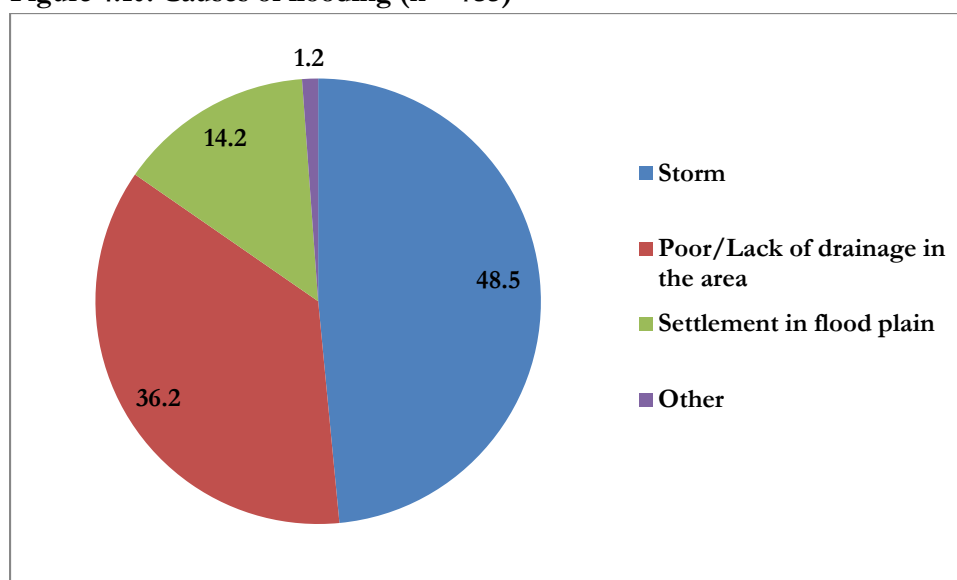
Figure 4.9: Causes of fire (n = 472)

Flooding was another environmental challenge that residents of informal settlements faced. In the Eastern Cape, 63.5% of households experienced flooding in the last year, while the North West was the least affected province by floods (8.7%) (Table 4.18).

Table 4.18: Percentage of household respondents who experienced flooding while living in their current settlement by province

Province	Yes		No		Total n
	%	95% CI	%	95% CI	
Western Cape	20.5	[11.9-32.9]	79.5	[67.1-88.1]	198
Eastern Cape	63.5	[47.1-77.2]	36.5	[22.8-52.9]	312
Northern Cape	31.0	[17.4-48.9]	69.0	[51.1-82.6]	151
Free State	40.4	[33.9-47.3]	59.6	[52.7-66.1]	255
KwaZulu-Natal	36.4	[31.8-41.3]	63.6	[58.7-68.2]	200
North West	8.7	[3.6-19.6]	91.3	[80.4-96.4]	194
Gauteng	24.4	[17.6-32.7]	75.6	[67.3-82.4]	800
Mpumalanga	32.0	[27.6-36.8]	68.0	[63.2-72.4]	47
Limpopo	9.4	[1.3-45.6]	90.6	[54.4-98.7]	77
Total	26.8	[21.0-33.6]	73.2	[66.4-79.0]	2234

In relation to the reported or perceived cause(s) of flooding, storms accounted for 48.5%, with poor or lack of drainage in the area accounting for 36.2% of cases (Figure 4.10).

Figure 4.10: Causes of flooding (n = 735)

Mudslides were also reported as problematic in some provinces, with only 7.0% of the households interviewed having been affected by mudslides (Table 4.19). Although only 7.0% of households across all provinces were affected by mudslides, this was particularly problematic in the Eastern Cape (31.9%) and KwaZulu-Natal (17.2%) (Table 4.19).

Table 4.19: Percentage of household respondents that experienced mudslides while living in the current settlement

Province	Mudslides experience		Total n
	Yes (%)	No (%)	
Western Cape	5.6	94.4	155
Eastern Cape	31.9	68.1	170
Northern Cape	9.6	90.4	125
Free State	11.8	88.2	182
KwaZulu-Natal	17.2	82.8	159
North West	6.3	93.7	168
Gauteng	3.6	96.4	600
Mpumalanga	3.2	96.8	32
Limpopo	0.9	99.1	63
Total	7.0	93.0	1654

4.7 Satisfaction with Services in the Informal Settlements

The respondents' perception of services varied considerably, not only in the degree of satisfaction/dissatisfaction, but also in the type of services provided (Table 4.20). The two service types with the highest affirmative (satisfied) responses were "household water quality" (44.8%) and "supply of water" (35.3%). The corresponding services that residents were dissatisfied with, were housing (31.5%), employment opportunities (34.0%) and sanitation services (31.3%). Further, the rate for "very dissatisfied" respondents was even higher (range 30.5%-50.0%) for seven of the 13 areas of service the questions asked related to.

Table 4.20: Level of satisfaction with services in the settlements

Item	Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied	I don't know	Total n
	%	%	%	%	%	%	
Household water quality	13.8	44.8	5.0	19.1	16.0	1.3	2338
Supply of water	11.4	35.3	7.0	25.9	20.0	0.3	2338
Sanitation services	2.9	18.8	9.2	31.3	35.2	2.6	2326
Frequency of electricity supply	6.1	23.5	6.6	22.8	36.9	4.0	2282
Wastewater collection services	0.9	13.7	18.1	29.9	31.4	6.0	2262
Refuse removal	3.5	26.8	14.3	28.9	25.5	1.1	2321
Public service	1.7	20.7	16.7	29.6	30.5	0.8	2305
Public transport links	8.5	47.2	11.5	18.3	14.2	0.3	2312
Police service	3.8	33.9	13.1	25.7	22.4	1.1	2300
Employment opportunities	1.3	8.0	8.9	34.0	47.3	0.6	2308
Support from community	6.7	26.7	20.3	24.3	21.6	0.4	2306
Housing	0.8	6.6	10.6	31.5	50.0	0.5	2318
Land ownership	3.2	11.9	12.4	27.5	41.5	3.5	2259

Provincially, the Northern Cape and Western Cape recorded the highest levels of satisfaction (combined very satisfied and satisfied) for water supply among the visited households, with 79.5% and 66.8% respectively (Table 4.21). The highest levels of dissatisfaction (dissatisfied and very dissatisfied) were reported in Limpopo (67.9%) and Mpumalanga (71.7%). Furthermore, respondents in the settlements in Limpopo were also dissatisfied (dissatisfied and very dissatisfied) with the quality of the water supplied (75.6%) (Table 4.22). For the Western Cape, Northern Cape, Free State and North West provinces, more than half of the visited households were satisfied (very satisfied and satisfied) with the quality of water supplied.

Table 4.21: Level of satisfaction with water supply services by province

Province	Very satisfied %	Satisfied %	Neither satisfied nor dissatisfied %	Dissatisfied %	Very dissatisfied %	I don't know %	Total n
Western Cape	32.1	34.7	0.9	22.6	9.7	0.0	207
Eastern Cape	5.9	35.5	11.6	31.5	15.5	0.0	317
Northern Cape	6.2	73.3	2.7	12.9	3.6	1.3	163
Free State	36.4	19.1	0.9	20.2	23.4	0.0	255
KwaZulu-Natal	8.8	29.5	9.6	29.7	22.5	0.0	208
North West	9.9	56.1	15.8	14.2	4.0	0.0	194
Gauteng	9.5	33.3	6.4	27.8	22.3	0.6	847
Mpumalanga	3.8	14.5	10.1	50.6	21.1	0.0	57
Limpopo	2.3	26.0	3.8	24.1	43.8	0.0	90
Total	11.4	35.3	7.0	25.9	20.0	0.3	2338

Table 4.22: Level of satisfaction with household water quality services by province

Province	Very satisfied %	Satisfied %	Neither satisfied nor dissatisfied %	Dissatisfied %	Very dissatisfied %	I don't know %	Total n
Western Cape	30.3	47.4	1.1	14.0	7.2	0.0	207
Eastern Cape	6.3	55.1	6.7	17.7	5.8	8.3	316
Northern Cape	9.0	61.5	4.4	18.6	5.2	1.3	161
Free State	37.0	34.8	0.8	10.6	16.8	0.0	256
KwaZulu-Natal	8.8	42.2	7.2	21.9	20.0	0.0	208
North West	11.2	61.8	12.5	11.4	3.0	0.0	195
Gauteng	13.6	43.1	4.8	20.5	17.1	0.9	846
Mpumalanga	18.3	43.7	6.8	22.5	8.7	0.0	59
Limpopo	2.8	21.0	0.7	27.8	47.8	0.0	90
Total	13.8	44.8	5.0	19.1	16.0	1.3	2338

Table 4.23 presents the level of satisfaction or dissatisfaction with regard to sanitation services across provinces. Only the Northern Cape and North West had more than half of the visited households satisfied (very satisfied and satisfied) with sanitation services at 66.7% and 56.6% respectively. Limpopo recorded the highest percentage (90.7%) of respondents who reported to be dissatisfied (dissatisfied and very dissatisfied) with sanitation services in their informal settlements, followed by Mpumalanga with 82.4% of respondents dissatisfied with sanitation services.

Table 4.23: Level of satisfaction with sanitation services by province

Province	Very satisfied %	Satisfied %	Neither satisfied nor dissatisfied %	Dissatisfied %	Very dissatisfied %	I don't know %	Total n
Western Cape	8.1	28.4	6.7	29.2	27.6	0.0	205
Eastern Cape	2.9	16.2	7.2	28.4	44.7	0.5	316
Northern Cape	3.0	63.7	2.4	21.7	7.8	1.3	161
Free State	16.6	11.3	3.0	23.1	45.9	0.1	256
KwaZulu-Natal	3.0	10.9	13.1	44.4	28.6	0.0	207
North West	6.1	50.5	13.8	15.3	13.9	0.4	194
Gauteng	1.1	13.7	10.0	32.9	37.6	4.7	842
Mpumalanga	0.0	7.8	9.8	51.3	31.1	0.0	56
Limpopo	0.0	4.7	4.6	37.4	53.3	0.0	89
Total	2.9	18.8	9.2	31.3	35.2	2.6	2 326

With regard to refuse removal, only the households in the Western Cape reported a more than 40.0% satisfaction rate (very satisfied and satisfied), while the Free State, Eastern Cape, Gauteng, Mpumalanga, Northern Cape and Limpopo provinces reported a more than 50.0% dissatisfaction level (dissatisfied and very dissatisfied) (Table 4.24).

Table 4.24: Level of satisfaction with refuse removal services by province

Province	Very satisfied %	Satisfied %	Neither satisfied nor dissatisfied %	Dissatisfied %	Very dissatisfied %	I don't know %	Total n
Western Cape	2.7	40.2	26.0	12.5	18.1	0.5	202
Eastern Cape	0.0	23.2	8.7	29.2	37.0	1.9	316
Northern Cape	1.4	31.5	9.6	46.0	10.1	1.3	160
Free State	3.7	12.1	2.1	25.6	56.5	0.0	256
KwaZulu-Natal	7.6	29.7	12.4	23.1	24.2	2.9	208
North West	1.1	22.7	34.3	28.1	12.3	1.5	196
Gauteng	4.3	28.4	12.4	30.5	23.4	0.9	839
Mpumalanga	3.6	9.8	16.3	39.1	27.6	3.6	55
Limpopo	2.3	9.1	2.3	39.6	46.7	0.0	89
Total	3.5	26.8	14.3	28.9	25.5	1.1	2321

Table 4.25 highlights that overall the majority (81.5%) of respondents in the settlements targeted for upgrading was not satisfied (combined dissatisfied and very dissatisfied) with housing services in their settlements across all provinces. Furthermore, Limpopo had none of the respondents satisfied (combined satisfied and very satisfied) with housing services. Gauteng was the province with the second lowest rating (3.5%) with regard to satisfaction level (combined very satisfied and satisfied).

Table 4.25: Level of satisfaction with housing services by province

Province	Very satisfied %	Satisfied %	Neither satisfied nor dissatisfied %	Dissatisfied %	Very dissatisfied %	I don't know %	Total n
Western Cape	0.9	4.8	20.1	31.4	41.1	1.7	202
Eastern Cape	1.4	7.1	4.3	20.6	65.7	0.9	317
Northern Cape	2.7	36.2	8.6	40.7	9.5	2.2	164
Free State	4.3	3.5	8.6	19.2	64.3	0.1	255
KwaZulu-Natal	0.5	11.5	9.3	33.8	44.4	0.4	208
North West	3.5	20.2	26.3	27.3	22.4	0.2	195
Gauteng	0.0	3.5	8.1	34.0	54.1	0.4	836
Mpumalanga	3.4	10.8	10.1	51.9	23.5	0.3	54
Limpopo	0.0	0.0	7.0	31.2	61.8	0.0	87
Total	0.8	6.6	10.6	31.5	50.0	0.5	2318

In terms of the relationship between the community and local government, the North West recorded the highest percentage (54.1%) of respondents who perceived the relationship to be either very good or good, followed by the Western Cape with 47.2% (Table 4.26). Nearly one third (31.8%) of all respondents perceived this relationship as neither good nor bad across provinces. Most provinces had at least 30.0% of the visited households indicating that there was a bad (bad and very bad) relationship between the community and the local government (except Western Cape and North West).

Table 4.26: Quality of relationship between community and local government by province

Province	Very good	Good	Neither good nor bad	Bad	Very bad	Total
	%	%	%	%	%	n
Western Cape	5.9	41.3	38.0	8.8	6.0	205
Eastern Cape	3.3	21.6	29.5	28.8	16.8	318
Northern Cape	5.4	37.7	20.6	28.8	7.5	164
Free State	7.4	23.2	27.7	27.1	14.6	257
KwaZulu-Natal	3.2	26.7	32.5	21.5	16.0	207
North West	7.2	46.9	28.9	11.3	5.6	195
Gauteng	4.3	28.9	30.2	21.9	14.7	853
Mpumalanga	3.6	20.9	35.2	26.0	14.3	55
Limpopo	2.3	21.7	45.6	19.3	11.1	89
Total	4.5	30.3	31.8	20.5	12.9	2343

With regard to municipal responsiveness towards community needs across all settlements, 23.7% of the respondents reported that municipalities were not responsive to community needs (Table 4.27). The Western Cape (63.3%) and North West (61.1%) recorded the highest percentages of respondents who indicated that municipalities were responsive (very responsive and moderately responsive) to the community needs. Limpopo and Gauteng had the highest number of respondents who highlighted that the municipalities were rarely responsive, with 46.3% and 40.6% respectively. The highest percentage (57.3%) of respondents who indicated that the municipalities were not responsive to the community needs was recorded in the Free State.

Table 4.27: Municipal responsiveness to community needs by province

Province	Very responsive	Moderately responsive	Rarely responsive	Not responsive	Total
	%	%	%	%	n
Western Cape	15.0	48.3	28.7	8.0	205
Eastern Cape	6.3	30.8	34.5	28.4	316
Northern Cape	20.3	30.1	28.0	21.6	164
Free State	8.5	22.2	12.0	57.3	256
KwaZulu-Natal	5.8	39.3	29.2	25.8	207
North West	8.0	53.1	26.0	12.9	195
Gauteng	8.2	26.7	40.6	24.5	851
Mpumalanga	7.3	20.5	18.3	54.0	56
Limpopo	4.5	18.6	46.3	30.5	90
Total	8.6	31.7	36.0	23.7	2340

4.8 Summary

Overall, informal settlements lacked basic services for decent human existence and this was evident with regard to living conditions, availability of water and sanitation, and access to electricity and social services. It was therefore not surprising that their general level of satisfaction with services and living in these areas, in general, was low. The variable availability of the services was also due to the fact that some settlements were in the early stages of upgrading and therefore had some services.

In the absence of specific norms and standards for upgrading informal settlements for South Africa and even internationally, it is not easy to find credible comparators to the observed basic services status indicators. This is a fundamental omission to the UISP and needs to be addressed if future progress and impact assessments are to be conducted effectively.

Access to water was reasonably high (60.0%) with the common water source being communal or public tap. By 2011, Stats SA reported that 71.6% of indigent households received free basic water (SERI, 2013). Clearly, informal dwellers' access to water in 2015 is still below the 2011 free basic water coverage for indigent households. However, the quality of water was reported to be generally good.

Similarly, access to sanitation services was also lower than the latest national coverage figures for free basic sanitation of 57.9% versus 22.4% (flush toilet connected to a municipal sewerage system) in informal settlements. The Western Cape had made significant progress in this regard at 83.0%.

Nearly 21% of informal settlement households reported that the local authority/a private company collected garbage at least once a week. Once again, free basic removal services had reached 54.1% for the indigent countrywide in 2011. Only 47.0% of the informal settlement households reported having access to electricity against a free basic electricity coverage of 59.5% in 2011 (SERI, 2013). However, the predominant source of energy for cooking was paraffin, electricity for lighting, and paraffin and electricity for heating. Although the availability of emergency service such as ambulances, fire brigades and police was relatively low across the informal settlements, the services were largely accessible to most settlements (over 60.0% across provinces).

Environmental challenges were not uncommon across the informal settlements, with most having had an experience with fire (due to the energy mix) or flooding or mudslides (due to geographical location and vulnerabilities).

5. PHYSICAL AND ENVIRONMENTAL VULNERABILITIES

Since the UISP aims to improve the quality of life of informal dwellers through the provision of basic infrastructural services and consolidation of the top structures, these were measured in a number of ways. The National Development Plan (National Planning Commission, 2011) links quality of life to the following:

- Nutrition
- Housing, water, sanitation and electricity
- Transport, education and skills
- Safety and security
- Health care
- Employment, and
- Recreation and leisure, and a clean environment

In terms of national comparisons to a clean environment, Table 5.1 shows that all provinces, with the exception of Limpopo, experienced a decrease in the collection of refuse removal from shacks between 2001 and 2011. This trend has not changed across informal settlements for the better, and poses obvious health risks associated with such a decrease in refuse removal.

Table 5.1: Households living in shacks (not in backyards) with access to refuse removal*

Province	Percentage in 2001	Percentage in 2011
Eastern Cape	54.0	43.0
Free State	46.0	39.0
Gauteng	55.0	51.0
KwaZulu-Natal	66.0	62.0
Limpopo	17.0	20.0
Mpumalanga	37.0	35.0
North West	36.0	25.0
Northern Cape	48.0	42.0
Western Cape	74.0	69.0
South Africa	53.0	48.0

*Source: HDA, 2013.

5.1 Physical Environmental Risks

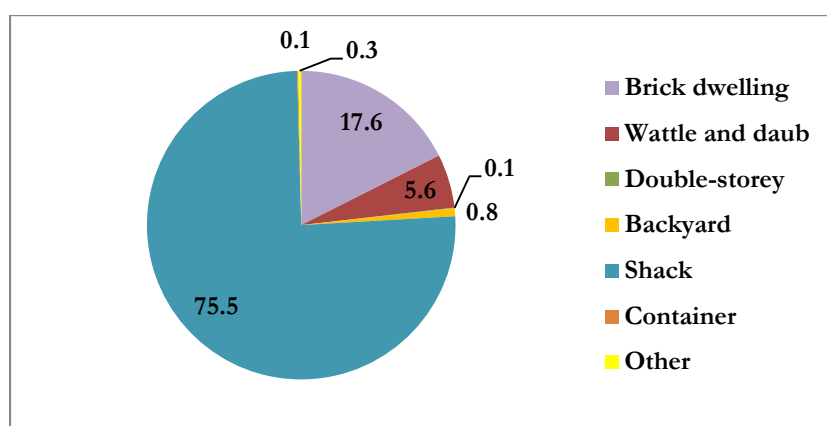
5.1.1 Risk and vulnerability

Most informal settlements were located in areas that were either vulnerable to flooding or fire, next to heavy industrial or service infrastructure (e.g. slimes dams, railway reserves or road reserves), or subject to negative geotechnical conditions or planning constraints such as wetlands. Campbell and Rethabiseng, in Northern Cape and Gauteng, respectively, are examples of informal settlements located close to dams or flood plains which make them prone to flooding.

Some informal settlements were located near dumping sites, which pose serious health risks in terms of polluted air. Some dwellers depended on such dumping sites for their food. The Dumping Site informal settlement in Randfontein is an example of this.

Statistics on the type of dwelling, materials of the roofs and walls, as well the condition thereof, was collected based on the observation of fieldworkers. Most households (75.5%) were staying in shacks made of semi-permanent material (Figure 5.1). Only 17.6% of households stayed in brick structures, while 5.6% stayed in dwellings made of wattle and daub.

Figure 5.1: Type of dwelling in selected informal settlements (n = 2 337)



The walls of informal dwellings were mostly constructed of corrugated iron (66.8%) and secondly of cement block/concrete (10.7%) (Table 5.2). Brick walls were observed in 8.4% of cases, while plastic walls were found in 3.5% of households.

Table 5.2: Material used for walls of informal dwellings (n = 2 254)

Type of wall	Percentage (%)
Bricks	8.4
Cement block/concrete	10.7
Corrugated iron/zinc	66.8
Wood/timber	3.2
Plastic/marquee material/cloth	3.5
Cardboard	3.2
Mud and cement mix	1.6
Wattle and daub	0.2
c	0.0
Mud/Clay	1.5
Thatching/grass	0.0
Asbestos	0.4
Other	0.6

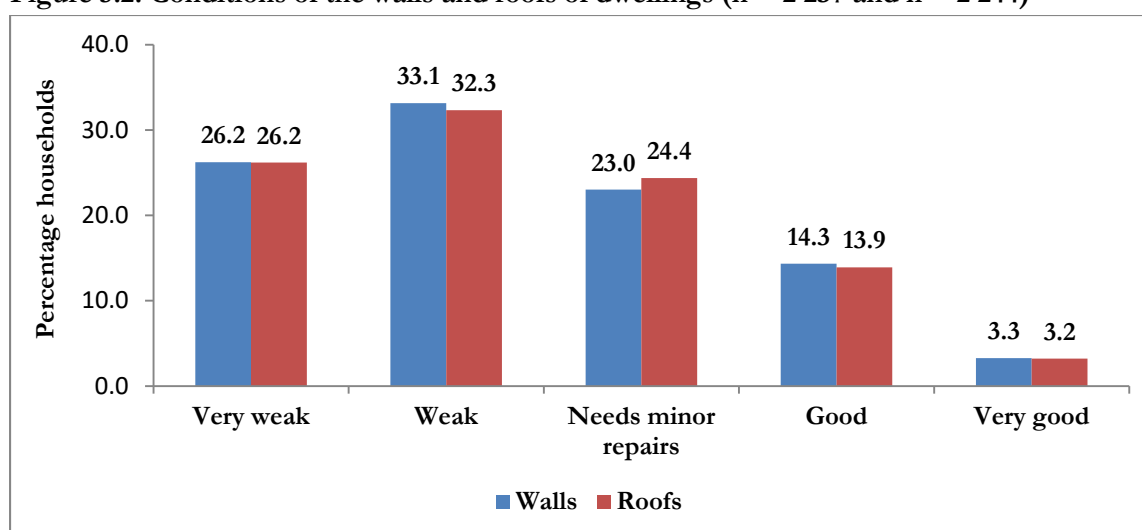
The observed roof materials of dwellings were predominantly corrugated iron (84.5%) (Table 5.3). Other materials were observed in a few cases, namely cement (5.4%) and plastic or cloth (2.7%).

Table 5.3: Material used for roofs (n = 2 284)

Type of roof	Percentage (%)
Bricks	1.0
Cement block/concrete	5.4
Corrugated iron/zinc	84.5
Wood/Timber	1.2
Plastic/Marquee material/Cloth	2.7
Cardboard	1.1
Mud and cement mix	0.3
Wattle and daub	0.0
Tile	1.5
Mud/Clay	0.0
Thatching/grass	0.1
Asbestos	1.3
Other(Specify)	0.7

Figure 5.2 shows that walls and roofs of dwellings required attention because most were weak or very weak (range 33.1% and 26.2%, respectively).

Figure 5.2: Conditions of the walls and roofs of dwellings (n = 2 237 and n = 2 244)



Conversely, very few dwellings (17.6%) had walls that were in a good or very good condition. Roofs were mostly in a weak or very weak condition (combined total 58.5%), while only 3.2% were in a very good condition. The roofs of most dwellings required attention and posed a risk to the occupants.

5.1.2 Vulnerability to fire

The use of combustible materials such as paraffin or candles for whatever reason increases the risk of fire in a household. Households which reported a fire indicated that it was mostly caused by flammable solvents like paraffin (34.8%) or candles (38.6%). Illegal connections and “other” reasons as a cause of a fire made up a further 21.6% (Table 5.4).

Table 5.4: Causes of fire in the informal settlements (n = 675)

Cause	Percentage (%)
Illegal electricity connection	11.4
Use of paraffin/gas stove	34.8
Candles	38.6
Cigarettes	0.9
Arson	4.1
Other	10.2

Risk and vulnerability to fire was furthermore increased by the type of building material used (flammable) and the density of houses and shacks. Many shacks were built with non-permanent materials which is an indication of the uncertainty of the duration of stay (UN-Habitat 2003). However, this poses a fire risk.

5.1.3 Vulnerability to flooding

Fieldwork observations recorded that many informal settlements were located in areas vulnerable to flooding due to being located in flatlands. Furthermore, the baseline study showed that the causes of floods were mostly storms (48.5%), poor drainage (36.2%) and being situated in a flood plain (14.2%) (Figure 4.10).

5.1.4 Geotechnical conditions

The geology of the sampled informal settlements showed that few settlements were located on dolomite, shale or sand, which are considered unsafe (Annexure 3, Section 5, Table A5.1). Shale and dolomite are considered to be prone to expansion, which can cause damage due to continual heavage and shrinkage.

Freedom Square and Afghanistan Section in Gauteng are located on dolomite and chart. Dolomite is a collapsible soil which can cause damage due to differential settlement. In the Northern Cape, Rainbow Valley and Skerpdraai are located on sand. Settlements located on shale only were mostly situated in Gauteng and KwaZulu-Natal.

5.1.5 Planning constraints (zoned agricultural land)

Poortjie, an informal settlement in KwaZulu-Natal, is located in an agricultural area, and the type of upgrading proposed for this settlement is an agro-village. This will not only enable people to get jobs but also encourage small- to medium-scale farming. According to the municipality, bulk water supply is already available and sewer upgrading is covered by Mkhambathini Wastewater Works and Reticulation. The process is however slow because of legal procedures pertaining to the expropriation of the identified land strip.

5.2 Summary

Typical characteristics of informal settlements are non-compliance with building regulations and standards, unsatisfactory housing and living conditions, as well as a low probability of finding a home built of solid and long-lasting materials. (UN-Habitat, 2003: DHS, 2011). This phenomenon was found in many of the sampled settlements. Since the objective of upgrading should be to reduce vulnerability (Abbott, 2002), the findings of the baseline study showed that there is a lot of physical environmental vulnerabilities and risks in the sampled informal settlements. This included very poor quality of roofs and walls, dwellings constructed of corrugated iron, and roofs made of cardboard or cloth.

The underlying assumption of the UISP is that the quality of life of communities will improve through provision of associated basic services and subsequent better housing. This baseline study has showed that the necessary basic services and housing were largely absent in informal settlements targeted for upgrading. It would, therefore, be important to use the indicators of the current study to measure improvements in follow-up studies.

6. HEALTH, FOOD AND NUTRITION SECURITY

Improving health and safety is among the key objectives of the UISP, and this chapter specifically addresses the key indicators for health, food and nutrition in the informal settlements targeted for upgrading and sampled for this study. Informal settlements by their nature are associated with a variety of health challenges due to the physical, environmental, social and economic deprivation that the residents experience. They are characterised by high population density, congested physical structures and a general lack of basic services such as clean water and sanitation services, as well as high rates of crime. Such an environment predisposes the dwellers to all forms of health risks and conditions. Not only are the risks of contracting disease(s) and experiencing injury high, access to appropriate health services is also generally poor and therefore the wellbeing of such residents is equally at high risk.

Lack of access to potable clean water predisposes informal dwellers to diarrhoeal diseases (such as dysentery, typhoid, cholera), respiratory disease particularly among children under five years of age, who are known to be at a high risk of poor growth with attendant malnutrition;. Overcrowding and poorly ventilated structures provide conducive grounds for communicable diseases such as tuberculosis (TB) and other respiratory infections. Violence against women and children, sexually transmitted diseases and HIV and AIDS are also more prevalent in informal settlements. Informal settlement dwellers are likely to experience psychological disorders that go undiagnosed because of factors such as constant stress associated with inadequate resources (making ends meet on very few resources), constant fear of violence and high levels of victimisation/exposure to trauma, disjuncture between aspiration and the reality of extreme deprivation, as well as a sense of exclusion and neglect. Consequently, health outcomes, for example maternal, infant and child morbidity and mortality, among informal dwellers tend to be higher than in the general population.

This chapter presents the results on the general health, food and nutrition status of informal dwellers based on a selected set of key questions around morbidity patterns and mortality, food availability and types, TB, diarrhoeal and respiratory infections and time lost to illness.

6.1 Burden of Disease (Selected Indicators)

Table 6.1 shows the reported experiences of death for infants and children, miscarriage or still births and occurrence of TB in a household in the last 12 months preceding the interview.

Table 6.1: Household occurrence of deaths, miscarriage/still birth or abortion and TB in the last 12 months

Experiences in the last 12 months	Yes (%)	No (%)	Total (n)
<1 year death (Infant Mortality)	5.7	94.3	2348
<5 year death in the last 12 months	3.4	96.6	2343
Miscarriage or still birth or abortion in the last 12 months	5.4	94.6	2343
Tuberculosis in the last 12 months	5.9	94.1	2345

Nearly 6.0% of the households reported to have experienced the death of a child younger than one year of age. Only 73 households (3.4%) reported to have experienced the death of a child younger than five years of age, 153 households (5.4%) experienced a miscarriage or still birth or abortion, and 178 (5.9%) households reported that they had experienced TB.

There were marked differences in the reported infant mortality, miscarriages or abortion, and TB across the provinces (Table 6.2). Infant mortality was highest in Northern Cape at 14.2%, followed by Mpumalanga, KwaZulu-Natal, Gauteng and the Free State at 10.9%, 7.2%, 6.4% and 6.1%, respectively. Mpumalanga had the highest reported mortality of children younger than 5 years of age at 7.4% and Western Cape had the lowest rate at 0.5%. Reported miscarriage or abortion rates were highest in the Northern Cape (14.3%), and lowest in North West at 1.3%. Reported TB rates were high in Mpumalanga, Northern Cape, and Eastern

Cape at 24.0%, 12.8% and 11.4% respectively. This could probably be due to exposure of household members to mining activities in their province and or migrant labourer work.

Table 6.2: Household occurrence of deaths, miscarriage or abortion and TB in the last 12 months by province

Province	<1 year death infant mortality			<5 years death in the last 12 months			Miscarriage or still birth or abortion in the last 12 months			TB in the last 12 months		
	Yes (%)	No (%)	Total (n)	Yes (%)	No (%)	Total (n)	Yes (%)	No (%)	Total (n)	Yes (%)	No (%)	Total (n)
Western Cape	1.9	98.1	203	0.5	99.5	203	2.1	97.9	203	3.7	96.3	203
Eastern Cape	3.9	96.1	318	1.9	98.1	318	7.4	92.6	318	11.4	88.6	318
Northern Cape	14.2	85.8	165	6.0	94.0	164	14.3	85.7	165	12.8	87.2	165
Free State	6.1	93.9	257	4.3	95.7	257	8.9	91.1	257	2.9	97.1	257
KwaZulu-Natal	7.2	92.8	208	3.3	96.7	208	9.1	90.9	208	5.0	95.0	207
North West	5.1	94.9	199	5.7	94.3	198	1.3	98.7	198	8.9	91.1	197
Gauteng	6.4	93.6	849	3.9	96.1	846	5.4	94.6	844	5.0	95.0	847
Mpumalanga	10.9	89.1	59	7.4	92.6	59	10.3	89.7	60	24.0	76.0	60
Limpopo	3.4	96.6	90	1.2	98.8	90	3.4	96.6	90	2.9	97.1	91

6.2 Household Food and Nutrition Status

6.2.1 Food availability and types

Respondents were asked if they had experienced specific food and nutrition challenges in the last 12 months. Nearly eighty percent (79.2%) of the households reported that there were either “sometimes” or “always” worried about running out of food (Table 6.3), with one out of five households (21.6%) reporting that there always was a concern that the household would run out of food. Nearly six out of ten (59.1%) households were sometimes unable to eat healthy and nutritious food with almost one out of five (20.0%) households being always unable to eat healthy and nutritious food. The rates of a household sometimes “only eating a few healthy foods”, “skipping meals”, “ate less”, “run out of food”, “being hungry but did not eat”, and “went without eating a whole day” varied from 42.4% to 59.1%. At the provincial level, the reported household food and nutrition situation was generally similar, with provinces such as KwaZulu-Natal and Northern Cape reporting relatively high rates of hunger and consumption of less nutritious foods. For instance, 33.5% of households in KwaZulu-Natal reported being worried of food shortages, 25.8% were always unable to eat healthy and nutritious food, and nearly 21.9% of them always ran out of food (Annexure 3, Section 6, Table A6.1). This is possibly explained by the lack of access to government provided interventions by informal dwellers.

Table 6.3: Household food and nutrition situation in the last 12 months

Nutrition situation	Never %	Sometimes %	Always %	Total n
The family was worried that it would run out of food	20.9	57.6	21.6	2 351
The family was unable to eat healthy and nutritious food	20.9	59.1	20.0	2 340
The family ate only a few kinds of foods	21.5	58.0	20.5	2 343
Some family members had to skip a meal	33.0	51.7	15.3	2 334
The family ate less than it thought it should	28.2	56.4	15.4	2 335
The household ran out of food	31.9	53.2	15.0	2 324
Someone in the family was hungry but did not eat	42.1	45.5	12.4	2 278
Someone in the family went without eating for a whole day	47.1	42.4	10.5	2 179

6.2.2 Under 5s children's food and nutrition situation

Household respondents were asked about their consumption of nutritious foods in the recent past, particularly for children younger than 5 years of age. Nutritious food in this case meant that the meal consisted of all six categories of nutrients that the body needs, that is protein, carbohydrates, fat, fibre, vitamins and minerals, and water. This also included vegetables, fruits meat, dairy, legumes (e.g. peas, beans), and others.

In 53.3% and 13.8% of the households, respectively, children younger than 5 years of age did not “sometimes” or “always” eat healthy and nutritious food because of a lack of money or other resources (Table 6.4). Furthermore, 53.1% and 12.8%, respectively, of the households reported children younger than 5 years of age “sometimes” or “always” not being given enough food because of a lack of money or other resources.

Table 6.4: Consumption of adequate and nutritious food for children younger than 5 years old in the last 12 months

Nutrition situation (For children under 5 years old)	Never %	Sometimes %	Always %	Total n
Did not eat healthy and nutritious foods because of a lack of money or other resources	32.9	53.3	13.8	1 013
Was not given enough food because of a lack of money or other resources	34.1	53.1	12.8	993

Table 6.5 compares provinces in terms of food consumption for children under the age of 5 years. KwaZulu-Natal, Limpopo and North West province had relatively higher rates of households who reported that such children were “always not eating healthy and nutritious foods because of a lack of resources” at 17.4%, 16.4% and 16.3%, respectively. The corresponding rates for “not given enough food because of a lack of money or other resources” in these provinces were 12.1%, 17.1% and 18.3%, respectively.

Table 6.5: Consumption of adequate and nutritious food for children younger than 5 years old in the last 12 months by province

Question	Response		WC	EC	NC	FS	KZN	NW	GP	MP	LP
Did not eat healthy and nutritious foods because of a lack of money or other resources	Never	%	65.8	27.0	39.2	13.3	43.2	11.3	31.4	51.2	16.0
	Sometimes	%	25.9	69.4	53.1	70.8	39.4	72.3	52.7	47.3	67.6
	Always	%	8.3	3.6	7.7	15.9	17.4	16.3	15.9	1.5	16.4
	Total	n	94	105	127	106	88	73	324	44	52
Was not given enough food because of a lack of money or other resources	Never	%	66.7	25.5	38.7	12.4	44.5	12.1	33.4	51.7	12.7
	Sometimes	%	24.9	68.1	53.7	74.4	43.5	69.7	52.2	47.9	70.2
	Always	%	8.4	6.4	7.5	13.3	12.1	18.3	14.2	0.4	17.1
	Total	n	100	103	128	95	87	69	318	47	51

6.3 General Health

6.3.1 Occurrence of illnesses or injury during the 4 weeks preceding the interview

Overall, just over one out of six (13.8%) households in the study reported a household member having suffered an illness or injury during the 4 weeks preceding the interview (Table 6.6), with a trend for females (16.5%) to have a higher rate than males (15.3%) of such an incident. Provincial analysis (Table 6.6) showed North West having the highest prevalence (18.4%) of people who suffered an illness or injury followed by the Northern Cape (17.4%) with the Western Cape having the lowest rate (11.6%).

Table 6.6: Reported illnesses or injuries during the past 4 weeks for all household members by province

Province	Yes		No		Total n
	%	95% CI	%	95% CI	
Western Cape	11.6	[9.0-14.8]	88.4	[85.2-91.0]	570
Eastern Cape	13.3	[10.6-16.5]	86.7	[83.5-89.4]	1078
Northern Cape	17.4	[10.1-28.3]	82.6	[71.7-89.9]	581
Free State	13.2	[9.1-18.6]	86.8	[81.2-90.9]	793
KwaZulu-Natal	16.4	[11.1-23.5]	83.6	[76.5-88.9]	881
North West	18.4	[13.7-24.2]	81.6	[75.8-86.3]	703
Gauteng	12.7	[10.5-15.3]	87.3	[84.7-89.5]	2928
Mpumalanga	17.0	[13.5-21.3]	83.0	[78.7-86.5]	181
Limpopo	14.1	[12.2-16.3]	85.9	[83.7-87.8]	348
Total	13.8	[12.2-15.5]	86.2	[84.4-87.8]	8063

The majority of the household members had flu as the main cause of illness (47.0%), followed by high blood pressure (6.4%), HIV Infection (5.5%), tuberculosis (4.5%), and injury (4.2%) (Annexure 3, Section 6, Table A6.2). Nearly 10.0% of household members reported suffering from “other” medical conditions such as stroke, STI, or headaches. Significant provincial variations were also observed for all medical conditions, except flu (Annexure 3, Section 6, Table A6.3).

Respondents were asked how many days in the recent past household members had been ill or injured; the mean number of days was 8.91 days (ranging from 0 day-91 days). Provincial analysis showed that the Northern Cape had the lowest rate of morbidity (6.6 days) and KwaZulu-Natal the highest rate (12.78 days) (Table 6.7).

Table 6.7: Number of days in the recent past* a household member reported ill or injured

Stat/Province	WC	EC	NC	FS	KZN	NW	GP	MP	LP
Mean	7.74	7.55	6.60	9.96	12.78	7.95	8.99	8.92	8.39
Range	31	38	30	90	91	31	90	29	60
Min	0	0	1	0	0	0	0	1	0
Max	31	38	31	90	91	31	90	30	60

*Question was for past 4 weeks but respondents overstated recall period

With regard to the number of days in the recent past a household member was not able to function normally because of illness or injury, the mean number of days was 6.14 days (ranging from 0 day to 90 days). Table 6.8 shows the reported mean number of days not able to function by province. Mpumalanga had the highest mean number of reported days that a household member was not able to function normally (10.05 days), with North West having the lowest mean of 5.11 days.

Table 6.8: Reported number of days in the recent past* a household member was unable to function normally

Stat/Province	WC	EC	NC	FS	KZN	NW	GP	MP	LP
Mean	6.33	5.94	5.74	6.11	8.90	5.11	5.70	10.05	7.29
Range	29	53	33	90	60	30	90	30	60
Min	1	0	0	0	0	0	0	0	0
Max	30	53	33	90	60	30	90	30	60

* Question enquired for the past 4 weeks but respondents extended the recall period

6.3.2 Prevalence of tobacco smoking

The study enquired about how often each household member smoked tobacco: the majority never smoked (81.7%), 17.8% (combined total) smoked “often” or “sometimes” and 0.4% for don’t know (Table 6.9). Categorised by gender, the majority (88.6%) of the females had never smoked; 4.4% were reported to have smoked often, and 6.8% smoked “sometimes” only. Of the males, 15.8% “often” smoked tobacco and 10.0% smoked “sometimes”. Overall, 9.4% of household members smoked “often”. Comparison of tobacco smoking responses across provinces showed that the majority of household members “never” smoked. The proportion of those who “often” smoked tobacco ranged from 5.7% in KwaZulu-Natal to 14.5% in the Western Cape (Table 6.9).

Table 6.9: Prevalence of smoking tobacco for all household members by province

Province	Often		Sometimes		Never		Don't know		Total n
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Western Cape	14.5	[11.1-18.7]	11.6	[9.5-14.2]	73.8	[71.2-76.2]	0.1	[0.0-1.0]	527
Eastern Cape	8.5	[5.3-13.2]	10.3	[8.1-13.0]	80.2	[75.7-84.0]	1.1	[0.5-2.5]	1070
Northern Cape	13.9	[11.4-16.8]	12.9	[6.1-25.4]	72.6	[63.2-80.4]	0.6	[0.2-2.0]	554
Free State	10.3	[7.7-13.5]	10.0	[8.1-12.4]	78.3	[76.8-79.8]	1.4	[0.8-2.6]	766
KwaZulu-Natal	5.7	[3.9-8.3]	10.0	[7.2-13.7]	84.3	[79.0-88.5]	0.0		897
North West	8.3	[6.6-10.2]	15.3	[12.7-18.3]	76.4	[73.8-78.8]	0.1	[0.0-1.0]	690
Gauteng	9.4	[8.0-11.2]	6.6	[3.7-11.3]	83.8	[80.6-86.5]	0.2	[0.1-0.9]	2892
Mpumalanga	11.4	[8.5-15.1]	3.5	[2.4-5.1]	85.1	[79.9-89.1]	0.0		169
Limpopo	9.6	[8.8-10.5]	5.1	[4.2-6.1]	84.0	[81.1-86.5]	1.3	[0.6-2.9]	345
Total	9.4	[8.4-10.6]	8.4	[6.3-11.2]	81.7	[79.4-83.8]	0.4	[0.2-0.7]	7910

6.3.3 Prevalence of alcohol consumption

Of the 7854 household members, 82.0% were reported to have “never” consumed alcohol, and the remainder (18.0%) “often” or “sometimes” consumed alcohol. There were gender differences in alcohol consumption, with 8.4% of males and 2.4% of females consuming alcohol “often”. More females (89.3%) were reported to have “never” consumed alcohol as compared to males (74.6%). The pattern of having “never” consumed alcohol was generally similar across the provinces, with minor differences in the frequency of consuming alcohol “sometimes” or “often” (Table 6.10)

Table 6.10: Prevalence of alcohol consumption for all household members by province

Province	Often		Sometimes		Never		Total n
	%	95% CI	%	95% CI	%	95% CI	
Western Cape	5.2	[4.2-6.4]	16.2	[14.8-17.7]	78.6	[76.8-80.4]	523
Eastern Cape	3.8	[1.7-8.4]	19.2	[16.0-23.0]	77.0	[72.3-81.0]	1053
Northern Cape	6.6	[4.3-10.0]	16.0	[10.3-24.1]	77.4	[71.6-82.3]	549
Free State	5.9	[4.3-8.1]	17.3	[12.3-23.7]	76.8	[70.1-82.3]	766
KwaZulu-Natal	2.4	[0.9-6.5]	8.3	[6.6-10.3]	89.3	[85.3-92.3]	887
North West	3.1	[1.5-6.3]	18.8	[14.0-24.9]	78.1	[74.0-81.7]	694
Gauteng	6.0	[4.9-7.3]	10.9	[8.4-14.0]	83.1	[80.1-85.7]	2877
Mpumalanga	7.8	[6.0-10.2]	16.3	[14.3-18.5]	75.9	[75.9-75.9]	162
Limpopo	5.4	[5.0-5.7]	10.5	[7.8-14.0]	84.1	[81.2-86.7]	343
Total	5.2	[4.3-6.2]	12.8	[10.7-15.2]	82.0	[79.9-84.0]	7854

6.3.4 Prevalence of substance abuse

Substance abuse (e.g. drugs) is a major societal problem, especially among the youth in South Africa. The household respondents were asked whether any of their household members abused any substances (e.g. drugs): 95.3% of respondents reported household members “never” abused any substance, and only 3.9%

(combined total) of respondents acknowledged household members abused substances “often” or “sometimes” with 0.9% for “don’t know” (Table 6.11). Of the 3 805 female household members, 0.4% were reported as “often” abusing substances, 2.4% as only abusing substances “sometimes” and 96.9% as having “never” abused any substances. Substance abuse was reported to be relatively higher in males with 1.4% and 4.7% respectively having been reported to have “often” and “sometimes” abused substances. The pattern of reported substance abuse was generally similar across provinces, although Northern Cape had the highest rate of substance abuse (6.7%) “sometimes” (Table 6.11).

Table 6.11: Reported substance abuse for all household members by province

Province	Often		Sometimes		Never		Don't know		Total n
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Western Cape	0.6	[0.1-2.5]	2.6	[0.4-14.9]	95.7	[79.6-99.2]	1.1	[0.2-5.6]	528
Eastern Cape	0.5	[0.2-1.1]	3.5	[1.7-7.0]	94.3	[90.1-96.8]	1.7	[1.0-3.0]	1033
Northern Cape	0.9	[0.3-2.5]	6.7	[4.4-10.1]	89.0	[85.3-91.8]	3.4	[1.7-6.8]	547
Free State	0.4	[0.1-1.5]	3.2	[0.9-10.8]	95.3	[89.9-97.9]	1.1	[0.4-3.3]	765
KwaZulu-Natal	0.2	[0.0-1.0]	2.7	[1.9-3.8]	96.9	[96.0-97.6]	0.2	[0.0-1.1]	889
North West	0.1	[0.0-0.7]	2.5	[1.2-5.1]	95.9	[93.4-97.4]	1.5	[0.8-3.0]	703
Gauteng	1.3	[0.7-2.5]	3.1	[1.9-5.0]	95.2	[93.3-96.6]	0.4	[0.1-1.8]	2876
Mpumalanga	0.0		4.3	[3.2-5.9]	95.7	[94.1-96.8]	0.0		159
Limpopo	0.7	[0.3-1.6]	2.0	[0.6-6.3]	95.8	[94.6-96.7]	1.6	[0.9-2.5]	338
Total	0.9	[0.5-1.6]	3.0	[2.2-4.1]	95.3	[94.0-96.2]	0.9	[0.5-1.4]	7838

6.3.5 State of general health

The study sought to establish the general state of health of household members compared to that of the previous year. Only 10.3% (combined total) of the dwellers’ health compared to one year ago was reported as either “somewhat worse” or “much worse”, 47.8% of respondents reported their general health as being “about the same”, and 42.0% as either “much better” or “somewhat better”. Comparative findings across provinces showed that KwaZulu-Natal had 71.5% of household members’ reported state of health as having remained the same, followed by the Free State at 52.7%. Nonetheless, the general household member perception across the provinces was that their state of health had improved (combined “much better” and “somewhat better”). The proportion of informal dwellers in Mpumalanga whose state of health was reported as “somewhat worse” and “much worse” (combined) than the preceding year was 9.6% (Table 6.12).

Table 6.12: Reported general state of health compared to one year ago for all household members by province

Province	Much better	Somewhat better	About the same	Somewhat worse	Much worse	Total
	%	%	%	%	%	n
Western Cape	42.0	6.6	35.3	7.4	8.6	536
Eastern Cape	31.3	12.2	46.9	5.6	4.0	1074
Northern Cape	44.2	17.3	33.9	3.0	1.6	478
Free State	20.2	12.4	52.7	7.7	7.0	774
KwaZulu-Natal	4.6	14.5	71.5	6.2	3.3	900
North West	35.9	16.4	41.6	5.7	0.4	693
Gauteng	22.4	20.4	45.7	10.2	1.3	2957
Mpumalanga	40.9	19.7	29.8	7.4	2.2	181
Limpopo	23.2	15.2	59.5	1.1	0.9	329
Total	24.8	17.2	47.8	8.0	2.3	7922

6.3.6 Prevalence of diarrhoeal diseases

Household respondents were asked if household members had any episodes of diarrhoea in the last month. Only 2.7% were reported to have experienced diarrhoea. Mpumalanga had the highest reported cases of diarrhoea (6.5%), followed by the Western Cape at 4.8%. The Free State (1.0%) and the Northern Cape and Gauteng with 2.2% each had the least number of reported cases of diarrhoea (Table 6.13).

Table 6.13: Reported diarrhoeal cases in the last month for all household members by province

Province	Yes		No		Total n
	%	95% CI	%	95% CI	
Western Cape	4.8	[3.7-6.2]	95.2	[93.8-96.3]	551
Eastern Cape	3.1	[1.8-5.2]	96.9	[94.8-98.2]	1053
Northern Cape	2.2	[0.8-5.4]	97.8	[94.6-99.2]	549
Free State	1.0	[0.4-2.5]	99.0	[97.5-99.6]	783
KwaZulu-Natal	2.6	[2.1-3.3]	97.4	[96.7-97.9]	879
North West	3.3	[0.9-11.9]	96.7	[88.1-99.1]	692
Gauteng	2.2	[1.5-3.2]	97.8	[96.8-98.5]	2860
Mpumalanga	6.5	[4.0-10.6]	93.5	[89.4-96.0]	192
Limpopo	3.4	[2.4-4.7]	96.6	[95.3-97.6]	332
Total	2.7	[2.1-3.4]	97.3	[96.6-97.9]	7891

The number of reported diarrhoeal cases was higher in places where “other” sources of water (which included springs and open wells) at 4.0% followed by public tap water at 3.0% were used (Table 6.14). The problem related to use of public taps may likely be not so much the tap *per se* but rather the hygiene aspects related to the water container and storage.

Table 6.14: Reported diarrhoeal cases in the last month for all household members by main source of drinking water

Source of drinking water	Yes		No		Total n
	%	95% CI	%	95% CI	
Piped tap water in dwelling	2.0	[1.1-3.6]	98.0	[96.4-98.9]	1027
Piped tap water on site	1.9	[1.0-3.6]	98.1	[96.4-99.0]	1753
Public tap	3.0	[2.1-4.2]	97.0	[95.8-97.9]	3994
Water carrier or tanker	2.7	[1.2-5.7]	97.3	[94.3-98.8]	528
Other	4.0	[2.3-6.7]	96.0	[93.3-97.7]	484
Total	2.7	[2.1-3.4]	97.3	[96.6-97.9]	7786

The study also sought to explore the number of days a person with diarrhoea was ill and off work. Of the 214 household members that were reported to have experienced diarrhoea, the mean number of days of illness was 5.41, ranging from 1-31 days (Table 6.15). North West and the Western Cape had relatively high mean values of 7.85 and 7.26 days respectively.

Table 6.15: Number of days ill with diarrhoea and off work during the month preceding the interview, by province

Stat/Province	WC	EC	NC	FS	KZN	NW	GP	MP	LP
Mean	7.26	6.68	4.54	2.85	3.01	7.85	4.50	4.35	3.71
Range	29	19	5	6	6	19	29	29	5
Min	2	1	2	1	1	2	1	1	2
Max	31	20	7	7	7	21	30	30	7

To explore the types of diarrhoeal diseases that informal dwellers suffered from, respondents were asked if they had seen blood or mucous in household members' stool. Of the 236 household members that were reported to have experienced diarrhoea, 2.8% (n = 11) had blood, 16.7% (n = 51) had mucous, 6.5% (n = 7) had both blood and mucous in the stool. About 25.9% (n = 63) of household members had also experienced vomiting.

6.3.7 Prevalence of respiratory diseases

Data was collected of household members if they had ever experienced breathing problems and or chest infections in the month preceding the interview. Of the 7 816 informal dwellers, 4.5% confirmed to have had such symptoms. The latter rates ranged from 2.6% in the Free State and Limpopo to 13.3% in North West (Annexure 3, Section 6, Table A6.4).

The study also sought to explore the number of days a household member was ill with respiratory illness. The mean number of days with respiratory illness was 7.48 (the maximum ranging from 27-60 days). Although household respondents were asked about experience in the last month, some respondents reported more days than the prescribed recall period, hence the variation in the means across provinces (Table 6.16).

Table 6.16: Reported numbers of days with a respiratory illness and off work in the past month*

Stat/Province	WC	EC	NC	FS	KZN	NW	GP	MP	LP
Mean	5.37	5.85	9.06	6.86	10.12	5.25	10.88	10.81	9.99
Range	30	29	29	27	60	50	60	29	29
Min	1	1	2	1	0	1	0	2	1
Max	31	30	31	28	60	51	60	31	30

* Question enquired for the past month but respondents extended the recall period

Of the 396 household members who were reported to have experienced respiratory illness, 53.7% had a cough. This pattern was similar across provinces with the rates of coughing being highest in Limpopo (98.0%), the Free State (88.3%) and Northern Cape at 64.1% (Table 6.17). A similar pattern of rates and provincial distributions was recorded for those who were reported to have experienced "breathing with a sound" (60.6%) (Table 6.18), or had "rapid breathing" (56.0%) (Table 6.19). With regard to those who were reported to have experienced "breathing with a sound", Mpumalanga recorded the highest percentage with 88.4% (Table 6.18). The Eastern Cape had the highest percentage (78.6%) of household members who were reported to having experienced "rapid breathing" (Table 6.19).

Table 6.17: Reported experience of any cough among household members with respiratory illness by province

Province	Yes		No		Total
	%	95% CI	%	95% CI	n
Western Cape	55.2	[21.2-84.9]	44.8	[15.1-78.8]	35
Eastern Cape	75.0	[67.3-81.4]	25.0	[18.6-32.7]	64
Northern Cape	64.1	[43.9-80.3]	35.9	[19.7-56.1]	26
Free State	88.3	[49.9-98.3]	11.7	[1.7-50.1]	23
KwaZulu-Natal	50.8	[13.7-87.1]	49.2	[12.9-86.3]	50
North West	32.4	[10.7-65.8]	67.6	[34.2-89.3]	55
Gauteng	54.2	[41.9-66.0]	45.8	[34.0-58.1]	117
Mpumalanga	32.6	[14.3-58.4]	67.4	[41.6-85.7]	16
Limpopo	98.0	[73.8-99.9]	2.0	[0.1-26.2]	10
Total	53.7	[38.8-68.0]	46.3	[32.0-61.2]	396

Table 6.18: Reported experience of breathing with a sound among household members with respiratory illness by province

Province	Yes		No		Total n
	%	95% CI	%	95% CI	
Western Cape	84.8	[65.1-94.3]	15.2	[5.7-34.9]	32
Eastern Cape	77.6	[63.5-87.3]	22.4	[12.7-36.5]	67
Northern Cape	59.5	[47.8-70.2]	40.5	[29.8-52.2]	27
Free State	82.0	[61.5-92.9]	18.0	[7.1-38.5]	23
KwaZulu-Natal	53.0	[20.8-82.9]	47.0	[17.1-79.2]	51
North West	35.1	[18.1-57.0]	64.9	[43.0-81.9]	54
Gauteng	65.4	[53.2-75.9]	34.6	[24.1-46.8]	118
Mpumalanga	88.4	[17.8-99.6]	11.6	[0.4-82.2]	15
Limpopo	62.5	[32.2-85.5]	37.5	[14.5-67.8]	10
Total	60.6	[46.7-72.9]	39.4	[27.1-53.3]	397

Table 6.19: Reported experience of rapid breathing among household members with respiratory illness by province

Province	Yes		No		Total n
	%	95% CI	%	95% CI	
Western Cape	61.9	[39.4-80.3]	38.1	[19.7-60.6]	30
Eastern Cape	78.6	[65.0-87.9]	21.4	[12.1-35.0]	65
Northern Cape	60.4	[45.3-73.8]	39.6	[26.2-54.7]	27
Free State	49.4	[12.6-86.9]	50.6	[13.1-87.4]	22
KwaZulu-Natal	43.6	[12.4-81.0]	56.4	[19.0-87.6]	52
North West	56.3	[35.7-75.0]	43.7	[25.0-64.3]	47
Gauteng	52.3	[40.3-64.0]	47.7	[36.0-59.7]	114
Mpumalanga	70.9	[55.6-82.6]	29.1	[17.4-44.4]	12
Limpopo	51.1	[35.8-66.2]	48.9	[33.8-64.2]	10
Total	56.0	[45.4-66.1]	44.0	[33.9-54.6]	379

6.4 Summary

The results provide a broad impression about the current state of health, as well as of food and nutrition security in informal settlements. The number of reported deaths of children under 1 year ($n = 161$) and 5 years of age ($n = 73$) if converted to per 1 000 live births becomes significantly higher than the general population of 23.6 (2013) and 34.3 (2013) per 1000 live births (Stats SA, 2015a) respectively, confirming that health outcomes among informal dwellers are generally worse compared to the general population. About 1.0% ($n = 450\ 000$) of the South African population develops active TB per year compared to the reported 5.9% in the informal settlements targeted for upgrading.

Over two-thirds of households reported significant challenges in accessing food and more so healthy and nutritious foods. A fifth of the respondents reported persistent challenges in accessing food. These results show high levels of food insecurity in informal settlements. Not only is the food in short supply but dietary diversity is also limited. The prevalence of hunger, defined as people who “sometimes” and “always” went without eating for a whole day (52.9%), is very high by any standards. What is clear from these findings is that the household food and nutrition situation across the provinces was unacceptable with high levels of hunger, risk of hunger and food insecurity.

Of equal concern is the reported food consumption patterns for the children under five years old, in which 66.1% of the informal households reported children under five years “sometimes” or “always” having to eat non-nutritious foods because of a lack of money or other resources. An equally higher percentage (64.8%) reported not having enough food due to the same reasons. Although the situation regarding

nutritious food adequacy was similar across provinces, these indicators were even worse in Limpopo, KwaZulu-Natal and North West.

Occurrence of illnesses or injuries

The reported levels of morbidity among informal dwellers ranged from 11.6% in Western Cape to 18.4% in North West. The common causes were flu, high blood pressure, HIV, tuberculosis and injuries. Worth highlighting is the problem of high blood pressure which is a risk factor for non-communicable diseases. The mean number of days of being sick or injured was 8.91, and this varied across provinces. Also of note was that the informal dwellers invariably reported having experienced common ailments with flu, high blood pressure, diarrhoea, injury, TB, HIV and asthma as major causes of illness or injury. The disease profile was generally similar across the provinces.

The prevalence of current smoking in the informal settlements targeted for upgrading was 17.8%, which is higher than the reported national prevalence of 16.4% in 2012 (Shisana et al, 2014). Informal settlement dwellers in the Western Cape reported the highest proportions of reported tobacco smoking with 14.5% smoking “often” and 11.6% smoking “sometimes”. Alcohol consumption was found to be high among informal dwellers at 18.0%, which, although high, is lower than the rate reported by Peltzer et al (2011) (27.7%) for both males and females. Soliciting information regarding substance abuse by any member of the household was known *a priori* going to be difficult; however, the baseline study found that about 4.0% of the respondents acknowledged the existence of the problem. Apart from Northern Cape which had a rate of 7.6% reporting frequent (“often” or “sometimes”) abuse of substance, the reported levels were very low. It is reasonable to assume an underreporting of substance abuse given the sensitivity of the matter and the fact that these questions were posed to the household head and not the specific individual.

With regard to the general state of health compared to the year preceding the interview, most of the informal dwellers had a general sense of improvement except for KwaZulu-Natal, the Free State and Limpopo where people felt it remained the same (71.5%, 52.7% and 59.5%, respectively). This baseline study also assessed occurrence of symptoms of diarrhoeal and respiratory diseases. The prevalence of diarrhoea ranged from 1.0% in the Free State to 6.5% in Mpumalanga. As found in this study, the literature is replete with evidence that diarrhoeal diseases such as dysentery, typhoid and cholera are common in informal settlements and so, too, are respiratory ailments such as acute respiratory infections, asthma and others. Such illnesses take a toll on the ability of these household dwellers to function properly and hence sustain themselves.

Although the baseline study deliberately looked at selected health, food and nutrition security indicators, the overwhelming finding is that most indicators were of concern and this is not unexpected given the difficult physical, environmental, social and economic deprivation that the residents experience. Nonetheless, these basic indicators will indeed be useful to explore further after the upgrading as part of ongoing monitoring or the impact evaluation process.

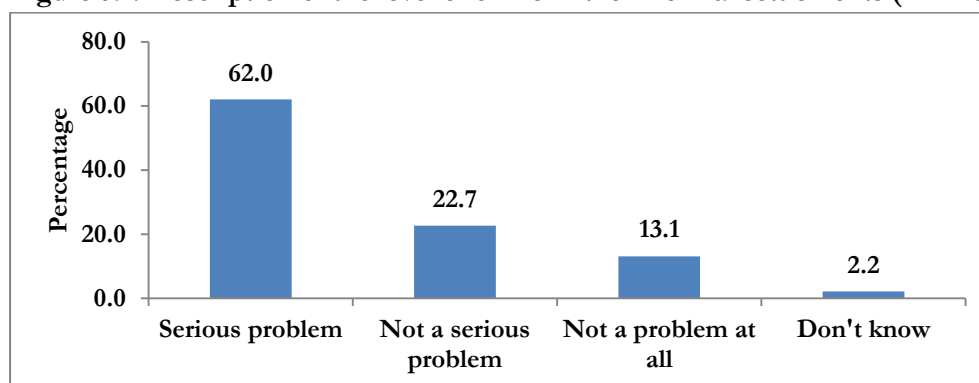
7. CRIME AND SAFETY

The UISP identifies safety among its key objectives. Activities linked to improving safety include the provision of basic infrastructural services such as water, sanitation, electricity and waste removal. The lack of adequate water, sanitation, lighting and related facilities results in assaults, especially on girls and women, and particularly at night as they access toilets, fetch water from communal standpipes or even return home from errands (Amnesty International, 2010; Corburn & Hildebrand, 2015; Gonsalves *et al* 2015). Understanding crime in informal settlements is critical to making interventions that not only address the issues of access but also crime that might arise from inadequate infrastructural services. This chapter reports on defined aspects of crime, perceptions on safety, experiences of crime over the year preceding the survey, the safety of vulnerable groups such as women and children, gender-based violence, the reporting of crime, the police's response to crime, and initiatives taken by the community in dealing with crime.

7.1 Description of Crime in Informal Settlements

A total of 62.0% of the respondents indicated that crime was a “serious problem” in their settlements. However, 22.7% of respondents were of the view that crime was “not a serious problem”, and 13.1% indicated that it was “not a problem at all” (Figure 7.1).

Figure 7.1: Description of the level of crime in the informal settlements (n = 2 357)



The Limpopo province had the highest proportion of respondents (75.3%) who indicated that crime was a “serious problem”, while the Western Cape had the lowest such response rate at 44.2% (Table 7.1). The two provinces with the highest proportion of respondents who answered that crime was “not a serious problem” in their settlements were the KwaZulu-Natal (34.6%) and the Free State (31.1%), with the lowest proportion of such a response having been recorded in Limpopo at 11.5% (Table 7.1).

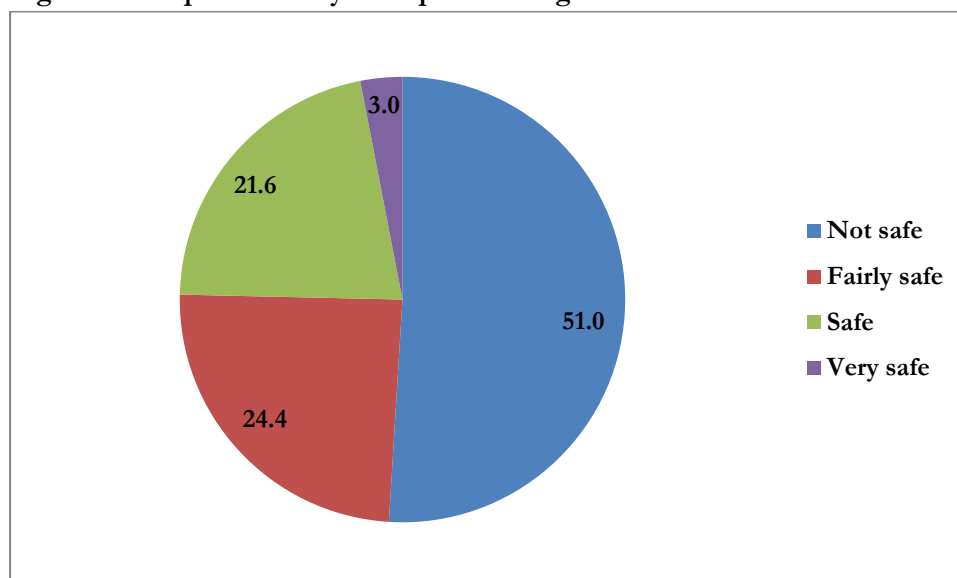
Table 7.1: Description of the level of crime by household respondents per province

Province	Serious problem		Not a serious problem		Not a problem at all		I don't know		Total
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	n
Western Cape	44.2	[34.4-54.5]	20.3	[17.2-23.7]	32.2	[20.9-46.1]	3.3	[1.1-9.8]	207
Eastern Cape	70.4	[54.6-82.4]	22.8	[12.7-37.5]	5.5	[3.4-8.9]	1.3	[0.5-3.2]	317
Northern Cape	60.9	[41.6-77.2]	21.0	[13.5-31.1]	13.7	[6.4-26.9]	4.4	[2.5-7.7]	165
Free State	62.1	[55.4-68.3]	31.1	[24.8-38.1]	6.6	[3.6-11.7]	0.2	[0.0-1.5]	254
KwaZulu-Natal	51.9	[43.6-60.1]	34.6	[29.2-40.5]	7.9	[2.3-23.6]	5.6	[2.4-12.3]	207
North West	61.1	[45.3-74.9]	29.4	[19.6-41.5]	7.0	[2.1-21.3]	2.5	[1.1-5.4]	199
Gauteng	63.5	[50.7-74.7]	21.6	[17.6-26.3]	13.0	[6.7-23.6]	1.8	[0.6-5.4]	860
Mpumalanga	66.5	[61.3-71.3]	19.6	[14.0-26.9]	13.9	[12.5-15.4]	0.0		58
Limpopo	75.3	[62.5-84.8]	11.5	[3.0-35.3]	12.7	[7.3-21.1]	0.5	[0.0-8.0]	90
Total	62.0	[54.5-69.0]	22.7	[19.3-26.6]	13.1	[8.9-18.9]	2.2	[1.2-3.9]	2357

7.2 Respondents' Perceptions of Safety against Criminals in Informal Settlements

More than half (51.0%) of the respondents felt “unsafe within their own informal settlement, while 24.4% and 21.6% of the respondents felt “fairly safe” and “safe” respectively (Figure 7.2). Only 3.0% of the respondents felt “very safe” in their community.

Figure 7.2: Reported safety of respondents against criminals in the settlement (n = 2 351)



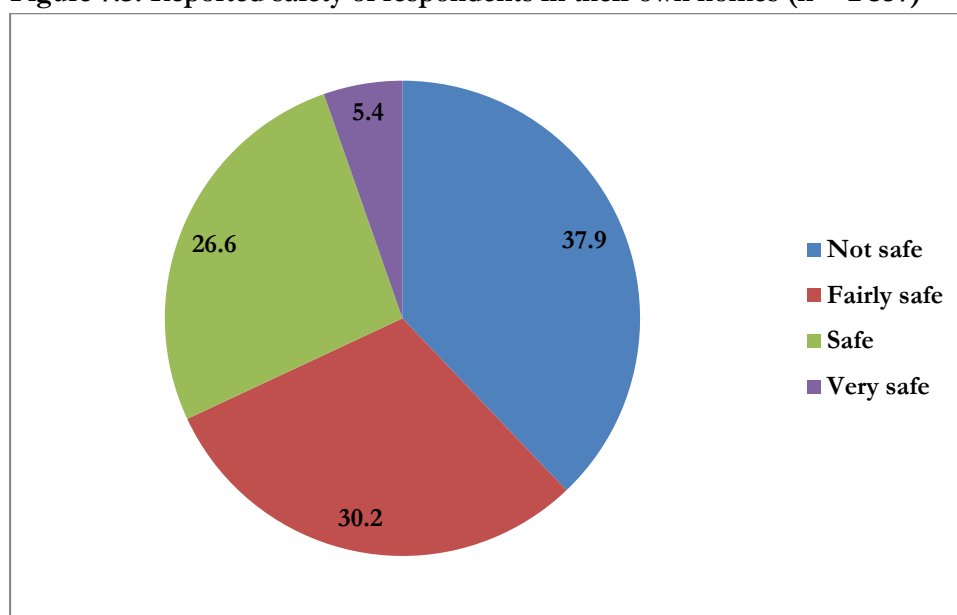
The Limpopo province had the highest proportion (66.9%), followed by Eastern Cape (61.2%) of respondents who did not feel safe against criminals in the settlements (Table 7.2). Respondents in all provinces reported to feel safe, with an average of 21.6%. The Western Cape followed by KwaZulu-Natal had the highest proportions of respondents who reported feeling “very safe” against criminals in their settlements (11.1% and 6.1% respectively). The North West province recorded the least proportion of respondents feeling “not safe” against criminals in the settlements at 36.4% (Table 7.2).

Table 7.2: Feeling of household respondents against criminals in the settlements by province

Province	Not safe		Fairly safe		Safe		Very safe		Total n
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Western Cape	43.7	[35.7-52.0]	22.7	[19.3-26.6]	22.5	[18.5-27.0]	11.1	[6.8-17.5]	205
Eastern Cape	61.2	[47.8-73.1]	21.9	[15.9-29.4]	15.5	[10.4-22.4]	1.4	[0.5-4.1]	317
Northern Cape	57.2	[46.6-67.2]	22.9	[18.8-27.6]	15.3	[11.1-20.8]	4.6	[1.5-12.8]	165
Free State	59.4	[30.5-83.0]	16.1	[5.8-37.6]	20.2	[11.6-32.7]	4.3	[1.3-13.7]	255
KwaZulu-Natal	41.8	[33.2-50.9]	32.2	[25.5-39.7]	19.9	[10.8-33.8]	6.1	[4.1-9.0]	205
North West	36.4	[28.2-45.5]	27.5	[24.0-31.3]	32.2	[26.8-38.2]	3.8	[1.0-14.0]	199
Gauteng	51.3	[43.5-59.1]	25.4	[16.4-37.1]	21.7	[10.8-38.7]	1.6	[0.7-3.4]	858
Mpumalanga	46.0	[44.3-47.7]	21.7	[20.8-22.6]	29.1	[27.2-31.1]	3.2	[2.2-4.7]	57
Limpopo	66.9	[61.8-71.6]	15.0	[7.3-28.2]	18.0	[10.3-29.6]	0.1	[0.0-2.9]	90
Total	51.0	[45.9-56.0]	24.4	[18.9-30.8]	21.6	[15.0-30.1]	3.0	[1.8-5.0]	2351

7.3 Feeling of Safety against Criminals in Own Home

Nearly four out six of the respondents (37.9%) did not feel “safe” in their own homes (Figure 7.3). Those respondents who felt “fairly safe” and “safe” were almost equal at 30.2% and 26.6% respectively.

Figure 7.3: Reported safety of respondents in their own homes (n = 2 357)

The Limpopo province had the highest proportion (56.9%) of respondents, followed by Free State at 55.6% of respondents who did not feel safe in their own homes (Table 7.3). The provincial average of feeling “safe” was 26.6%. The Western Cape, followed by KwaZulu-Natal, had the highest proportions of people who reported feeling “very safe” against criminals in their homes, at only 11.5% and 10.2% respectively. The Mpumalanga province recorded the least proportion of people feeling “not safe” in their homes at 15.8% (Table 7.3).

Table 7.3: Feeling of household respondents about safety against criminals at home by province

Province	Not safe		Fairly safe		Safe		Very safe		Total n
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Western Cape	30.8	[22.4-40.7]	24.6	[16.3-35.4]	33.1	[24.1-43.5]	11.5	[8.2-16.0]	207
Eastern Cape	51.6	[39.2-63.8]	23.8	[14.7-36.1]	20.0	[17.6-22.8]	4.6	[2.6-8.1]	318
Northern Cape	54.4	[47.2-61.5]	16.3	[14.0-19.0]	20.6	[16.6-25.1]	8.7	[3.5-19.8]	165
Free State	55.6	[28.6-79.7]	18.7	[5.8-46.2]	20.5	[12.9-30.9]	5.2	[1.8-14.2]	256
KwaZulu-Natal	33.7	[27.0-41.1]	34.3	[26.8-42.5]	21.8	[17.4-27.1]	10.2	[8.3-12.5]	207
North West	21.8	[12.4-35.5]	30.9	[20.5-43.8]	39.4	[30.7-48.8]	7.8	[3.5-16.8]	199
Gauteng	36.0	[26.3-47.1]	33.2	[17.6-53.6]	26.9	[15.1-43.2]	3.9	[2.9-5.3]	858
Mpumalanga	15.8	[11.0-22.3]	28.5	[28.2-28.8]	52.4	[48.4-56.5]	3.2	[2.2-4.7]	57
Limpopo	56.9	[49.5-64.0]	27.6	[16.3-42.6]	15.4	[8.8-25.4]	0.1	[0.0-2.9]	90
Total	37.9	[31.1-45.1]	30.2	[20.8-41.5]	26.6	[19.5-35.1]	5.4	[4.1-6.9]	2357

7.4 Experiences of Crime in the 12 Months Preceding the Interview

Table 7.4 indicates the type of various crimes experienced in the last 12 months preceding the interview. Of the respondents who answered this question, 15.2% reported that their houses had been broken into (Table 7.4). Only 2.6% of households had experienced arson, 1.8% reported that a family member had been murdered in the community, while 7.0% of the respondents indicated that a family member had been a victim of a crime.

Table 7.4: Experiences of crime in the last 12 months

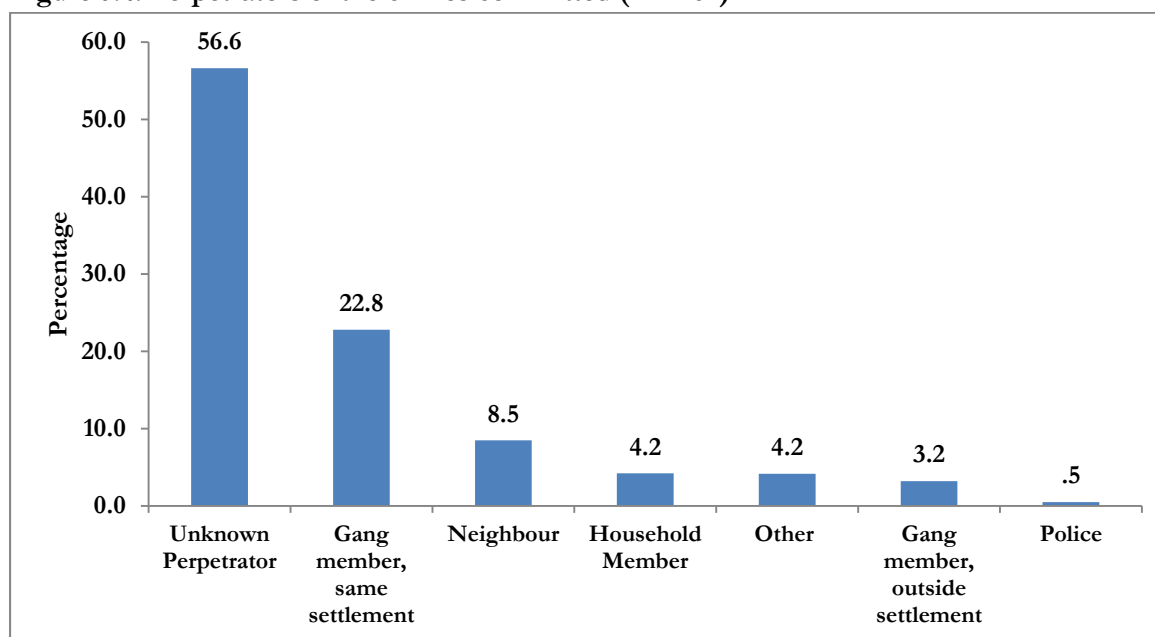
Experiences of crime in the last 12 months	Yes (%)	No (%)	Total (n)
Has your house/shack been broken into?	15.2	84.8	2353
Was this household a victim of arson?	2.6	97.4	2346
Was any member of the family murdered?	1.8	98.2	2346
Was any member of the family a victim of crime?	7.0	93.0	2337

Among household members who were reported to have experienced crime, 53.1% reported theft being the crime committed against them. This was followed by mugging at 24.1% (Table 7.5). All other crimes were reported to being experienced by less than 10.0% of the household members, with rape being the lowest at 0.3%.

Table 7.5: Reported type of crime for household members (n = 164)

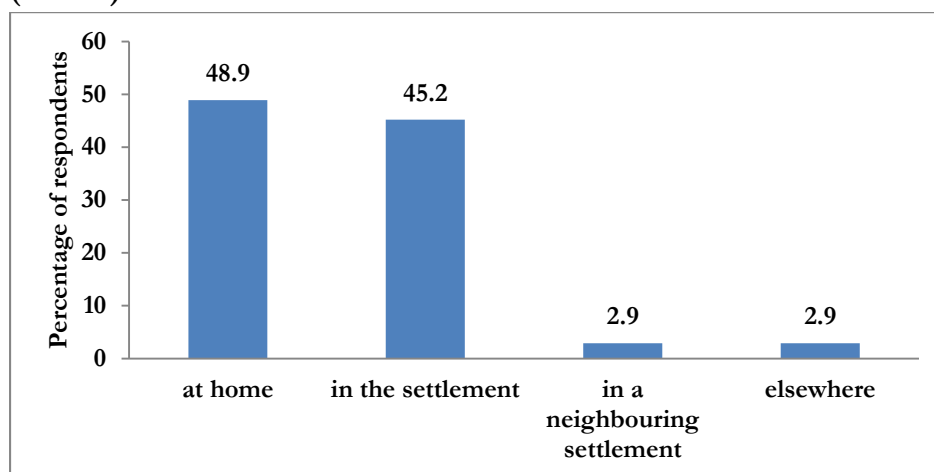
Type of Crime	Number (n)	Percentage (%)
Theft	86	53.1
Mugging	47	24.1
Other	8	11.1
Knife injury	14	6.4
Attempted murder	4	2.6
Hijacking	1	1.6
Severe beating	3	0.8
Rape	1	0.3

The majority (56.6%) of the household members did not know the perpetrators of the crime, while for almost a quarter (22.8%) the perpetrators were gang members from their own settlement (Figure 7.4). These were followed by perpetrators who were gang members outside their own settlement (3.2%), a neighbour (8.5%), household members (4.2%) and “other” (4.2%). The police were identified as perpetrators at the lowest rate of 0.5%.

Figure 7.4: Perpetrators of the crimes committed (n = 162)

Almost half (48.9%) of household members who experienced crime experienced it at home, while a further 45.2% experienced it in the settlement in which they lived. Less than 2.9% of household members experienced crime in a neighbouring settlement, or 2.9% elsewhere.

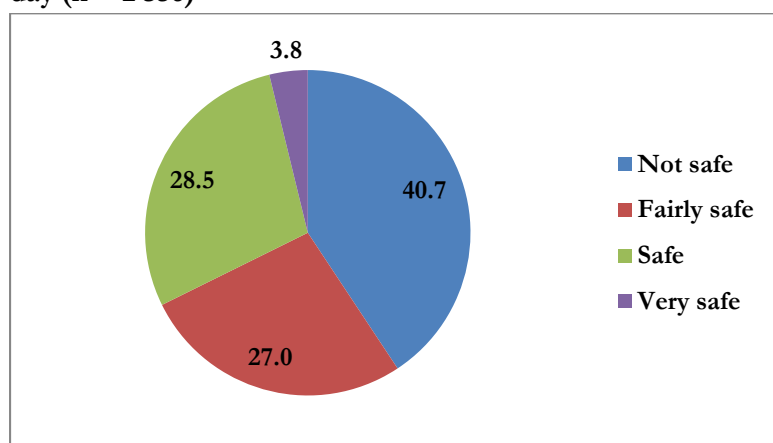
Figure 7.5: Reported place where the crime occurred for household members who experienced it (n = 159)



7.5 Safety of Women, Children and Other Vulnerable Groups in Informal Settlements

Just under 6 out of 10 (59.3% combined total) of respondents were of the view that it was “safe” for women and children to walk around in their settlement by themselves during the day, and only 40.7% felt it was “not safe” for them to walk unaccompanied during the day (Figure 7.6). With regard to the sex of the respondent, it was found that the responses were not gender based (Table A7.1). For instance, male respondents that felt that it was fairly safe for women and children to walk alone were slightly less than female respondents, 26.5% and 28.1% respectively, while 31.6% of male respondents compared to 26.2% of female respondents felt it was safe. In addition, 3.0% of male respondents felt it was very safe while more females felt it was very safe with 5.0%.

Figure 7.6: Reported safety levels for women and children to walk around by themselves during the day (n = 2 356)



Limpopo province had the highest proportion (74.3%) of respondents followed by Eastern Cape (55.8%), who felt that women and children were “not safe” to walk around by themselves during the day (Table 7.6). The provincial average of feeling “safe” was 28.5%. The Western Cape followed by KwaZulu-Natal had the highest proportions of people who reported feeling “very safe” that women and children could walk around by themselves during the day (10.7% and 8.4%, respectively) (Table 7.6). The Mpumalanga province reported the smallest proportion of people feeling that women and children were “not safe” to walk around by themselves during the day (16.0%).

Table 7.6: Feeling of household respondents about safety of women and children to walk around by themselves during the day by province

Province	Not safe		Fairly safe		Safe		Very safe		Total n
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Western Cape	27.0	[18.5-37.5]	30.1	[22.4-39.2]	32.2	[23.3-42.6]	10.7	[6.8-16.3]	207
Eastern Cape	55.8	[45.6-65.6]	19.4	[14.0-26.4]	21.5	[16.7-27.3]	3.2	[1.9-5.3]	317
Northern Cape	46.6	[36.7-56.8]	20.5	[18.4-22.6]	29.9	[21.9-39.4]	3.1	[1.0-9.1]	166
Free State	41.8	[28.5-56.3]	17.2	[6.9-36.7]	36.2	[26.8-46.8]	4.8	[1.6-13.6]	255
KwaZulu-Natal	29.2	[24.2-34.7]	31.8	[26.0-38.3]	30.6	[26.2-35.5]	8.4	[6.9-10.2]	206
North West	22.2	[15.5-30.8]	31.5	[25.1-38.7]	40.8	[32.0-50.3]	5.4	[0.9-26.4]	199
Gauteng	40.5	[34.0-47.3]	29.6	[17.4-45.5]	27.7	[18.4-39.3]	2.3	[0.9-5.5]	860
Mpumalanga	16.0	[12.1-20.9]	22.7	[20.9-24.6]	57.6	[51.3-63.6]	3.7	[3.6-3.8]	56
Limpopo	74.3	[66.9-80.6]	9.5	[3.0-26.1]	16.2	[10.2-24.6]	0.0		90
Total	40.7	[34.9-46.7]	27.0	[19.5-36.1]	28.5	[23.0-34.7]	3.8	[2.4-6.1]	2356

7.5.1 Gender-based violence in informal settlements

The prevalence of gender-based violence across the settlements was 24.0% (Annexure 3, Section 7, Figure A7.1). Limpopo province had the highest reported gender-based violence at 31.4%, followed by North West (30.5%) and the Free State at 29.1% (Table 7.7).

Table 7.7: Prevalence of gender-based violence

Province	Yes		No		Total n
	%	95% CI	%	95% CI	
Western Cape	11.1	[8.1-15.1]	88.9	[84.9-91.9]	206
Eastern Cape	29.0	[22.2-36.7]	71.0	[63.3-77.8]	316
Northern Cape	26.7	[19.5-35.3]	73.3	[64.7-80.5]	165
Free State	29.1	[21.9-37.7]	70.9	[62.3-78.1]	255
KwaZulu-Natal	16.9	[12.3-22.7]	83.1	[77.3-87.7]	206
North West	30.5	[21.7-41.1]	69.5	[58.9-78.3]	197
Gauteng	23.4	[16.9-31.6]	76.6	[68.4-83.1]	855
Mpumalanga	22.0	[17.6-27.1]	78.0	[72.9-82.4]	57
Limpopo	31.4	[24.9-38.7]	68.6	[61.3-75.1]	90
Total	23.7	[19.5-28.6]	76.3	[71.4-80.5]	2347

7.5.2 Mob justice violence in informal settlements

Mob justice violence was reported by 41.7% of the respondents. Gauteng province was leading with regard to mob justice and violence (56.2%), followed by Mpumalanga at 46.5% (Table 7.8). The Northern Cape recorded the lowest rate (18.6%).

Table 7.8: Occurrence of mob justice violence within the settlement in the last 12 months by province

Province	Yes		No		Total n
	%	95% CI	%	95% CI	
Western Cape	26.3	[16.3-39.5]	73.7	[60.5-83.7]	207
Eastern Cape	23.6	[17.9-30.4]	76.4	[69.6-82.1]	317
Northern Cape	18.6	[12.5-26.8]	81.4	[73.2-87.5]	166
Free State	25.4	[12.6-44.4]	74.6	[55.6-87.4]	252
KwaZulu-Natal	20.4	[11.0-34.7]	79.6	[65.3-89.0]	206
North West	32.8	[17.0-53.9]	67.2	[46.1-83.0]	198
Gauteng	56.2	[41.6-69.8]	43.8	[30.2-58.4]	855
Mpumalanga	46.5	[34.2-59.2]	53.5	[40.8-65.8]	56
Limpopo	23.8	[20.5-27.4]	76.2	[72.6-79.5]	89
Total	41.7	[30.9-53.3]	58.3	[46.7-69.1]	2346

7.6 Dealing with Crime in Informal Settlements

About 44.4% of respondents indicated that their communities were doing something to reduce the crime in their communities, while 59.7% of them also employed other mechanisms to deal with crime (Table 7.9). The Western Cape had the highest proportion of respondents (72.1%) who reported community involvement in reducing crime, followed by North West at 69.7%. The Free State had the highest proportion of respondents who reported no involvement in reducing crime with 64.3%, followed by Limpopo at 58.2% (Table 7.9).

Table 7.9: Dealing with crime and community action in reducing crime

Province	Did you do anything to reduce crime?			Is your community doing anything to reduce crime?		
	Yes %	No %	Total n	Yes %	No %	Total n
Western Cape	58.5	41.5	14	72.1	27.9	202
Eastern Cape	21.4	78.6	17	53.8	46.2	312
Northern Cape	66.9	33.1	16	44.9	55.1	162
Free State	55.5	44.5	12	35.7	64.3	248
KwaZulu-Natal	12.0	88.0	23	42.3	57.7	205
North West	54.3	45.7	27	69.7	30.3	196
Gauteng	52.3	47.7	65	63.6	36.4	822
Mpumalanga	0.0	100.0	5	43.3	56.7	53
Limpopo	0.0	100.0	4	41.8	58.2	90
Total	44.4	55.6	183	59.7	40.3	2290

7.6.1 Reporting of crime incidents to the police

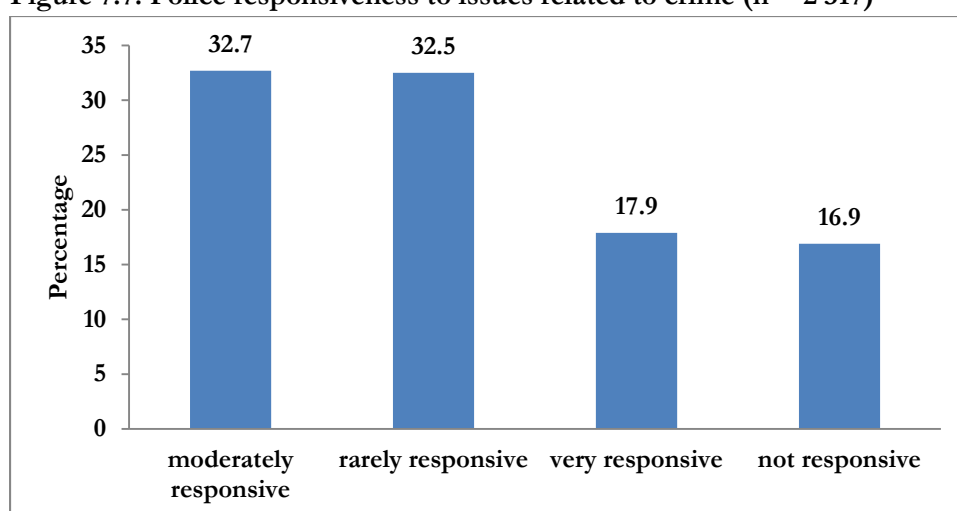
Less than half (44.8%) of respondents reported crime to the police, and more than half (55.9%) of the respondents indicated that they trusted the ability of the police to effectively reduce crime in their areas (Table 7.10). The provincial rate of reporting crime was highest in the Northern Cape (60.8%) and the lowest in Mpumalanga (14.1%). Of concern is that 44.1% of respondents said they did not trust the police to effectively reduce crime in their areas.

Table 7.10: Report of incidents to and trust of police to reduce crime

Province	Have you reported any of these incidents to the police?			Do you trust the police to effectively reduce crime in the area?		
	Yes %	No %	Total n	Yes %	No %	Total n
Western Cape	24.3	75.7	14	70.7	29.3	206
Eastern Cape	39.3	60.7	17	45.0	55.0	313
Northern Cape	60.8	39.2	15	51.7	48.3	163
Free State	37.2	62.8	11	52.3	47.7	251
KwaZulu-Natal	41.7	58.3	23	57.9	42.1	204
North West	48.0	52.0	27	67.3	32.7	197
Gauteng	47.3	52.7	68	53.0	47.0	831
Mpumalanga	14.1	85.9	5	46.9	53.1	57
Limpopo	44.8	55.2	3	58.6	41.4	90
Total	44.8	55.2	183	55.9	44.1	2312

7.6.2 Response of the police to crime in informal settlements

The police response to issues related to crime were indicated by 32.7% of the respondents as being moderately “responsive”, followed by 17.9% of the respondents who indicated that the police were “very responsive”, and, respectively, 32.5% and 16.9% who indicated that the police were “rarely responsive” or “not responsive” to issues related to crime (Figure 7.7).

Figure 7.7: Police responsiveness to issues related to crime (n = 2 317)

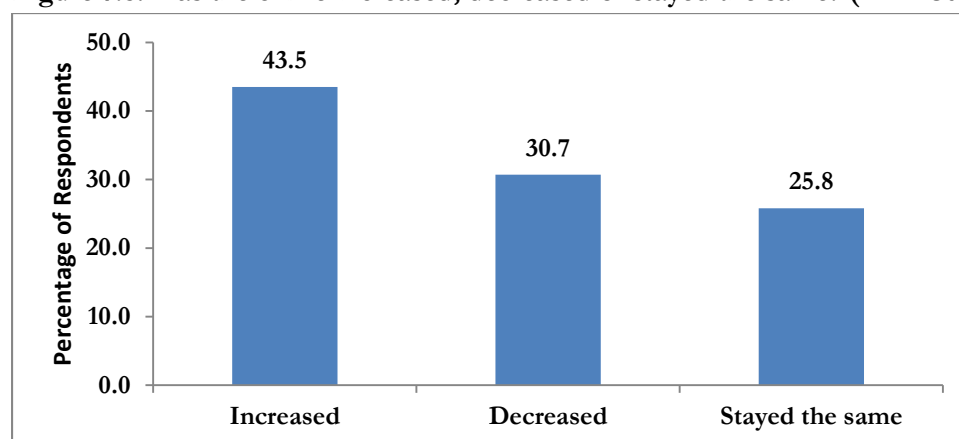
The Western Cape had the highest percentage (26.5%) of respondents who perceived the police as being “very responsive”, and also 42.8% who regarded the police as being “moderately responsive” to crime-related issues. The Free State, on the other hand, recorded the highest percentage of respondents (40.1%) who believed the police were “not responsive” to crime-related issues, followed by Gauteng at 20.6% (Table 7.11).

Table 7.11: Respondents' perceptions about police responsiveness to issues related to crime by province

Province	Very responsive		Moderately responsive		Rarely responsive		Not responsive		Total n
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Western Cape	26.5	[23.6-29.6]	42.8	[38.1-47.6]	23.6	[17.3-31.2]	7.2	[1.9-23.6]	206
Eastern Cape	16.8	[12.4-22.3]	32.7	[24.9-41.5]	34.8	[29.0-41.1]	15.8	[9.9-24.2]	317
Northern Cape	27.4	[18.3-38.8]	26.6	[20.8-33.4]	35.7	[28.0-44.2]	10.4	[8.3-12.9]	164
Free State	21.2	[14.4-30.2]	23.3	[16.4-32.0]	15.3	[12.2-19.1]	40.1	[25.2-57.2]	251
KwaZulu-Natal	18.5	[13.7-24.5]	37.1	[24.5-51.7]	25.3	[17.0-35.8]	19.1	[15.3-23.6]	205
North West	15.1	[7.1-29.2]	47.4	[42.8-52.1]	31.6	[24.4-39.8]	5.9	[1.8-17.4]	198
Gauteng	15.8	[12.7-19.6]	28.5	[24.5-32.8]	35.1	[29.0-41.7]	20.6	[15.7-26.6]	828
Mpumalanga	20.4	[19.3-21.5]	38.9	[35.5-42.3]	40.5	[37.1-43.9]	0.3	[0.0-10.6]	58
Limpopo	21.6	[16.8-27.3]	32.3	[30.2-34.5]	35.0	[30.0-40.3]	11.1	[5.6-20.8]	90
Total	17.9	[15.8-20.3]	32.7	[28.9-36.7]	32.5	[28.9-36.2]	16.9	[12.9-21.8]	2317

7.7 Crime Trends in Informal Settlements over the Year Preceding the Study

A total of 43.5% of the respondents were of the view that crime in their settlements had “increased”, and 30.7% indicated that crime in their areas had “decreased” (Figure 7.8). Those who indicated that crime in their communities had “stayed the same” constituted 25.8% of the respondents.

Figure 7.8: Has the crime increased, decreased or stayed the same? (n = 2 308)

Limpopo province was leading in respondents who reported a perceived increase in crime (64.5%, followed by the Eastern Cape at 52.7% (Table 7.12). The Mpumalanga province recorded the highest percentage of respondents who reported that there was a decrease in crime (48.1%), followed by the Western Cape (37.6%). More than 40% of the respondents reported that crime had remained the same in the Northern Cape and KwaZulu-Natal.

Table 7.12: Respondents' perceptions on whether crime has increased or decreased or stayed the same in the settlement by province

Province	Increased		Decreased		Stayed the same		Total n
	%	95% CI	%	95% CI	%	95% CI	
Western Cape	33.0	[27.0-39.7]	37.6	[33.8-41.6]	29.4	[26.9-32.0]	206
Eastern Cape	52.7	[41.2-63.8]	25.1	[19.0-32.4]	22.3	[15.4-31.1]	314
Northern Cape	43.5	[28.3-60.0]	13.0	[10.5-15.9]	43.5	[29.6-58.5]	164
Free State	51.8	[41.8-61.6]	29.2	[26.4-32.3]	19.0	[12.1-28.5]	251
KwaZulu-Natal	31.6	[25.2-38.7]	27.7	[22.9-33.1]	40.8	[35.9-45.8]	201
North West	51.3	[38.6-63.8]	26.7	[17.1-39.2]	22.0	[14.4-32.2]	198
Gauteng	40.8	[31.5-50.8]	33.8	[24.5-44.5]	25.4	[21.5-29.8]	827
Mpumalanga	34.9	[33.4-36.4]	48.1	[47.5-48.7]	17.0	[16.1-17.9]	57
Limpopo	64.5	[38.2-84.2]	19.4	[14.5-25.5]	16.1	[4.4-44.3]	90
Total	43.5	[36.3-51.0]	30.7	[24.9-37.2]	25.8	[22.4-29.5]	2308

7.8 Summary

About 62.0% of participants indicated that crime was “a serious problem” in the nine provinces, while 22.7% of respondents were of the view that crime was “not a serious problem”, and 13.1% reported that crime was “not a problem at all” in their settlements. The Limpopo province had the highest proportion of respondents (75.3%) who indicated that crime was a “serious problem”, while the Western Cape had the lowest similar response rate at 44.2%. Although crime was perceived to be on the increase nationally at the rate of 43.5%, the national police responsiveness was reported to have been relatively moderate at a rate of 32.7%, with “rarely responsive” and “very responsive” police response constituting 17.9% and 32.5% respectively. Only 16.9% of respondents indicated that the police were “not responsive” to issues related to crime.

8. ECONOMIC ACTIVITIES

At the end of the 20th century, poverty seemed to have increased, and social justice and the quality of life had diminished, while sustainability was increasingly threatened. Some of the factors accounting for this, were the retreat of the state from its protective and supportive roles, as well as rapid urbanization and population growth under conditions of economic stagnation (UN Habitat, 2003). More recent findings indicate that the situation is still unacceptable but some progress has been made.

Besides global trends, macroeconomic growth in South Africa showed negative patterns in the second quarter of 2015. The following sectors reflected negative growth:

- manufacturing at -6.3%
- mining and quarrying at -6.8%
- agriculture, forestry and fishing at -17.4%

At the same time, the finance, real estate and business services experienced positive growth of 2.7% (Stats SA, 2015b).

Considering informal sector business operations, reports show that these were dominated by Africans, persons aged between 35-44 years, and occurred mostly in Gauteng, KwaZulu-Natal, Limpopo and Mpumalanga (Stats SA, 2014). Table 8.1 displays the percentage of individuals running non-VAT registered businesses in 2013.

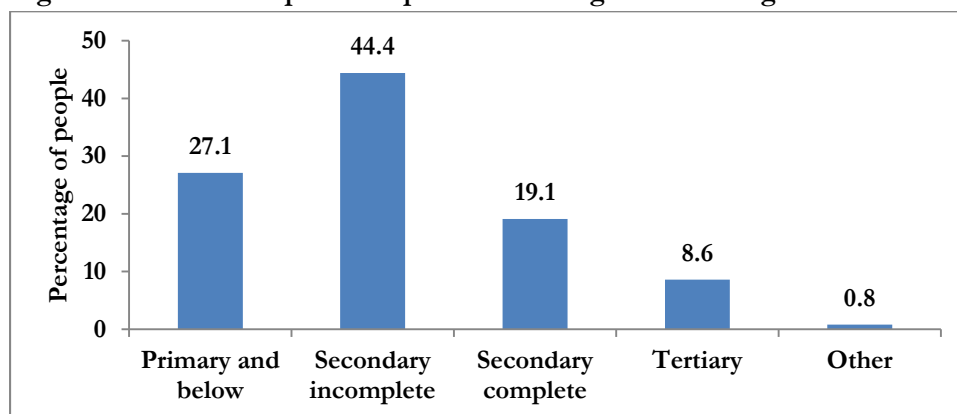
Table 8.1: Percentage of individuals running non-VAT registered businesses by province in 2013*

Province	Percentage (%)
Eastern Cape	9.5
Free State	4.0
Gauteng	29.9
KwaZulu-Natal	20.0
Limpopo	14.2
Mpumalanga	10.6
North West	4.9
Northern Cape	0.8
Western Cape	6.0

*Source: Stats SA, 2014 (as published by Stats SA, the percentages don't add up to 100%)

According to official statistics, the majority of people who ran non-VAT registered businesses in 2013 had incomplete secondary education. Figure 8.1 shows that 27.1% of such individuals had primary and lower level education, while the majority (44.4%) had incomplete secondary training.

Figure 8.1: Education profile of persons running non-VAT registered businesses*



*Source: Stats SA, 2014

Available poverty head counts revealed that in 2011, the Eastern Cape had the highest percentage of poor people, namely 14.4%. KwaZulu-Natal and Limpopo had similar counts around 10.0%, while the poverty figure for Gauteng and the Western Cape was below 5.0% (Table 8.2).

Table 8.2: Poverty head count per province*

Province	Head count Percentage (%)
Eastern Cape	14.4
Free State	5.5
Gauteng	4.8
KwaZulu-Natal	10.9
Limpopo	10.1
Mpumalanga	7.9
North West	9.2
Northern Cape	7.1
Western Cape	3.6

*Source: Stats SA, 2013 (as published by Stats SA, the percentages don't add up to 100%)

8.1 Economic Activity Recorded in the Survey

Statistics reported on employment and business activities in the baseline study considered those household members who were of working age (15 to 64 years old). Household members who worked for a wage, salary, commission or any payment in kind (including paid domestic work) during the calendar week preceding the survey, amounted to 1 317. In terms of the gender division, 62.8% of these were males, while the rest consisted of females. Table 8.3 shows that unemployment was highest in the Northern Cape (83.6%), while the Western Cape had the lowest levels at 45.9%. On average, 68.8% of household members in the informal settlements targeted for upgrading were unemployed.

Table 8.3: Percentage of household members who worked and did not work by province

Province	Employed		Unemployed		Total n
	%	95% CI	%	95% CI	
Eastern Cape	31.4	[23.6-40.5]	68.3	[59.4-76.0]	639
Free State	29.9	[21.6-39.8]	69.3	[59.9-77.4]	503
Gauteng	28.2	[26.3-30.1]	71.5	[69.6-73.3]	1788
KwaZulu-Natal	28.4	[26.3-30.5]	71.6	[69.5-73.7]	460
Limpopo	31.7	[30.5-33.0]	68.3	[67.0-69.5]	173
Mpumalanga	27.3	[25.9-28.7]	72.1	[71.5-72.8]	94
North West	30.1	[25.0-35.6]	69.9	[64.4-75.0]	382
Northern Cape	16.1	[9.3-26.6]	83.6	[73.3-90.5]	310
Western Cape	54.1	[49.2-58.9]	45.9	[41.1-50.7]	401
Total	30.9	[28.1-33.8]	68.8	[66.0-71.5]	4750

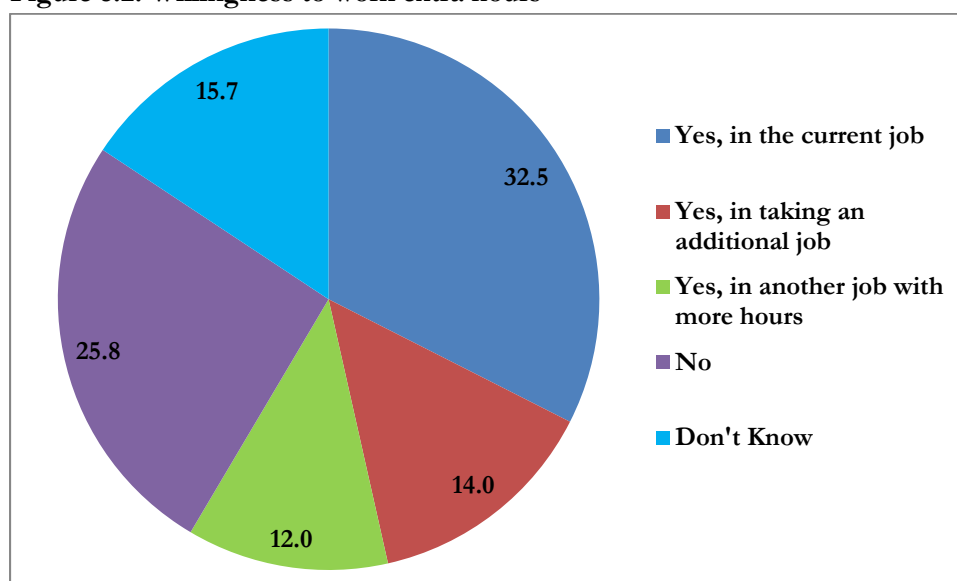
Household respondents were asked whether household members ran or did any kind of business, big or small, for themselves or with one or more partners during the calendar week preceding the interview (Table 8.4). The national average was 8.2% of household members. Most of such businesses were run by individuals in the Free State, with 13.9% (n = 503), Limpopo with 11.7% (n = 173) and Gauteng with 9.3% (n = 1745)

Table 8.4: Percentage of household members who ran a business

Province	Run business		Not run business		Total n
	%	95% CI	%	95% CI	
Western Cape	5	[2.8-8.8]	95	[91.2-97.2]	383
Eastern Cape	6.8	[3.7-12.4]	92.8	[87.6-95.9]	625
Northern Cape	7.3	[2.7-18.1]	92.2	[82.4-96.8]	302
Free State	13.9	[9.9-19.2]	86.1	[80.8-90.1]	503
KwaZulu-Natal	4.7	[2.4-9.0]	94.6	[89.1-97.4]	466
North West	4.8	[3.7-6.2]	94.3	[91.9-96.1]	383
Gauteng	9.3	[6.7-12.8]	90	[86.3-92.8]	1745
Mpumalanga	8.8	[8.6-9.0]	91	[90.4-91.5]	82
Limpopo	11.7	[6.2-21.0]	88.3	[79.0-93.8]	173
Total	8.2	[6.3-10.6]	91.3	[88.8-93.3]	4662

A question about whether household members helped, without being paid, in any kind of business run by their household showed that males (57.8%) were more likely than females (42.2%) to do so (n = 197). The majority of household members, however, did not participate in business activities without getting paid.

In the week preceding the interview, most household members (32.5%) would have liked to work more hours in their current job than they actually did work (Figure 8.2) (n = 1 617), provided the extra hours would have been paid for. Another 14.0% were reported to have been willing to work extra hours in an additional job. Many household members (25.8%) were not willing to work extra hours.

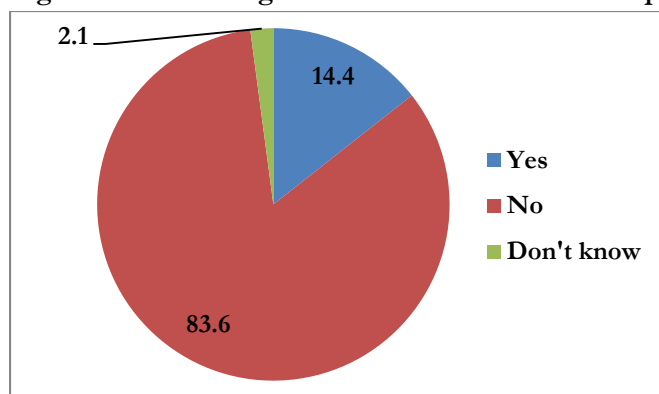
Figure 8.2: Willingness to work extra hours

The results also showed that the organization or business or branch where household members worked were mostly in the informal sector (43.3%), while 42.1% were in the formal sector (n = 1 551). Another 14.6% of the respondents reported they were not sure whether household members' place of employment was in the formal or informal sector.

In terms of their willingness to work in the preceding calendar week (n = 771), most household members were reported as not willing (78.8%) to work, 15.4% indicated "yes", while another 5.8% were unsure. The responses for this question included those household members of working age and excluded those who were already employed.

In terms of participation in a government or municipal job creation programme or Expanded Public Works Programme (EPWP) in the 6 months preceding the interview ($n = 1\,299$), most household members (83.6%) did not participate. A percentage of 14.4% had participated in such a programme (Figure 8.3). The n value for this response includes those of working age and excludes those who were employed.

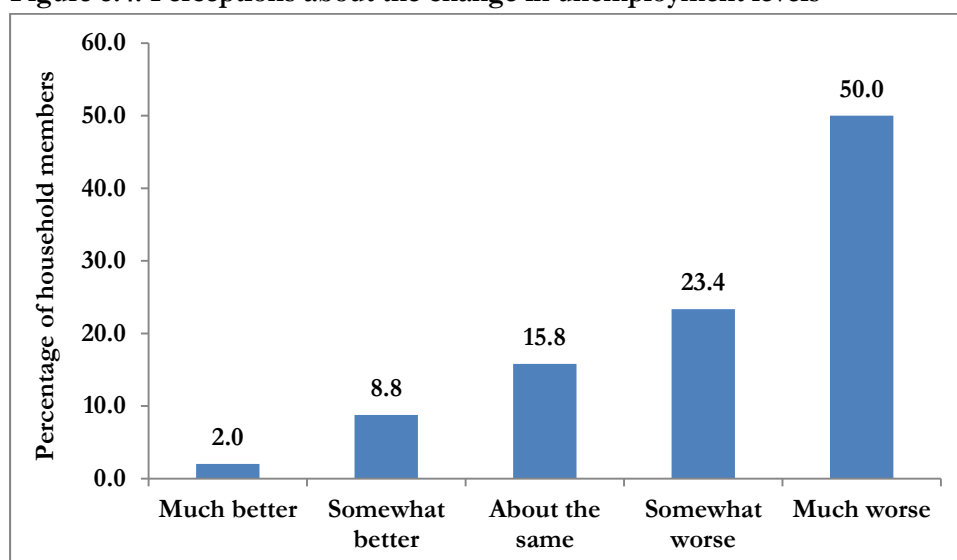
Figure 8.3: Percentage of household members who participated in EPWP* or similar programmes



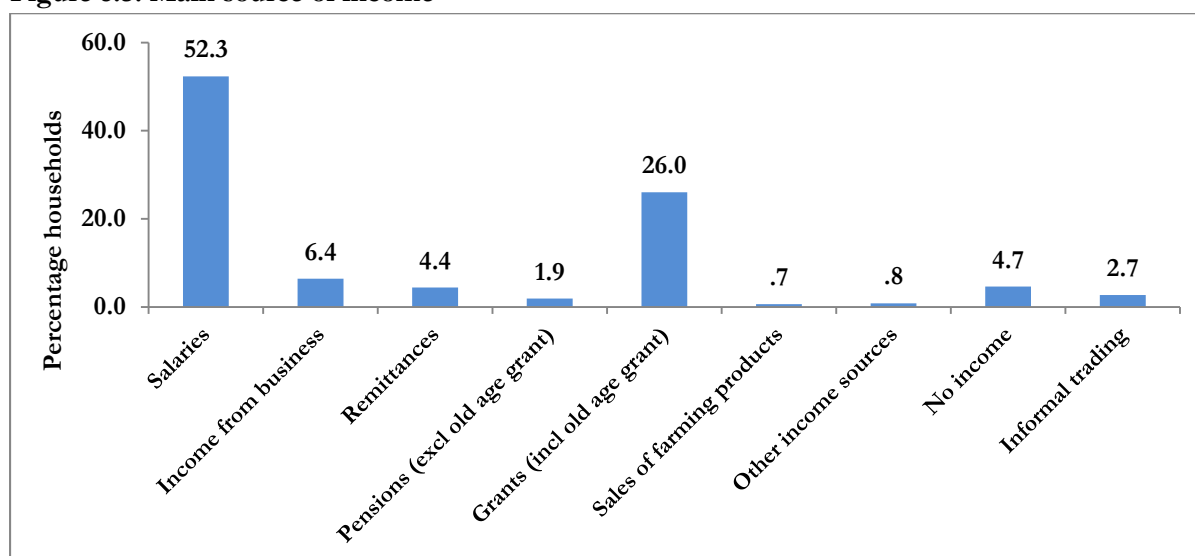
* EPWP: Expanded Public Works Programme

Figure 8.4 shows that households ($n = 2\,098$) perceived that conditions around unemployment got “much worse” in the past two years (50.0%). Another 23.4% believed it got “somewhat worse” while 15.8% believed it remained “about the same”. Only 2.0% believed that unemployment conditions got “much better”.

Figure 8.4: Perceptions about the change in unemployment levels



The majority of households (52.3%) indicated that their main source of income was salaries or wages (Figure 8.5). Another 26.0% indicated that grants were their main source of income, while 6.4% received income from a business ($n = 2\,162$).

Figure 8.5: Main source of income

The monthly household income question was answered by 2 228 household respondents (Table 8.5). The majority of household respondents (47.5% indicated a household income of between R1 and R2000, while 8.5% had no monthly income and 3.5% were not sure).

Table 8.5: Monthly household income

Income	Percentage of households (%)
No income	8.5
R1 - R500	10.2
R501 - R1,000	14.0
R1,001 - R1,500	12.6
R1,501 - R2,000	10.7
R2,001 - R2,500	7.3
R2,501 - R3,000	9.2
R3,001 - R3,500	4.6
R3,501 - R4,500	6.2
R4,501 - R5,500	3.7
R5,501 - R6,500	2.1
R6,501 and more	5.7
Refuse to answer	1.8
Not sure	3.5

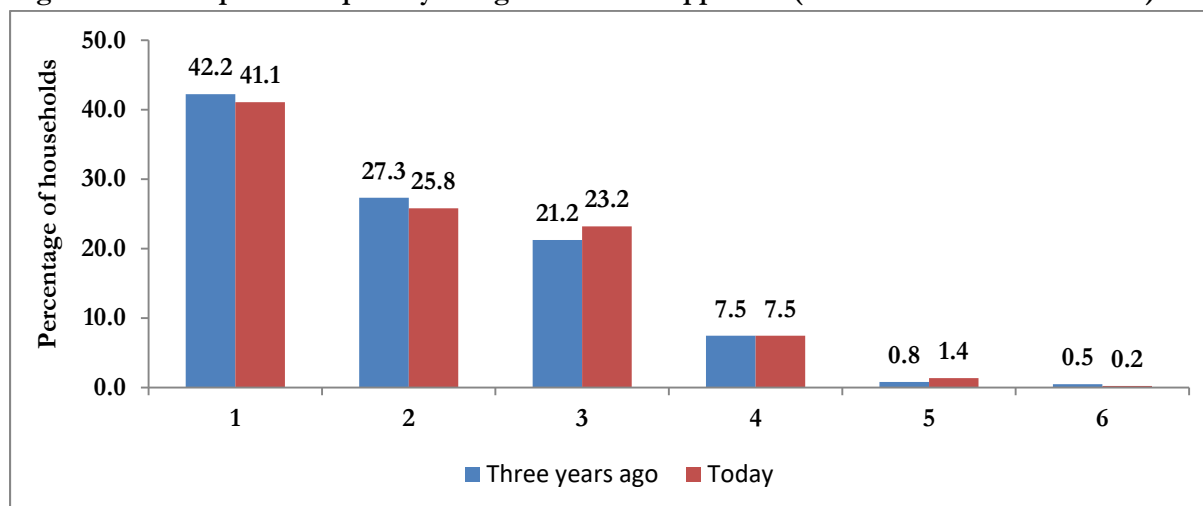
Table 8.6 shows a selection of working household goods to provide an idea of living standards in the selected informal settlements. Six items were arbitrarily selected from a list of 35 for this table. Extremely few households (only 2.3%) had hot running water in their households. Most households had a mattress (81.2%) or a cell phone (75.9%). Almost forty percent (38.7%) of households had a stove without an oven in their dwelling, while 44.9% had a TV and 27.9% had a radio.

Table 8.6: Presence of household goods

Selected household goods	Yes (%)	Number (n)
Hot running water	2.3	2288
Cell phone	75.9	2331
Electric or gas stove without oven	38.7	2317
TV set	44.9	2330
Radio	27.9	2322
Mattress	81.2	2347

Figure 8.6 displays households' perceptions on the poverty level of their own household three years ago and today ($n = 2\,341$ and $2\,340$ respectively). The majority of households felt that they were on the poorest level both now (41.1%) and three years ago (42.2%). In the categories of extreme poverty 1 and 2, there was a slight improvement in poverty since there were fewer households that felt they were still in the poorest category today. The perceptions of households in category 3 and 5 showed a decrease in poverty perception between the current situation and the situation three years ago. The biggest improvement was in category 3 where 2.0% of households felt they were better off today than 3 years ago. In the 6th category, there was a decline in proportion of perceived rich households between three years ago and today.

Figure 8.6: Perceptions on poverty using a six-ladder approach (1 = Poorest and 6 = Richest)



8.2 Borrowing and Savings

Questions about borrowing, savings and credit aimed to provide an indication of financial behaviour of individuals and households in informal settlements.

8.2.1 Borrowing

The baseline study results revealed that household members who contracted a loan or bought anything on credit over the past 12 months preceding the interview amounted to 18.2% ($n = 2\,607$). Table 8.7 shows the purposes for which loans were taken out, and 21.4% of such loans were obtained for clothing or furniture appliances ($n = 444$). Other consumer goods constituted 28.2% of loans and, in comparison, agricultural land or equipment constituted 0.4% of the purpose of loans. Housing upgrades was reported by 8.2% of respondents as the purpose of loans.

Table 8.7: Purposes for which loans were contracted

Purpose	Percentage (%)
Investment in property	1.6
Agricultural land or equipment	0.4
Business	1.7
Housing upgrade	8.2
Education/ training	7.8
Health	1.9
Ceremonies	7.6
Vehicle	2.5
Clothing/furniture/appliances	21.4
Other consumer goods	28.2
Other	18.7

National reports on credit analysis show that most people accessed credit for retail apparel (about 10.0%), while retail/furniture constituted 2.7% of credit access. Other consumer goods made up 2.6% of credit (XDS, 2012).

Table 8.8 indicates the different kinds of guarantees which were required by the lender or credit provider and it reflects that 63.5% of lenders did not require anything as a guarantee, and almost 14.2% of household members were required to work for the proportion of money that they borrowed. An ID or passport was reported as required for 9.8% of household members and the guarantee of housing or buildings constituted less than one percent (n = 428).

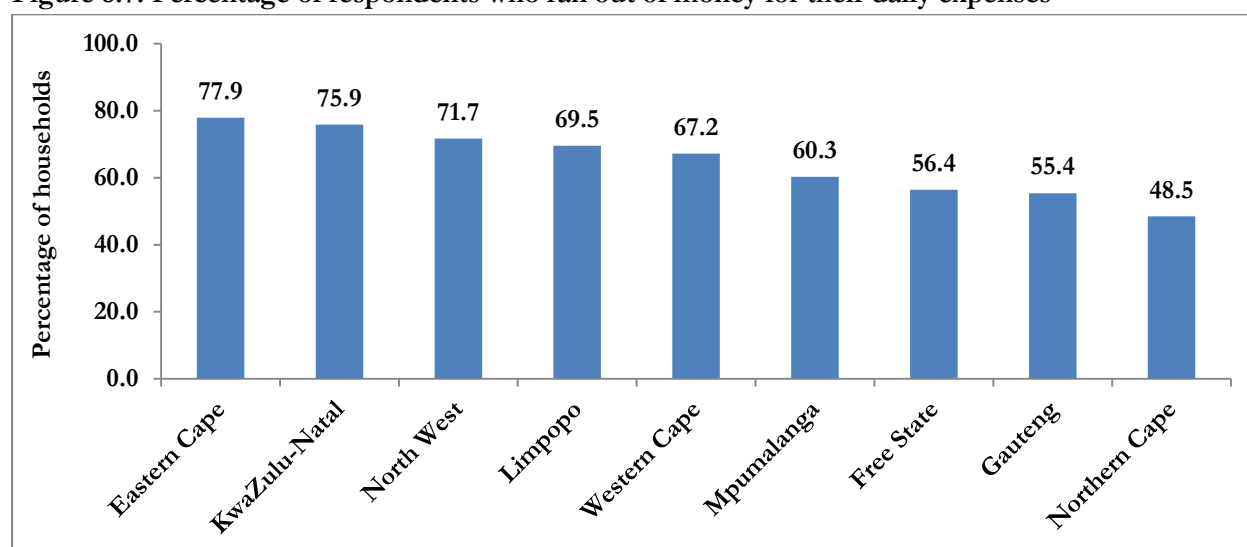
Table 8.8: Type of guarantee required by lender or credit provider

Type of guarantee	Percentage (%)
None	63.5
Land	1.3
Furniture/TV	0.3
House/Building	0.8
Employment	14.2
Relatives	0.6
Non-Relatives	0.7
ID/passport	9.8
Other	8.8

Household members were furthermore asked whether they had the option to use their land or house as a collateral or guarantee for loans and 5.7% (n = 425) had the option. The majority of people did not have such an option.

Figure 8.7 shows the percentage of the “yes” responses in terms of whether households ran out of money to meet their day-to-day expenses in the last 12 months. The total number of respondents across all the nine provinces was 2 278. The three provinces with the highest rates above 70.0%, were Eastern Cape (77.9%), KwaZulu-Natal (75.9%), and North West (71.7%), with the Northern Cape having the lowest rate (48.5%). In general, more than 50.0 % of households experienced shortages of their daily financial needs.

Figure 8.7: Percentage of respondents who ran out of money for their daily expenses



The coping strategies that households adopted to deal with a lack of money included a number of options. Table 8.9 displays that most respondents (63.3%) resorted to borrowing money from a neighbour or relative. This was followed by those who begged for basics and looked for extra work or income (17.2% and 15.6%,

respectively). About 24 responses (2.4% of cases) were recorded for those who had to resort to stealing as a coping strategy to deal with a lack of money. Among those who borrowed money, the vast majority of respondents (87.5%) paid back the money which they borrowed (n = 1 138).

Table 8.9: Coping strategies to deal with lack of money

Coping strategy	Responses		Percentage of cases
	Number (n)	Percentage (%)	%
Borrowed money from a neighbour/relative	721	40.5	53.5
Beg for basics like food	306	13.0	17.2
Looked for an extra job	286	11.8	15.6
Borrowed money from an informal money lender	269	11.6	15.3
Other	196	9.7	12.8
Borrowed money from the social group, e.g. stokvel	124	5.9	7.9
Sent the children away to reduce the cost of living	89	3.5	4.6
Borrowed money from the bank/loan	53	2.3	3.0
Had to resort to stealing	24	1.8	2.4

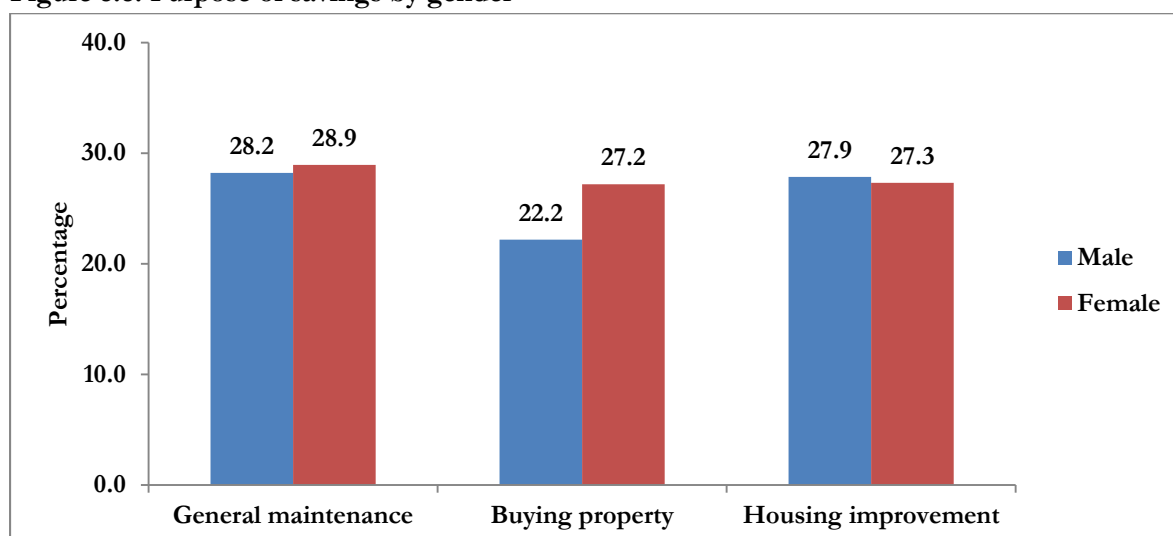
8.2.2 Savings

Household respondents indicated that the type of savings institution household members used ranged from banks to credit associations. Banks were the most prominent institutions for keeping savings accounts (50.7%), followed by rotating savings and credit associations or stokvels with 40.7% (n=397); a small percentage of household members (3.7%) used cooperatives as their savings institutions of choice (Table 8.10).

Table 8.10: Type of savings institution

Type of savings	Percentage (%)
Rotating savings & credit association or stokvels	40.7
Bank	50.7
Cooperatives	3.7
Credit union	0.1
Savings and loan group	2.5
Other	2.3

Figure 8.8 indicates the purpose(s) for saving money. The options included buying property (n = 357), house improvement (n = 361) and general house or plot maintenance (n = 342). Females favoured borrowing money for general house or plot maintenance and buying property, in comparison to their male counterparts. Figure 8.8 also indicates that 28.9% of females were planning to use their savings for general house or plot maintenance, and for males the “yes” percentage was 28.2%. In relation to housing improvement as an option, 27.9% of male and 27.3% of female household members indicated that they were planning to use their savings for that purpose. Buying of property constituted 22.2% for males and 27.2% for females.

Figure 8.8: Purpose of savings by gender

8.3 Microenterprises

The majority of household members (15 years of age or older) who operated such businesses, had no schooling or tertiary education as their highest education level (10.5% each), with 9.3% of household members operating their own businesses having a completed primary education (Table 8.11).

Table 8.11: Education level of respondents who were operating informal businesses

Education attainment	Number (n)	Percentage (%)
No schooling	14	10.5
Primary school	81	9.3
High school	147	7.8
Matric	57	6.9
Tertiary	10	10.5
Other	13	6.7

A question about the operation of business enterprises revealed that the most common type of enterprise operated by households were spaza shops (37.1%), while 19.0% did hawking (Table 8.12). Almost 5.0% of the respondents operated hair salons while 31.0% operated “other” enterprises.

Table 8.12: Types of enterprises operated (n = 179)

Type of enterprise	Percentage (%)
Spaza shop	37.1
Hair salon	5.0
Shebeen	4.0
Tailor	1.1
Car or electronics repair	2.2
Weaving	0.2
Telephone use	0.5
Hawking/selling goods	19.0
Other	31.0

Most of the household members’ enterprises (79.7%) did not employ extra people in the previous four weeks and provided work for the specific household member only (n = 119). Table 8.13 shows that only 5.5% of the household members employed one other person, while 10.6% employed two people. The national average for own-account workers and contributing family workers in total employment was 10.0% in 2011, and the objective is to reduce it to 5.0% (Statistics South Africa 2013).

Table 8.13: Number of people employed by enterprises

Number of employed	Percentage (%)
0	79.7
1	5.5
2	10.6
3	0.2
4	1.0
5	0.9
6	0.9
9	1.2

8.4 Summary

This chapter found that, contrary to national statistics, people who tend to operate informal enterprises are mostly those with no schooling (Figure 8.1 and Table 8.11). Although the percentage of household members who worked was low, the results showed that the distribution of places of work was mostly in the informal sector. The distribution between informal and formal sector employment was fairly equal. This also means that there could be a steady income stream through formal sector employment which should increase household financial security.

Perceptions on poverty revealed that slightly fewer households felt they were still in the poorest category today in comparison to three years ago (Figure 8.6). There were improved perceptions of households being in Category 3 to 5 of poverty/wealth, and the reason for this needs to be further investigated. At the same time, perceptions on unemployment revealed that most respondents believed that unemployment got much worse in the past two years.

There was some agreement in findings between provinces where households ran out of money for daily expenses and provinces with the highest poverty head counts. The Western Cape, Northern Cape, Gauteng and Free State had comparatively low poverty rates (Table 8.2), and these were also the provinces with the lowest percentage of households running out of money (Figure 8.7). The converse was found in other provinces.

The provinces with the highest number of household members who ran a business in this study were different from the findings of a national survey in 2014. To fully grasp the implications, one would have to compare the sample designs before making any deductions. However, the findings could potentially indicate that trends in informal settlements targeted for upgrading are different. A fairly low percentage of 18.2% of household members contracted loans and these were mostly unsecured, since 63.5% required no guarantee.

9. SOCIAL CAPITAL AND COMMUNITY EMPOWERMENT

Community participation and related concepts such as social capital and social cohesion are among the key principles of the UISP. This chapter examines the social context of informal settlements targeted for upgrading by exploring issues on social capital, social cohesion, community participation and empowerment. The purpose of presenting such information is to understand how social capital and networks work for the informal residents and how these can be harnessed in the process of upgrading to provide better outcomes for the residents. Explicating the levels of community participation helps shed light on how residents are involved in decision making and formulating solutions for tackling their housing challenges. The underlying assumption is that where the community is cohesive and residents collectively tackle their challenges, development is likely to be more sustainable than in contexts where there exists neither social cohesion nor a collective approach to tackling challenges.

9.1 Social Capital

The notion of social capital derives from the idea that social networks are an important asset in accessing tangible assets such as human resources and liquid capital. The networks themselves are built and developed on the basis of 'shared norms, values and understandings that facilitate co-operation within or among groups' (Foxton & Jones, 2011:1). Analysts define social networks as "the personal relationships which are accumulated when people interact with each other in families, workplaces, neighbourhoods, local associations and a range of informal and formal meeting places" (Foxton & Jones, 2011:1).

In understanding the state of social capital in informal settlements the study asked a number of questions in the household questionnaire such as: how important is it for you to help people whether by sharing time, or money; do you or any other member of the household get help from anyone; what sort of help do you or your household members get; who provides the help; are there people who help you in your community; what type of help do you or your household members give; to whom do you or your household members give help; are there people you help in the community; do you expect (immediately or in future) that if you help someone in your community, they should also help you in return. These questions address social capital in terms of trust, reciprocity and social networks. The questions also help to understand how people in the informal settlements interact, how they assist one another and with what motives.

Most (80.3%) respondents of the informal settlements targeted for upgrading reported that it was important to help people whether through sharing money or time (Annexure 3, Section 9, Table A9.1). Very few (10.8%) respondents thought that it was not important to help people.

In terms of whether the household got help from anyone, more than half (51.7%) of the respondents indicated that they received help from other members of the community, while 47.6% indicated that they had not received any type of help (Annexure 3, Section 9, Table A9.2). In responding to what sort of help household members received, money was the most cited (66.7%), followed by groceries (22.3%), "other" (4.1%) and child minding (4.1%) (Annexure 3, Section 9, Table A9.3).

The sources of help most respondents mentioned were neighbours (75.3%), family (20.1%), "other" (1.8%) (Annexure 3, Section 9, Table A9.4). Government and non-governmental organisations were mentioned by 0.2% of respondents as sources of help, while church/religious groups were mentioned by 0.8% of the respondents (Annexure 3, Section 9, Table A9.4). About 84.7% of respondents indicated that there were people in the community who gave them help, and only 14.6% indicated they did not get help (Annexure 3, Section 9, Table A9.5).

Social capital is about relationships, connection and reciprocity. Among those who responded ($n = 2\,337$) 56.8% provided help to others, and 42.6% did not help anyone (Annexure 3, Section 9, Table A9.6). The type of help that the household members were reported to give ($n = 1\,159$) was in terms of money (60.4%),

groceries (27.3%), clothes (3.1%), and child minding (3.4%) (Annexure 3, Section 9, Table A9.7). The recipients of help from the households were mainly neighbours (62.8%), family (29.9%), and relatives (2.3%) (Annexure 3, Section, Table A9.8).

In understanding the type of relationships, bonding and bridging capital, it was important to know whether informal settlement respondents expected those that they helped to reciprocate. Interestingly, only 39.9% expected those they helped to return the favour, and 60.1% did not expect anything in return (n = 2 299).

9.2 Social Networks

Understanding the state of social capital entails identifying the type of groups/networks with which residents associated in the different informal settlements. Social networks generally refer to “all persons and groups, expressed in terms of actual persons with whom one maintains direct and more or less lasting ties that satisfy the daily requirements” (Ayuku *et al*, 2004). Participants were asked to describe the extent of their involvement in groups such as soccer clubs, political parties, school committees and youth groups. The common groups or networks identified were:

- the church
- South African National Civic Association
- fitness clubs
- sport specific clubs, such as netball, soccer , volleyball, baseball,
- political parties
- drama clubs

The findings of the focus groups were consistent with those of the quantitative data, which showed that the most active groups/networks in informal settlements were religious organisations (17.0%); national political parties (15.4%); burial societies (14.1%), stokvels (11.8%) and health volunteers (10.1%) (Annexure 3, Section, Table A9.9).

Participants who mentioned that residents participated in the different groups/associations shared that:

Participant #: We have a lot of political parties here; these are the reasons the people of this community are not united. All my life living in Joe Slovo, I have never heard of anything like a school committee or a youth group or even a sports club. Yes, there is a soccer stadium, but it seldom gets full (EC_FGD_Joe_Slovo).

Participant #: ... we have SANCA and big fish; they are a lot (GP_FGD_Diepsloot).

Participant #: There are no such things here in Roosenekal, but we created them ourselves, there is a soccer tournament here every weekend (LP_FGD_Vaalwater).

Participant #: Churches are available (MP_FGDKwazanele).

The social groups that existed and in which informal residents interacted were largely based on the mutual interests such as sports, religion, political interest, interest in social and cultural activities, hence the existence of drama groups. The groups that existed were loosely defined, they did not meet on a regular basis and most depended on the availability of facilities. For example, playing soccer depended on the availability of playing fields. There were, however, settlements such as Vaalwater in Limpopo where people actively got involved in social activities. They had a programme for interaction and they organised soccer tournaments. Despite having no specific spaces allocated for recreation, residents organised to play using the available open spaces in their settlement. Similarly, in the Northern Cape people met to play baseball but this was done on the streets because there were no recreation facilities. Where facilities existed, such as in

Drakenstein in the Western Cape, such spaces were considered to be poorly maintained and unsafe; therefore parents did not allow their children to play in such spaces. The weak urban management of infrastructure is not limited to informal settlements but is a general problem which highlights that provision of infrastructural services alone is insufficient without managing and maintaining the infrastructure.

Churches seemed to be the places where informal settlement residents met. In Mpumalanga, all participants in the focus group agreed that they all attended churches. It was also in the churches that residents sought refuge from vices, such as harmful use of alcohol. Although political parties were mentioned as groupings to which informal residents belonged, participants argued that political parties created division among the residents. Previous work by the DHS indicated the importance of churches in the lives of informal dwellers, and the current study seems to reinforce such findings. With regard to household participation in the existing social networks, the qualitative data confirmed the findings of the quantitative data which shows that household participation in the community groups was highest in religious groups (56.9% of cases), burial society (44.1%), local national political party (33.1%), stokvel (24.9%), and resident association (15.9%) (Annexure 3, Section 9, Table A9.10).

Despite the existence of a range of groupings where residents met, participants were also careful to note the low levels of participation in certain types of groupings. In settlements such as Cambridge (EC), participants reported that despite the existence of a sports field, it was rarely used and that groupings such as school committees, sports clubs and youth groups were unheard of in the settlement. In settlements such as Mafikeng (NW), participants reported that political parties and not social groups existed in their settlements. In Freedom Square (GP), participants noted that although NGOs visited the settlement in the past, these no longer operated in the settlement.

To understand the levels of participation in the groupings that existed, household respondents were asked to indicate whether they had attended meetings in the groups to which they belonged in the 12 months preceding the interview. The responses showed that the most common organisations with the greatest attendance were: religious organisations (22.9%), burial society (17.7%), local national political party (16.9%), stokvel (10.7%), and residents' association (8.8%) (Annexure 3, Section 9, Table A9.11).

Discussants in Orlando (GP) noted that there were no social groups and that even if one tried to form a group, the residents were simply not interested in joining, the reason being that the residents were too preoccupied with eking out a living and this left them with little or no time for participating in social activities or gatherings in the informal settlement. The reason for not participating was attributed to the challenges of daily survival and this was succinctly put by a participant:

Participant #: There is nothing here. This is just a community that is living here. You'll try starting an activity but no one will be interested because in the mornings people are just thinking about, where they will be hustling that day to get money, you see. So entertainment is the last option (GP_FGD_Orlando).

Participants in Babanango (KZN) provided a gendered view of the resident's involvement in the sports clubs in the settlement. In particular, it was noted that men were able to play soccer and exercise in the settlement, although a playing field did not exist. Women and children were not involved in sports clubs and this was attributed to their lack of interest and outright discouragement.

Participant #: There used to be, but then it just ended, and sports grounds, there are no grounds in the area. There are amongst the guys because they exercise and play soccer here and there. But then for the girls and the younger children, to think that they know what they are doing say at 4pm. Even if you try and start something; people will talk about you and say 'who do you think you are as you are taking our children (KZN_FGD_Babanango).

Like in Babanango, residents of Zamani (KZN) reported that there were no recreation facilities such as sports grounds in their settlement. Recreation facilities available to residents of Zamani informal settlement were sports grounds in the nearby township schools, and informal dwellers interested in participating in sport had to leave their settlement and go to the township to use the sports facilities.

Vaalwater informal settlement (LP), like other informal settlements, reported that there were no social groupings. What had existed in the settlement were churches, and people only attended these churches because food and clothes were distributed free of charge. When the churches existed, the community socialisation diminished. Residents in the Northern Cape indicated that they attended church because it provided them with gifts such as pens for adults and children.

In North West in the Claudia informal settlement, the type of grouping discussed was a youth group that targeted ages 15-24 years. The purpose of the youth group was to educate the youth about HIV and AIDS, and also other types of illness. Although participants at Kanana informal settlement (North West) also confirmed that they did not have recreation facilities, they were involved in social and cultural activities. The narratives from the different communities suggest that social capital formation is affected by factors such as the availability of infrastructure that is adequate and suitable, and resources households (communities) have to invest in the development of networks that sustain the interaction.

Groups and networks provide the bridging and the linking social capital required to “mobilise resources to solve problems of common interest” (World Bank, 2015). It is within groups and networks that valuable information is shared and collective decisions are taken. Yet the value and effectiveness of the groups depends on “their structure, membership and the way they function” (World Bank, 2015).

In addition to participation in organized groups and networks, study participants made reference to their day-to-day interaction with neighbours who were an important source of social capital. Local networks were described as important because if a member lacked something or they had problems, they could seek help from their neighbour.

Participant #: We have a good relationship with our neighbours (NW_FGD_Claudia).

Participant #: also I have a good relationship with my neighbour and if I have problems she is the first person I go to (NW_FGD_Claudia).

Informal settlement dwellers described a range of networks that existed within their communities as indicated earlier. Bonding capital comprised of immediate neighbours with whom they could relate, family members and relatives from their homes of origin, specifically in the rural areas. Bridging social capital in formal settlements comprised of the churches that residents attended, the groups in which they participated, such as the burial societies, sports clubs, stokvels, the community health workers, and the police who were from time to time called upon to resolve conflict. Notable is that while these were valuable in linking members to resources and assistance, such groups comprised of members of the same class, and therefore the value that could be derived from the connections was limited. Politicians and political parties were also part of the linking social capital and networks of informal settlement dwellers. The value derived from linking social capital of informal dwellers was not explicitly evident as that derived from bonding and bridging social capital. The schools that the children attended, comprised the networks for the informal settlement children and teenagers, as well as their parents.

9.3 Trust and Solidarity

Trust and solidarity denotes the “informal and subjective elements of interpersonal behaviour [which] shape people’s thoughts and attitudes about interacting with others” (World Bank, 2015). In contexts where there

is trust among members, it becomes easy to reach consensus about issues, and decision-making occurs with greater ease. In the sampled informal settlements, trust and solidarity were discussed in terms of community members living peacefully together, treating each other with respect and kindness, and valuing the humanity in fellow residents. To understand the level of respect in the settlements, household respondents were asked to rate the extent to which they agreed that people in their area generally treated each other with respect in public. Those who reported that people in the informal settlements treated one another with respect were about 61.0% (combined total: strongly agree and agree); 23.6% were neutral (neither agree nor disagree) while 14.4% generally disagreed (strongly disagree and disagree) with the statement, and the remaining 1.0% were non-committal (“do not know”) (Table 9.1).

Table 9.1: Household respondents’ feeling on whether people treat others with respect in public (n = 2 057)

People treat others with respect	Number (n)	Percentage (%)
Strongly agree	370	16.6
Agree	867	44.4
Neither agree nor disagree	446	23.6
Disagree	233	10.1
Strongly disagree	116	4.3
Do not know	25	0.9

Extracts from the focus group discussions illustrated community perspectives with regard to trust and solidarity among residents of different informal settlements:

Participant #: As for us in the shacks we treat each other here in a good way; we just don’t have any improvement in this settlement. If only they could get us one Apollo light (MP_FGD_Kwazanele).

Participant #: In the area where I live there are no problems. There people there love one another. There is this one young man who stays not far from me and every time he walks past he will shout ‘how are you, old timer?’ We have helped one another many times and I also helped him to build his shack. I really do not have any problems with my neighbours (NC_FGD_Promised_Land).

Building relationships of trust and reciprocity was made difficult by what was considered unruly behaviour in the settlements. Such behaviour was attributed to the abdication of responsibility by parents in disciplining their children when they misbehaved. As a result, teenagers were reported to be engaged in anti-social behaviour such as disrespecting the elderly.

Although trust and reciprocity existed in informal settlements in the form of residents being able to reach out to their neighbours, and respecting one another and extending kindness to one another, such attitudes were strategic and helped in the survival of residents. Extending kindness, as shared by a study participant, was not done for the sake of it but with the hope that the second individual would reciprocate when it is needed. Expectations of reciprocity amongst informal residents were as high as 40.0%.

In understanding the level of connectedness in the social networks that existed among informal settlement dwellers, participants were asked about their knowledge of the people in their networks, whether they would contact members of their group (network) in case they wanted things done, needed a job or were in trouble. The extent to which group members interacted and assisted one another was also examined. Respondents reported that they would contact their group members if they wanted something done in 83.7% of the cases, while 79.3% of the cases reported that they would contact their group members if they needed a job (Table 9.2).

Table 9.2: Multiple responses for contacting group members for help

Would you contact members of this group if	Responses		Percentage of Cases %
	Number (n)	Percentage (%)	
You needed to get things done (e.g. find a baby sitter, find a school, get financial advice or other similar help)	947	34.0	83.7
You were upset or in trouble and needed personal help and support	935	33.7	83.0
You needed a job	921	32.2	79.3

The study also sought to document which were the most utilised sources of information in the community. Most of the respondents (64.3%) reported knowing most people in the groups that they are involved in, while a few (35.7%) described knowing few people (Annexure 3, Section 9, Table A9.12).

The World Bank (2015) notes that collective action is important in “achieving improved governance and accountability and used for example to lobby elected officials to provide more services to the community” (World Bank, 2015). Although participants alluded to the “spirit of togetherness”, whereby residents of the settlements met and resolved challenges such as crime, such togetherness was limited. Some residents were simply not interested in the events in the settlement and thus were happy to be left out.

Participant #: Spirit togetherness is there in the community at large but in case when coming to crime we do meet and there are people who are accountable to reduce that. We do meet but others do distance themselves (NW_FGD_Kanana).

Participant #: It usually depends, my brother, because there is a lot of trouble. Going back to that issue of employment, you sometimes see that other people have wrath because they are suffering. Sometimes you find that there is conflict over the smallest thing. Sometimes you find that you were having a conversation with someone and it was nice, then you don't know where it changed. And then you find the different areas in conflict because they've been trying to sort out that issue. For example, if a community member does something wrong in one area, the people of that area would reprimand that community member, and then the members of the community from which this member is from would go and try to defend that individual. We cannot fully comprehend the actions of an individual (EC_FGD_Cambridge).

The spirit of togetherness was difficult to forge in a context of high unemployment and lack of income, which resulted in some residents leading stressful lives, uncertain of what the future held. Collective action was described as useful in tackling the challenges of survival and calling to order members of the community who went against the shared norms and values of living in informal settlements.

Study participants argued that social networks were valuable to the members in a range of ways:

Participant #: it is satisfying and we treat each other with love (NW_FGD_Mafikeng).

Participant #: It's easy to answer that, my sister, like myself...I'm here but home is Limpopo...when I want to go home for maybe a month and a half, I am able to call on my brother who's a Tsonga or a Xhosa-speaker like but' Siphos and also Zulus. I just tell them 'my brothers, I'll be going to Limpopo' and they will tell me to have a safe trip. I won't leave anyone here; all I'll do is lock. We call one another and they'll update me on the safety of my house. Even if I need a tomato, I can always say 'hey Mashaba, how many tomatoes do you have, Three? Please give me one' and so one...so I can say that we are a family in that way (GP_FGD_Orlando).

Participant #: Block 5 am talking on behalf of my half I am someone who likes sharing things that other people do not have, you understand especially someone who is hungry no matter how small it is (GP_FGD_Madelakufa).

Social networks help to provide security against house breakings in the informal settlements, and individuals are able to access home-based care as a result of the groups that exist; the networks provide support in the form of food and food items that households might borrow from one another; discipline for the children and also the care and the social psychological support that people, such as the elderly need, or someone just greeting and asking how they are doing. Social networks in the informal settlements seemed to be forged along common interests, ethnicity, religious beliefs and political parties. Notable was the fact that the social networks of informal residents were not limited to the settlements but extended to areas of origin, specifically rural areas.

On the other hand, the networks were not always valuable. Residents indicated that youngsters could no longer be corrected by neighbours because parents shielded their own children from facing the consequences of indiscipline:

Participant #: you cannot reprimand your neighbour's child when he commits a mistake, his mother will tell you that is her child, why you shouting at him, and all that (GP_FGD_Diepsloot).

Participant #: There is a person that you can stomach [group agrees], but there is a person that you cannot stomach [group agrees]. And when you try stomaching that person, you really cannot [group agrees] and you even ask "Lord, what have I done because the book says love thy neighbour as you love yourself" [group agrees] but when you try to love your neighbour they just move away from you, when you try getting close to them, they move away such that you also see that you'd rather leave this person and go to this person that you can see that at least if you do not have salt, you can go to them. If I replace my door here, I can give that person to put in their house (KZN_FGD_Faireighs).

Participant #: we don't communicate, there is no community spirits or support, and they are groups here. We grouped ourselves by love, even the councillor has his own people, even on the meeting we always fight so there is no teamwork here and they call police on us. So if you can ask question, the councillor will says that you are one of the people who are fighting against him and that is when the attacking begins (EC_FGD_Joe_Slovo).

Forging social networks in informal settlements was neither easy nor straightforward. Some individuals actively resisted association with others. Therefore, seeking such individuals could be difficult and in fact yielded no results. Social networks are complex, and categorising them as either supportive or weak can conceal complexities and nuances that occur within the respective networks. While most people appeared to have supportive networks, there were those who could identify specific networks to which they belonged. The spatial elements also limited the social networks that individuals and households could reply upon. In the informal settlements, blocks seemed to define the spatial boundaries of social networks in the settlements themselves:

Participant #: Not all the blocks only few people do that I am able to go to my neighbour but I cannot go to everyone (GP_FGD_Madelakufa).

Participant #: For me is not good, if I have a problem nobody helps (NW_FGD_Mafikeng).

9.4 Social Cohesion and Inclusion

Analysts have grappled with the concept of social cohesion and its relevance in culturally diverse modern contexts. Simply put, social cohesion denotes ‘the “glue” or “bonds” that keep societies integrated...; it is the belief held by citizens of a given nation/state that they share a common moral community’ (Larsen, n.d.:2). For Larsen (n.d.), the shared moral community lies not in the same identity, religious beliefs or even family values but rather “citizens believe they share the norm of not cheating each other” (Larsen, n.d.:5).

In terms of the level of social cohesion in informal settlements as measured by how respondents rated the level of community spirit (togetherness), 56.0% of respondents said the community spirit was good (combined total; very good and good), 32.5% reported it was average, and 11.4% reported it was poor (combined total: very poor and poor) (Annexure 3, Section 9, Table A9.13).

Civic engagement as an indicator for assessing social cohesion in informal settlements was examined in the current study by asking about participation in a range of political activities at grassroots level. The findings indicate that 82.2% of respondents/household members had voted in local government elections, 18.2% had contacted the elected representative, only 4.1% had contacted newspapers, radio or TV to generate interest in a problem, 5.2% had participated in information campaigns (HIV awareness), and 26.0% had participated in a protest.

Among respondents who indicated that they had not voted ($n = 431$), the reasons advanced for not voting included not being a South African citizen (60.1%), the notion that “whether the respondents voted or not it made no difference” (8.8%), did not register (7.0%), fear of political intimidation (4.3%), and “other” (19.9%) (Annexure 3, Section 9, Table A9.14). In relation to violence as a reflection of the level of social cohesion, participants were asked whether the protests had led to violence in their settlement, with 44.7% having confirmed that protests had led to violence and destruction, while 48.1% reported that there had been no violence.

Table 9.3 presents reasons for protests in the settlements by province. Housing was cited by most households as the main reason for protesting in all the provinces, with cases of over 60.0%. The majority of cases who cited housing as the reason for protesting were in KwaZulu-Natal (86.5%), Limpopo (81.3%) and the Eastern Cape (79.1%). After housing, water was the second most common reason for protesting, with Mpumalanga (92.1%), Limpopo (74.2%) and the Northern Cape (54.4%) citing it as a reason for protest. Electricity was the third most common reason for protest. The highest proportion of respondents who cited electricity as a problem was in Limpopo (83.3%), the Northern Cape (69.8%), and the Free State (67.1%). A large proportion of cases in Limpopo (71.9%) cited sanitation as a key reason for the protests.

Table 9.3: Multiple responses for reasons for protests in the settlement by province

Province	Housing %	Water %	Sanitation %	Electricity %	Schools %	Health services %	Foreign nationals %	All of the above %
Western Cape	64.6	39.3	31.1	65.7	2.2	3.3	0.0	15.5
Eastern Cape	79.1	30.4	37.1	42.4	1.6	1.9	0.0	9.0
Northern Cape	69.4	54.4	54.6	69.8	7.2	6.3	1.3	12.7
Free State	63.3	52.0	50.0	67.1	20.3	28.6	4.3	22.9
KwaZulu-Natal	86.5	38.1	32.4	31.9	4.1	5.4	0.7	3.2
North West	75.0	34.0	18.5	30.6	13.2	7.4	15.4	8.1
Gauteng	60.4	39.5	31.6	37.0	15.7	14.6	6.7	23.7
Mpumalanga	48.2	92.1	32.3	32.3	8.6	7.9	7.2	7.2
Limpopo	81.3	74.2	71.9	83.3	41.4	53.2	6.4	15.3

Social exclusion as an indicator of lower levels of social cohesion is measured by establishing the existence of discrimination and the basis of discrimination in a society. In the informal settlements, very few respondents (8.2%) described themselves as being members of a discriminated group. Those who reported discrimination were further asked about the basis on which they were discriminated against, and three common cases were: tribe/ethnicity (33.2%), unemployment (31.9%) and language (23.9%) (Annexure 3, Section 9, Table A9.15).

In understanding how households were integrated and involved in the community, respondents were asked how they were involved in resolving problems in their community. The multiple responses indicated that 87.5% of the cases attended ward meetings, 39.1% spoke to their ward councillor, and 30.9% participated in service delivery protests. The largest proportion of cases which cited ward committees as the main avenue for resolving community conflict suggests that informal residents still have faith in the system (Annexure 3, Section 9, Table A9.16). The three main reasons cited for not being interested in participating in resolving the needs of the community were: not having time (23.3%), venues not being suitable (22.5%), and the fact that authorities did not take participation seriously (20.5%) (Annexure 3, Section 9, Table A9.17).

In responding to the question on how likely it was for the community to co-operate and resolve the problems, community leaders provided responses which can be categorised into i) communities coming together to plan how to resolve their challenges, ii) the community acting collectively to resolve challenges and iii) the municipality coming to resolve the challenges in the informal settlements.

In terms of the community planning together to resolve challenges, the community leaders shared the following:

“Yes, sometime we do call meetings to plan what to do” (GP_Community Leader_Tsakane).

“You know our people like to talk together to solve problems; it only depends on the leaders. If you listen, they give you a chance to resolve. If you don’t treat them with respect they will never respect you” (NW_Community Leader_Kanana Ext 13).

“Well, they will be 5 to 6 people in a group then they will come to my house to complain about something. They never come individually they always come in a group” (WC_Community Leader_Drakenstein 2).

The above extracts are consistent with the quantitative findings which showed that most households speak to their ward councillors to address concerns, rather than resorting to measures such as the media and

protests. There is minimal reliance on external (state or non-state) interventions to resolve certain community issues as shown in the following extracts:

“You see these taps? There are pumps and toilets ... there are municipal ones. The municipal ones are used by the municipality. They clean them, if they are broken, people from the municipality arrive, and they report them and fix them. There are others that were built before. We were told they were being given to us as community members, I don’t remember how it was arranged but they told us ‘every other problem is going to be your problem, if you have broken the tap, you will fix it yourselves’. There are people who can fix toilets, they fix them. If the pump is broken, someone can buy it. Sometimes we all contribute and buy the stuff that is needed. And another thing that recently happened, since the water is far, some people from a specific corner will say ‘what we should do is to pull the water for it to be closer to us as well’ so they contribute money to buy a pump to place the water closer to them than being far. So, that is working together” (EC_Community Leader_Cambridge).

“This I have to say it, if there is a problem with a tap, they must report to us, if they do not cooperate with us, it’s difficult for us to find the problem somewhere or maybe if the toilet is full they must come and report to us, they are cooperative” (LP_Mahlakaneng).

In some settlements the communities, instead of collectively resolving challenges, simply called the relevant authorities to resolve their challenges, thus exercising their civic duty:

“They call municipality to resolving those problems” (FS_Community Leader_Unit 3).

“... when there’s a problem, like I said earlier that we only rely on councillors; even when there’s a problem, say we don’t have water for a long time they are the ones who will organise water tankers to come and supply us with water” (MP_Community Leader_KwaZanele).

These extracts indicate that communities are empowered to deal with their challenges and understand that they are entitled to call upon the councillors or municipal officials to fulfil their mandate to the residents of informal settlements. The lack of trust in one another and lack of dependence on one another in tackling their challenges might suggest that such communities neither viewed themselves as having a common purpose nor destiny. What was surprising, was that most of the settlements that fell into the category of those where low levels of cohesion existed, were in the provinces with predominantly rural areas (Mpumalanga, North West, and the Free State), and only one settlement was in Gauteng. Thus low levels of social cohesion cannot be said to be a function of the urbanity or rurality of informal settlements but rather of individual settlement characteristics. In areas where there was no social cohesion study participants put it very clearly that:

“No, it doesn’t happen. Even when there’s a problem, like I said earlier that we only rely on councillors; ...” (MP_KwaZanele).

The lack of social cohesion as reflected in the extent to which collective action occurs suggested that each informal settlement is unique and has its own social dynamics. A surprising finding also was that social cohesion seemed to be minimal among two informal settlements in rural provinces (Mpumalanga and Limpopo).

The three most important structures that represented the interests and demands of the community were the ward committee (47.7%), political parties (18.7%) and the South African National Civic Organisation (SANCO) (9.0%) (Annexure 3, Section 9, Table A9.18). Other important structures cited were the residents’

association (6.8%) and church groups (3.8%). The homeless people's federation and trade unions constituted less than 1.0% each (0.5% and 0.4%, respectively).

9.5 Community Participation

The notion of participation when used from a development perspective denotes the collective involvement of beneficiaries in the implementation of projects (Paul, 1987). From the World Bank's perspective, community participation occurs "when people act in concert to advise, decide or act on issues which can be best solved through such joint action" (e.g. where externalities/indivisibilities are present or organised groups are essential for commitment creation, learning, confidence building, cost sharing and related issues) (Paul, 1987:2). The World Bank perspective is that community participation is a process rather than a product. The benefits of community participation derive from the process which results in the acquisition of skills as much as the product. The process of involvement ensures that the beneficiaries acquire skills necessary and sustaining development projects in their context. The objectives of community participation include empowerment, capacity building, project effectiveness, cost sharing in development projects and efficiency of projects (Paul, 1987). In the UISP, the community participation is conceptualised in terms of residents attaining the capability to be involved in "all aspects of the planning and development of the settlement" (DHS, 2009:30). According to the UISP, building the capacity of residents is essential to ensuring their participation in the upgrading process. The way to achieve participation in upgrading is through the "directed" approach, where "The community must be assisted and encouraged to achieve the required level of competency for meaningful and realistic participation in all aspects of their development" (DHS, 2009:30). Ward committees are considered as the way to initiate "capacitation and participation" (DHS, 2009:30) of residents in the upgrading process.

This baseline study sought to understand the extent to which informal settlement residents were involved in initiatives aimed at improving the living conditions in their settlement. The underlying assumption is that evidence of participation at baseline would result in community participation during the upgrading process.

The UISP underscores the importance of community participation in all the stages of upgrading. The insider knowledge that communities have of their communities is considered important in the settlement design and the installation of infrastructural services, provision of dwellings, and social facilities in informal settlements. The involvement of residents in planning for these services is part and parcel of community participation (DHS, 2009:30). There are different levels of community participation where upgrading of informal settlements is concerned. Participation can happen at planning, implementation and post-implementation phases (Ndinda, 2011). In the baseline study, there were settlements where the participation took specific forms, and some settlements reported minimal or no participation. In settlements where residents were collectively involved in pursuing development goals, the participants said the following:

Participant #: Yes, in terms of public participation, the IDP (audio not clear) unfortunately the community members did to go there in numbers you see, but since we did not participate well, we had a participation plan so that we give our own views, although not all of us are committed (GP_FGD_Diepsloot).

Participant #: There is no communication with the municipality, we are not working together, it is only there community that get along with each other but as there municipality no (NW_FGD_MK_Square).

As the extracts suggest, informal settlement residents organised and planned on how to resolve the challenges that confronted them. This was despite varying levels of commitment by the residents of the informal settlements. Informal dwellers further noted that although they were able to work together, there was minimal communication with local government. The participation of local communities in development

projects was done through development agencies such as the JDA (Johannesburg Development Agency), an entity of the City of Johannesburg.

Where limited participation was reported, participants noted that their participation was what can be considered “directed” participation as the leaders (councillors) informing the community, providing feedback from meetings which they convened for the community. Thus the participation was rather top-down and it entailed the residents receiving feedback without much space for interrogation of the information shared by their leaders.

The Madelakufa participants, however, noted that they had frequent meetings with their councillor. The meetings that they held were usually organised by the councillor of their area. The councillor explained the details of the issues that needed to be discussed with the community. The engagement between the councillor and the residents in Madelakufa was consistent with the principles of the UISP, which require the mobilisation of residents to get involved in resolving community challenges through interaction with their local representatives.

At the Freedom Square informal settlement (GP), participants noted that, although they were active in the local residents’ committees, decisions were made without their knowledge. In the past (1999), some residents were moved out of the settlement and allocated dwellings outside the settlement. The committee did not have information about this resettlement and the allocation of subsidised housing to the residents that had been moved away.

In some communities participants noted that there was little or no participation in their communities.

Participant #: Yes we did and we told them about our problems and they said they will deal with them once the budget is out but they never come back to us (FS_FGD_Mafikeng).

Participant #: And, just to add, there is no one representing us because no one cares about this place. There is another settlement that is just like this one, it was a compound before but now the residents own it, the municipality is able to go from here and respond to the demands on that side. They even have a community hall now and if there is any upgrading that the municipality will be doing, they are able to transport them on trucks and take them to the municipality so they can listen for themselves and comment on anything they want to comment on and raise their concerns directly. In our area, we just hear that there had been a municipal meeting in a particular place so they said this and that. Even the community hall, they finished the hall last year. It used to be a compound. So in our area, no one cares about us, no one ever comes and says “can we just take you so you can go directly to the municipality and raise your concerns”. We are not seen as important, that’s it (KZN_FGD_Poortjie).

Participant #: I will say no, because there way we participate even in the IDP nothing we said is being done they only bring what they want (NW_FGD_Kanana).

In places like Vaalwater in Limpopo, there was consensus among study participants that there was no communication in their informal settlement. Similar views were expressed in Poortjie (KZN), Joe Slovo (EC) and Kanana (NW). The responses in these areas suggested that communities were not organised, or perhaps that they did not share similar goals and objectives for the development of their settlements. These findings negate and challenge the commonly held assumptions about informal settlements as shared spaces which are “homogenous, with members’ shared characteristics distinguishing them from outsiders” (Leach et al, 1997:4). Where levels of participation were low, then levels of empowerment were likely to be low. The sustainability of development projects where levels of participation were low, was likely to be negatively affected as there might be little or nothing that held the residents together.

These findings are consistent with existing literature which critiques the notion that community participation is a panacea for failed development implementation. Dreyer (n.d.) in particular, refers to “unreliable assumptions” relating to the “high expectations of community participation” (Dreyer, n.d.:3). The assumptions include that the residents within the same territorial space can be referred to as a community, that social cohesion necessarily implies that residents can act collectively to make sustainable decisions for the good of the community, that there can be consensus in the community, that people necessarily know their needs, that the prioritisation of needs can be achieved within a group setting, that participation necessarily leads to sustainable development that people are willing to get involved or willing to be capacitated for long-term involvement in development. These, among other assumptions, critique the notion that community participation is necessarily the solution to implementing development projects or programmes such as UISP.

To establish the level of community participation in the upgrading of informal settlements, the study asked respondents whether the community had a say on the upgrading process. This was a multiple response question, which meant that one respondent had a chance of choosing more than one option. In this study, the level/type of toilets, level of water services and provision of electricity were the most common upgrading processes in which the community had a say, with rates of 85.6%, 84.3% and 84.8% respectively (Annexure 3, Section 9, Table A9.19). Informal dwellers were least involved in making decisions about multipurpose halls (48.1%), building materials (50.4%), and size of dwellings (59.1%).

The low levels of participation pointed to the need for a concerted effort in the mobilisation of informal residents to participate in the overall improvement and upgrading of their environment and homes. The low levels of participation also pointed to the existence of a top-down, technicist approach where experts planned for informal dwellers and implemented tailor-made solutions without sufficient consultation to understand the context and dynamics of the targeted communities.

The baseline study also sought to establish whether service delivery protests had led to violence. Out of 1 230 households that responded, 48.2% confirmed that there had been violence, while the rest (47.1%) indicated that there had been no violence and a few (4.7%) “did not know” (Annexure 3, Section 9, Table A9.20).

Violence is also a factor that affects social cohesion, and in the informal settlements sampled respondents were asked what forms of violence and harassment existed in their communities. Out of 1 229 responses, 25.0% confirmed that there was organised violence, 36.0% indicated there was non-organised violence, and 38.4% reported there was no violence. The different forms of violence (organised and unorganised) pointed to the need for greater security in these areas. Violence increases the vulnerability of informal dwellers, particularly women and children. Areas where violence is endemic are known to the security forces and these are considered “red” (dangerous) zones where even the police dread to venture. The research team had the experience of being attacked by an organised gang in the Western Cape and that meant that data collection could not proceed in the specific settlement.

9.6 Community Empowerment

Grassroots organisations are important in mobilising and organising local communities in embarking on development projects. In the different informal settlements, a range of local organisations exist and these include the following:

Faith Based Organisations (FBOs) that are linked to the local churches and whose role is informed by the doctrinal teachings of their faith. The FBOs are involved in visiting the sick in the community, offering help and support to families, caring for the sick, and of course spreading their faith in the community. The FBOs also provide meals to informal settlement dwellers. The work of local organisations is critical to the survival

of informal residents. The organisations provide a structure through which development can be planned, monitored and implemented in the informal settlements.

Home-Based Care organisations (HBOs), as their name suggests, visit the sick in their own homes and provide information to families on how to care for their sick members. HBOs are usually state-funded. Although some of the HBOs operate through the Expanded Public Works Programme (EPWP), this was not established through the current baseline. Related to the HBOs are organisations that deal with health issues such as drugs, anxiety and depression and general public health issues. Such organisations include the South African National Council on Alcoholism and Drug Dependence (SANCA) and the South African Anxiety and Depression Group (SADAG). SANCA is involved in providing counselling to drug users and also disseminating information to communities to help them be aware of the signs of substance abuse among teenagers and how to deal with the signs. Similarly, SADAG targets the youth but the focus is on ensuring mental health by addressing mental health challenges among teenagers in particular and the public in general.

Community-based organisations (CBOs) were described as operating in the different informal settlements but their programmes varied across the settlements:

Participant #: Talking about the home-based care, they concentrate on health of the elderly, as well as child-headed families. Pastors are concentrating on morale regeneration and promoting issues of religion and other aspect (GP_Rethabiseng).

Participant #: They really help with other people because they are able to have groceries for about a month even though when it finished they will be back to square one (KZN_Fairleigh).

Participant #: They function in different groups, like health, social, sport and safety and security (LP_Roossenekal).

The different grassroots organisations had programmes addressing the different dimensions of poverty. The programmes targeted the most pressing needs of informal settlement dwellers, such as health, education, care for the sick and elderly, nutrition, physical fitness, and awareness raising. The organisations were functional in the communities and they could be harnessed in the upgrading process to provide support, capacity or even to skill members such as the youth. The local formations that were not mentioned in response to this question and which emerged in discussions with the communities include the resident committees and the ward committees. The resident committees deal with issues related to adequate housing in the informal settlements. The ward committees make decisions regarding the settlements, and such decisions range from who is allowed entry into the settlement to how development should take place in the settlement. In embarking on any development in informal settlements, the development agents need to understand the structure of the existing organisations and their function in the informal settlement and also how such structures can be involved in the upgrading of informal settlements in South Africa.

While a range of structures existed in the informal settlements (Annexure 3, Section 9, Table A9.21), participants who responded to the question ($n = 1\,920$) identified ward committees and political parties as the most representative by most participants (47.7% and 18.7% respectively) (Annexure 3, Section 9, Table A9.18). SANCO and church groups (3.8%) were also identified as important structures that represent community interests. These findings suggest that informal settlement residents still have faith in the structures of representative democracy. Instructive as that is, both the quantitative and qualitative findings confirmed that grassroots organisations consistently emerge as representing the interests of communities.

9.7 Stakeholders Critical to the Upgrading of Informal Settlements

In each settlement, the existing NGOs, CBOs, FBOs, state departments, civil society, civic representatives and the local authorities are critical to the upgrading of informal settlements. The NGOs, CBOs and FBOs

worked with community members to provide support where it was required. These NGOs also seem to have a wider reach among the community members and therefore their perspectives are important in the planning phase of upgrading.

Given the high levels of unemployment cited among the key concerns of informal residents, the youth, men and women in informal settlements remain important stakeholders in the upgrading process to ensure that the upgrading is sustainable in the long run. The involvement of these groups in upgrading helps them to gain skills and experience necessary in the post-upgrading phase when maintenance of the infrastructure, dwellings and other public spaces is required. The interaction of informal settlement residents with the local authority provides insight into how they perceive the performance of local government in addressing the concerns of the residents.

The perspectives of informal dwellers were diverse, and reflected the conditions in the different municipalities and provinces. In all settlements, except one in the Northern Cape, the general perception was that the municipalities were unresponsive to the concerns of informal settlement residents and these remained unresolved, there was no trust between informal dwellers and the municipality, there was little or no communication between the informal dwellers and the municipality, when residents expressed their concerns, it took long for these to be addressed, and when the municipality undertook projects in the settlements, they did not include the targeted beneficiaries/informal residents as shown in the quotes below:

Participant #: Even when there are people or organizations who come here to help us solve our problems, our municipality continues to trail behind. When a person is coming to help you solve your problem you cannot trail behind (EC_FGD_Cambridge).

Participant #: There is no way we can, so we are still in the court trial...so we are prohibited from entering the municipality offices. We are afraid of going to the prison and now we don't know who to talk to (NW_FGD_Mafikeng).

Participant #: Those people that you talk of, they just pretend that they are not facing the problem, because they don't want to be on the wrong side of the councillor, thus they agree to what the councillor says even knowing that is not the truth, there are lots of problem here and most people are starving and the councillor knows the situations because he used to be one of us and is us who elected him because we believed in him and knew and understood our situations. They sometimes asked for donations on the people using our names and after receiving they don't share with us and I am staying with the orphanage children but they never received anything from the councillor and they were given to the people that don't deserve them who (NW_FGD_Mafikeng).

The relationship between the informal settlement dwellers and the municipalities is complex. In the Eastern Cape, one of the municipalities was perceived as being unresponsive to the needs of the residents, yet when help came from other sources, the municipality still did not partner with external agencies to resolve challenges in the informal settlement. In the North West, the informal settlement residents seemed to have an adversarial relationship with the municipality. The notion that the municipalities were slow in addressing the problems of informal dwellers was expressed in the North West province. The residents perceived the councillor, despite having previously lived in the settlement, as unhelpful because their problems remained unresolved:

Participant #: There is no relationship...We once called the municipality to come here to us, the only people who come was of Department of Human Settlements. The budget of Rooigronte is out and the term for them to finish with housing is over, they should have been done now with houses, so the municipality eats the money. I even asked the question at the Human Settlements meeting once in two weeks for reports and they said I talk too much. And the construction has

been here and they didn't finish with the houses and their term is over. Only if we have powers, we would stop them but unfortunately we don't have (NW_FGD_Mafikeng).

The relationship between the residents of informal settlements and the municipality was considered non-existent in the North West Province. Study participants argued that their pleas to the local municipality remained unaddressed and instead, the provincial DHS had been more responsive to their concerns. A similar perspective was expressed at the MK Square informal settlement (NW):

Participant #: There is no communication with the municipality, we are not working together, it is only there community that get along with each other but as there municipality no (NW_FGD_MK_Square).

Participant #: The relationship is not well, we do raise our concerns but they don't give them attention at all (FS_FGD_Unit_3).

At the MK Square informal settlement, the challenge was lack of communication between the residents and the municipality. Study participants argued that despite having no relationship with the municipality, the residents got along. In Unit 3 in the Free State, participants argued that despite raising their concerns, these often remained unaddressed. The tone and terms used by the study participants pointed to communities that have despaired of ever getting support or help from the local authority:

Participant #: Municipality does not agree but what we need to do is to strike and if you call your Cllr he will not listen to you, we should have called the Cllr to sit in this meeting to see that you are doing a good job (NW_FGD_MK_Square).

As the extract suggested, the unresponsiveness of local government was what led residents of informal settlements to stage service delivery protests, referred to as "strikes". The challenge of interacting with the municipality and councillors was particularly acute in areas where the informal settlements bordered formal townships, as this meant that the informal dwellers were represented by a councillor with whom they were not familiar, and who did not necessarily understand their context. Such views were expressed in Gauteng:

Participant #: Another thing that creates problems for us at Emalahleni is that we share a ward with the township, so when they vote, they also vote on our behalf, you see. So you find that they will just come and tell you that this is the councillor and you find that maybe you thought that the councillor you voted for was for another ward but it's the councillor for both areas in the same ward (GP_FGD_Orlando).

Participant #: That's another problem, you just hear people saying that this councillor has been elected, meanwhile you don't know him. You didn't vote for that person (GP_FGD_Orlando).

In instances where participants pointed to a relationship with the municipality, the relationship was often depicted as distant, and reflected on the services that the residents received. The following extracts illustrate such relationships:

Participant #: I don't know. What I see is that the people from local government do things then inform the community (GP_FGD_Tswaing).

Participant #: From my thinking and my knowledge, the only relationship we have with the municipality is through these water-cans, we do raise our concerns, as my brother was saying about the plastic bins...but they have not done that up until now (KZN_FGD_Poortjie).

As the extracts suggested, the evidence of interaction and relationship with the local authority among informal settlement residents was through the activities of the municipality in the informal settlement. Activities included the municipality simply getting on with their work and informing the community later, or the community receiving water cans. Such an approach is inconsistent with the UISP's conceptualisation of community participation, which states that "in order to ensure that community members assume ownership of their own development and projects, the involvement of the community from the onset is key. Hence, community participation should be undertaken within a structured agreement between the municipality and the community" (DHS, 2009:30).

In the baseline study where the residents were aware that their concerns were presented to the municipality, they remained concerned that nothing had been done about their situation. The participants pointed out how the relationship between other informal settlements was evident on the streets where women were involved in the public works programme. Thus the link to the municipality through the local councillor was considered not helpful, unless it resulted in the complaints of the residents being addressed:

Participant #: You need to start by going to the councillor and the councillor will then have to take it to the municipality. They even give him the feedback and then he comes back to tell you. So our link or the relationship we have with the municipality is through the ward councillor. We cannot simply go straight to the municipality (KZN_FGD_Babanango).

Western Cape informal settlement residents expressed the perception that the municipality was partial in tackling complaints from informal residents. Some of the residents had resigned to fate after numerous unsuccessful attempts to get assistance with the flooding of their dwellings:

Participant #: Not very quick, the municipality takes time to respond, our residents are always complaining saying the municipality is doing nothing for them and we sometimes think that they do not the good thing because I think that they are not able to meet the municipality halfway (NW_FGD_Kanana).

Participant #: They only listen to certain people. I had an incident where the drain was blocked and the drain water flood into my house, I complaint until I was blue in the face, they did not care and that is dirty water, waste water that was in my house (WC_FGD_Drakenstein).

The relationship between informal settlement residents and the municipalities was characterised by narratives about the unresponsiveness of local government in resolving the challenges that residents face. The unresponsiveness led to a breakdown in communication and in residents attempting to resolve their problems without the local government. In some instances, residents planned protests as a way of expressing frustration about the delays in getting services from local government.

9.8 Summary

This chapter started by noting that understanding social capital, social networks and the extent of social cohesion is important in explicating the context of informal settlements targeted for upgrading. The chapter argued that where participation was part and parcel of the community ethos, development was more likely to be sustainable than in communities that were fragmented and where the levels of social cohesion were low. The type of social groups identified in the informal settlements included churches, sports clubs and various NGOs. The existence of sports grounds did not lead to the creation of sports clubs or participation in the clubs that existed. Participation in sporting clubs was gendered and men were reported to participate more in sporting clubs than women. Most of the informal settlements did not have recreation facilities such as sports grounds, and those that did get involved in sporting clubs, had to be creative and improvise the available spaces in the settlement just to keep the clubs active.

Local organisations are critical to the implementation of development projects at the grassroots level. Similarly, local organisations are vital to the upgrading of informal settlements in South Africa and as such, organisations were reservoirs of social capital necessary in mobilising communities for development. The local organisations helped identify the critical stakeholders that needed to be consulted and involved in the upgrading of informal settlements. Some of the local stakeholders might not be readily identifiable and only through the process of stakeholder mapping in the communities could identity be established.

10. ATTITUDES TOWARDS FOREIGNERS

In terms of upgrading at the settlement level, the UISP provides services to all those who live in the targeted areas. The programme speaks to “recognising and formalising the tenure rights of residents within informal settlements” (DOH, 2004:13) and these residents include immigrants. Thus at the settlement level, all residents benefit from upgrading. However, at the housing consolidation level, the UISP specifies that “Beneficiaries of this programme will only receive access to land, basic municipal engineering services and social amenities and services. To qualify for housing assistance benefits, such as registered ownership and consolidation subsidy, beneficiaries need to comply to the requirements of the relevant programmes” (DHS, 2009:13). While locals who do not qualify for the housing subsidy still have options, the UISP is not clear about the options for immigrant residents in informal settlements. The analysis in this chapter focuses on South African informal settlement dwellers’ attitudes, and presents the results of both qualitative and quantitative data that examines the relationships that informal settlement dwellers had with foreigners, the attitudes of informal dwellers towards the contribution of foreigners, how attitudes towards foreigners were manifested in informal settlements and perception of informal dwellers towards the deportation of foreigners. The chapter begins by broadly reflecting on the attitudes of informal settlement dwellers towards foreigners. Respondents were asked whether in the past 3 to 10 years they would say the number of foreigners in their informal settlements had increased or reduced, whether both foreign nationals and local South African citizens engaged in positive friendships and relationships, and whether these relationships had greatly improved or deteriorated, how respondents would rate attitudes (from very friendly to very hostile) of people in their informal settlement towards foreign nationals, rate how attitudes towards foreign nationals was manifested in terms of stereotypes about foreigners in the context of housing insecurity (i.e. unemployment, lack of tenure, violence, declining livelihoods, and crime), propaganda used to explain tensions within informal settlements, and actions that should be taken to address access issues within the informal settlements.

10.1 Attitudes Towards Foreigners: A Descriptive Synthesis

In South Africa, the term “foreigner” is predominantly used with reference to African immigrants. In this study, the term is used in the same way and also interchangeably with terms that have similar meaning, namely African immigrants or simply immigrants. Immigrants from other contexts are rarely referred to as foreigners or labelled in the way that African immigrants are labelled in South Africa:

Participant #: ... they are accused of criminal activities, trafficking, raping, you name them. If you can ask here, who is a foreigner, they would mention, Zimbabwean and Mozambique. Those from Swaziland, Botswana and Lesotho, they are not foreigners, because they are very close to us, that is the problem (GP_FGD_Diepsloot).

The notion of foreigners in South Africa is a complex and contested one, and the qualitative findings from this baseline study reflected on the issues around defining who is and who is not a foreigner. Community perspectives suggested that black Africans are considered to be foreigners. A participant noted that in fact Africans (Black) from places such as Mozambique and Zimbabwe were the ones considered to be foreigners. However, the people from Botswana, Lesotho and Swaziland were not considered to be foreigners because their countries were geographically close to South Africa. While such an argument might stand for Lesotho and Swaziland, which are practically kingdoms within South Africa, the same cannot be said about Botswana which, like Zimbabwe and Mozambique, border South Africa. One might then ask why nationals from Swaziland, Lesotho and Botswana might not be considered foreigners by informal settlement dwellers, while Zimbabweans and Mozambicans are considered foreigners. One answer might be related to the languages spoken in Swaziland, Lesotho and Botswana (isiSwati, Sesotho, and Setswana) which are recognised as official languages in South Africa. Southern Sotho (Sesotho) and Setswana are similar to Northern Sotho (Sepedi), while isiSwati is similar to Zulu and Xhosa (Nguni languages). While the Ndebele language of Zimbabwe is similar to the Ndebele and Zulu languages of South Africa, it remains a paradox why

Zimbabwean nationals are considered foreigners. We argue that the definition and distinctions of who is and is not a foreigner from the perspective of informal residents is a reflection of how they make sense of the different African nationals in the country. The distinctions between “local foreigners” and “foreign foreigners” are also a reflection of how informal settlement dwellers make sense of the geo-political divide within the region.

The qualitative findings provide a glimpse of the attitude of informal settlement residents towards foreign nationals who live among them. The attitudes are reflected in the language and tone used to describe the relationship between the foreigners and local populations in the informal settlements. In areas where the attitudes towards foreigners are favourable, the terms used to describe the relationship with foreigners include:

Participant #: Foreigners are people just like us. As a result we get along with our foreigners (EC_FGD_Joe Slovo)’

Participant #: we respect them... treat them as equal to us (NW_FGD_Mafikeng).

Participant #: We are all Africans (GP_FGD_Orlando).

10.1.1 Friendships between South Africans and foreigners

The majority of South African respondents (60.1%) indicated that they didn’t have any friends who were foreigners (Annexure 3, Section 10, Table A10.1). This was somewhat lower than foreigners (66.8%) who by comparison indicated that they didn’t have any friends who were South African. The data therefore, shows that an overwhelming majority of both South Africans and foreigners did not engage in friendships and this had a risk of lesser integration. When respondents were asked whether they thought that the relationship between locals and foreigners had improved, 25.5% indicated that it had greatly improved even though the respondents perceived the number of foreigners as having greatly increased over several years (37.6%). It can therefore be said that there are factors that need to be identified which disconnect foreigners or citizens toward one another. According to this study, this can be linked to their perception about what they believed the other was taking away from them (for instance jobs, houses, etc.). When respondents were asked to rate the attitude of people in their settlement towards foreigners (from very friendly to very hostile), the majority of respondents indicated that attitudes of people toward foreigners was “friendly” (48.0%), compared to those who indicated that the attitudes were “neither friendly nor hostile” (28.2%), and those who indicated the attitudes were “hostile” (7.3%) (Annexure 3; Section 10 Table A10.2).

10.1.2 Informal residents’ attitudes towards foreigners

The attitudes of informal settlement dwellers towards foreigners are complex and hard to classify. The descriptions of these attitudes by the informal residents suggest that a range of attitudes exist, and these vary by settlement and also by province. What was however evident, was that within the same settlement and province a range of attitudes existed, and, therefore, it was difficult to say that specific attitudes were confined to certain settlements or provinces. The attitudes generally ranged from positive to negative, and, in between there were attitudes that could simply be considered as mixed or indifferent. While it remains difficult to classify the attitudes of informal settlement residents towards foreigners, the broad categorisations provided an understanding of how foreigners were perceived, treated and expected to live among the local populations in the informal settlements.

10.1.2.1 Positive attitudes towards foreigners

Certain aspects of attitudes towards foreigners could be described as positive, and the notion of positive attitudes towards foreigners was based on the words used in describing the relationship between the local population in informal settlements and the immigrants who also live in these communities. Study participants in different informal settlements used terms such as “good” “give”, “they don’t bother anyone”,

“our brothers” “people just like us”, “skilled”, “kind”, “our brothers-in-law”, “our children”, “our grandchildren”, “we are all Africans”. These terms provided an idea that positive attitudes towards foreigners abound in informal settlements. The terms used reflected the type of relationships that existed between the residents of informal settlements and the immigrants who lived among them:

Participant #: They are good and if you have nothing to eat, you go to them and they give you foods, they are good and if you have nothing to eat, you go to them and they give you foods (FS_FGD_Unit-3).

Participant #: Yes, there are but we don't have any issues with them (GP_FGD_Orlando).

Participants from different informal settlements in different provinces provided an understanding of the attitudes that people in their communities have had towards foreigners. From the extracts, foreigners were depicted as kind and caring to the people whose help was asked for, when necessary. The kindness of foreigners thus endeared them to the local people with whom they interacted. As a result, study participants noted that they did not have any concerns with the immigrants. More revealing was how the residents of informal settlements described the foreigners: “they are brothers”, “grandchildren”, “in-laws”, “they are God's people”. The kinship ties that informal settlement residents have had with the African immigrants suggested that at the individual level, both local people and foreigners interacted, and the relationships that informal settlement residents have had with African immigrants were enduring. In fact, the kinship ties that had been established had changed the attitudes of informal residents who now considered foreigners as part of their family networks:

Participant #: They are our brothers and some of them are now even our brothers-in-law. (Group Laughs) (GP_FGD_Orlando).

Participant #: We have the ones we have; we have no problems with them. Some of them are even our grandchildren now and son-in-law. The girls have had children from them; we have no issues with them (KZN_FGD_Babanango).

The description of foreigners using kinship terms pointed to an understanding of the relationship between the African South Africans and African immigrants. There was recognition that, one way or the other, individuals were connected. The positive attitudes towards foreigners arose from the relationships that existed between the residents and informal residents. The positive attitudes were also found across settlements and provinces, including KwaZulu-Natal and Gauteng, which were sites of xenophobic attacks in 2015. The connectedness of Africans was not just at the family level but extended to informal dwellers who recognised the importance of everyone and the fact that people were as much human as they were spiritual:

Participant #: We are all Africans. (GP_FGD_Orlando).

Participant #: We are all God's people (NC_FGD_Promised Land).

Beyond kinship ties, there was an understanding that both local and immigrant communities had a common African identity which encompassed and defined both citizens and foreigners. The self-identification of informal residents as Africans, just as the immigrants situated them in the broader African continent, implied a shared past, shared values and the recognition of a shared destiny on the continent. The situating of informal residents, not just within the South African borders but within a broader African space, encompassed the so-called “foreigners”, essentially erased the “foreignness” of the African immigrants within an African space. The notion of a common African identity thus erased the differences that divided informal settlement residents and foreigners (African immigrants) along national boundaries.

The notion of a shared African identity thus included those encompassed by such an identity and simultaneously excluded those outside the shared African identity. Such understandings of identity suggested that while informal settlements have been considered to be spaces of exclusion, they can be spaces of inclusion where the “other” excluded from the mainstream economy and its workings, finds a shared identity not based on ethnicity or nationality but on the shared experiences of living in spaces of exclusion. The notion of a shared identity in which all people are “God’s people” pointed to the recognition that beyond political, ethnic or national boundaries the divine, spiritual element ultimately explained how informal residents perceived their identity. Those living in informal settlements were concerned not about ethnic or national identity politics but their suffering and relegation to the margins of the affluent society. The shared experiences on the margins of cities and towns, their struggles to survive and the precarious existence in spaces where minimal and no basic services such as water, drainage and sanitation had resulted in a redefinition of informal dwellers as “God’s people”, rather than as either citizens or foreigners. The positive attitudes towards foreigners in informal settlements help to dispel the generalisations that informal settlement residents are xenophobic. The positive attitudes indicate that despite the challenges in informal settlements, residents find ways to be kind to one another, to reflect upon what it means to be human and to extend that humanness to others around them.

10.1.2.2 Negative attitudes towards foreigners

The negative attitudes towards foreigners suggest that they were perceived and described as in Table 10.1.

Table 10.1: Negative attitudes toward foreigners

<ul style="list-style-type: none"> • They have shops and do not employ locals. • They use impolite language towards locals. • Their competitive prices force local traders out of business. • They are perceived as being responsible for crime, human trafficking, rape. • They are corrupt and that is how they enter South Africa. • They are not taxed for employment. • They have no passports. • They do not bank their money in the country. • They accept low wages for their labour. • They do not have the correct documents to be in the country. • They occupy all the shops and drop prices. • They cheat the communities that South African leaders stayed in their (African) countries. • They steal customers from South Africans. • Indians take their cars to fellow Indians for repair. 	<ul style="list-style-type: none"> • They ask locals if their debts are paid so that they can sell them goods. • In the workplace they do things locals do not understand. • They want to rule South Africans. • There are more foreigners working than South Africans • They are treated differently to South Africans and given contracts while South Africans are fired. • South African workers with grievances are threatened by employers being told that there are other people who are willing to work. • Foreigners are considered to be illegal. • Foreigners are considered to be illegal and to use different names and are therefore not traceable. • Suspected in trading in expired foodstuffs. • Nigerians sell drugs to local children.
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These perceptions were drawn from different communities. Worth noting was the fact some discussants expressed more than one view and, in fact, both positive and negative views were expressed in the same focus groups and by the same participants. What was valuable was that when the negative views were expressed, participants proceeded to explain their perceptions. Thus the same individuals who expressed negative attitudes would in the same sentence also express positive attitudes. In some instances, it was not clear what the attitudes of the individuals and communities were, because participants would merely express shock and dismay at the attacks against foreign nationals and carefully reiterated that such attacks were not happening in their own communities but rather in other places far from their communities. The notion, therefore, that xenophobia happened out there but not in their own community might have been an attempt

for the communities to distance themselves from the acts of violence that were reported in the informal settlements. Informal settlement dwellers in particular said the following:

Participant #: People were crying that there are foreigners here and every shops is operated by them but they don't hire anyone from south Africa, others were saying that the foreigners they don't know how to talk to them because they use bad words against south African ,yah such things. (FS_FGD_Unit-3).

The perceptions about foreigners in these extracts related to the role of African immigrants in the economy. The immigrants were perceived to resist employing locals in their shops. The underlying connotation was that they were insular and kept to themselves while using township space and customers to build their wealth. Also evident was the fact that foreigners were perceived as being so competitive in business that they forced local traders out of business. Foreign nationals involved in trading were perceived as being so ruthless in their pursuit of money that they found out the debt status of potential customers before attempting to sell their goods. The foreign traders were portrayed as only being interested in the sales they could make from their customers. In addition to immigrants involved in business or trading, participants also verbalised their views about immigrants in employment:

Participant #: If I can add, I was also going to say that we don't have a problem with foreigners, we don't hate them...but there is just that thing, okay and the bad things that they have become associated with, that they have come with. But here in our community maybe it's at a lower level. But let's say you are hired with them, and then let's say we are not happy with something regarding the employer and we speak to the employer about it, especially with regards to wages, the employer will not want to deal with that issue. Instead, they will say that if you are not happy then you must leave and then you will lose your job because there are people who want to work. You find that in the end they are the ones who will remain behind and work, and you people will lose your jobs which means that in the concerns that we raise, we end up not getting any help because we must then accept whatever we have to, the employer is not willing to talk to us but just ignores us and does not sit with us and say "no, I will not be able to meet your demands because of whatever reason", they will just tell us to leave because they can get someone else (KZN_FGD_Zamani).

The perceptions about immigrant workers were drawn from participants in KwaZulu-Natal informal settlements. It was in KwaZulu-Natal where the 2015 wave of xenophobic violence started, and media reports attributed the violence to the employment situation where local workers had been dismissed while foreign workers were left working. The extracts seem to reflect the media reports regarding the root cause of the xenophobic violence of 2015. The employed foreigners were perceived to be a problem and obstacle for collective bargaining. They, too, were accused of accepting low wages, suspected of doing things in unorthodox ways that locals do not understand, and which resulted in locals being dismissed from work. Immigrants were portrayed as dominating, taking charge and wanting to "rule". Immigrants were perceived as not co-operating with local workers in demanding higher wages. The view that immigrant workers were not involved in collective bargaining and that they remained working when locals were dismissed, resulted in immigrants being perceived negatively. The extracts relating to business, trading and employment were consistent with media reports which had attributed xenophobic violence to business practices of immigrants which were perceived to contribute to their dominating business in low-income areas.

The negative perceptions about immigrant traders were largely drawn from the Free State study participants, while the discussions about immigrants in employment largely emerge from discussions with KwaZulu-Natal participants. The fact that similar views were not expressed in Gauteng and the Western Cape did not necessarily imply that such views did not exist in these two provinces but perhaps were a reflection of the changing levels of tolerance towards African immigrants. Migrants were considered not to play a role in the South African economy with claims that they did not pay taxes and that the money made in the country was

banked in their home countries. Such perceptions, while not supported by evidence, perpetrated the myth that immigrants did not contribute to the South African economy. Yet such myths, which the media also echoed, did not stand up to factual scrutiny. The negative perceptions about immigrants were not only limited to business, trading and employment, but extended to every aspect of the immigrants' existence. Immigrants were considered to be illegal (regardless of their status). Those who were known to be legal were suspected by locals to have fraudulently acquired their permits:

Participant #: For them it is tough they come here and see a shack and they see that as a better life compared to where they are from and they enjoy the freedom that comes with it. We need to settle with them, what I am against is corruption how do they get in? When they get employment they also should be taxed so that they can play a role into the economy that's it they must stop banking in their homes, they do not even have passports how do they get in? (GP_FGD_Madelakufa).

The rhetoric of illegal immigrants was not limited to informal settlements but appeared to be a commonly accepted way of describing African immigrants in South Africa. The media was a major culprit in perpetuating and entrenching such rhetoric. The language used in these extracts was congruent with media depictions of African immigrants as “corrupt” and “illegal” and associated with providing “cheap labour”, thus putting local workers out of the labour market. The notions of illegality and corruption also emerged among study participants in Gauteng. In terms of perceptions by local South Africans on whether foreigners benefited from South Africa recourses as an indicator of how attitudes were manifested, the quantitative data indicated that the majority of respondents were conflicted about whether foreigners benefited from RDP houses, or they did not contribute to the economy, or were stealing our jobs, or had legal documentation, or were involved in illegal activities, or that they should be sent to their countries of origin. For example, the percentage of the respondents who disagreed that foreigners benefited from RDP houses was 29.5%, with 12.9% strongly disagreeing with the statement. However, 21.1% of the respondents agreed with the statement. In addition, 21.0% of the respondents agreed with the statement that migrants contributed to the economy compared to 22.8% of the respondents who did not agree with the statement. With regards to the statement that foreigners were stealing local jobs, 25.6% of the respondents disagreed. With regards to whether foreigners were involved in illegal activities, 21.4% of the respondents disagreed and 18.3% of respondents agreed with the statement (Annexure 3, Section 10, Table A10.3).

10.1.3 Trends in the relationship between South Africans and foreigners

The attitudes towards foreigners to a large extent explain the type of relationship that existed between South Africans and the foreigners. Discussions with informal dwellers suggested that the relationship between citizens, and between foreigners and citizens was complex and varied from settlement to settlement. In some areas, the relationship was described as being cordial, harmonious and was characterised by respect and unity with the foreigners. A participant noted:

Participant #: Foreigners are people just like us. As a result we get along with our foreigners. No, we have not experienced that, like that xenophobia that we saw in Gauteng, it has not happened with us. In this community, we all get along very well. No one foreigner has ever been violated, we all get along. If someone from another place tries to rob one of them, we call them by name and tell them “so and so, stop what you are doing that is a person just like you”, and they let them be (EC_FGD_Joe_Slovo).

The relationship between citizens and foreigners in Joe Slovo informal settlement could be described as pleasant. The residents viewed the foreigners as their own people; the foreigners were considered to belong to Joe Slovo. The tone and terms used “our foreigners” suggested that Joe Slovo residents were protective of the foreigners who lived in their midst. The residents were proactive in protecting foreigners to the extent that those who attempted to attack foreigners were exposed and called to order. The foreigners were

considered to be part of the community, and violating any of them was considered a violation of the community. In places like the North West, the relationship between the citizens and foreigners was considered to be based on respect and treating the foreigners as equal. Participants were of the view that the relationship with foreigners was one of acceptance and integration, and the treatment was reflective of their belief in the equality of people:

Participant #: You see here we are living together in harmony. When I'm watching TV I see them being violated by people in other places. We don't have that here (EC_FGD_Joe_Slovo).

The fact that the children of foreigners attended the same schools as those of the local population reflected the level of integration and acceptance by the local communities. The fact that foreigners were safe in the North West was expressed in terms such as "they are fine here". The notion of respect was an important one in defining relationships in the South African context. Where respect abounded, people were able to co-exist in peace. Respect defined the boundaries that individuals could cross and those which they could not. In the absence of respect, people violated one another and tension ensued. In some informal settlements, the relationship between the citizens and the foreigners was characterised by tension, suspicion, patronizing attitudes and hostility from the local people, particularly in KwaZulu-Natal:

Participant #: What I can say, from what I have seen happening...there are a lot of foreigners who cause trouble and they have this thing where they have some groups that they want to teach those things. But not all of them, some of them are here in search of employment and wanting to live. But some of them came here to cause trouble (KZN_FGD_Fairleigh).

The perception that the population of foreigners was large in Fairleigh created hostility which was further aggravated by the notion that the foreigners had exclusive groups where ideas that they discussed were perceived to be negative by the local community. The hostile relationship with foreigners was not limited to Fairleigh but extended to other informal settlements in KwaZulu-Natal where some of the local people had no relationship and were indifferent to foreigners:

Participant #: Okay, for me, let me be honest, I feel nothing for them. Because we all get hired together and then they come and do things that we don't understand. They now come and want to rule us in our own territory. Then you find that now the South Africans that are working are smaller (in numbers) than the foreigners and then they are the only ones who are working, and it's easier for you people, who are actually citizens, to be fired and then they remain behind and work. (KZN_FGD_Zamani).

The indifferent and hostile relationship with foreigners arose from the perception that foreigners who worked alongside locals were always suspected of acting with ulterior motives. Among workers, the relationship was so hostile that the foreigners were suspected of aiming to dominate the locals in what they considered to be their own space or "territory". The hostile relationship was largely due to the perception that while citizens lost their jobs, it was the foreigners who got hired and only because they accepted low wages:

Participant #: Yes they are taking our jobs (KZN_FGD_Kwazanele).

While it might appear that only hostile, suspicious relationships between informal settlement residents and foreigners was largely limited to informal settlements in KwaZulu-Natal, participant discussions also pointed to strong relationships based on mutual trust, understanding and kinship ties. The foreigners were in-laws to the citizens. The people considered as foreigners were the children, grandchildren and in-laws of the citizens. The forging of kinship relationships between locals and foreigners suggested that although at the macro level the relationships with foreigners might have seemed hostile, people interacted at the

personal level and forged lasting relationships which were not based on suspicion or patronage but on mutual trust and respect:

Participant #: We tolerate them because wherever they are coming from, they left for a reason. So we are here to do the same thing. As our brothers were saying, we learn some things from them and vice versa (KZN FGD Poortjie).

Outside of the hostility, suspicion and kinship ties were the relationships of tolerance. As participants noted, there were relationships based on tolerance and the recognition that individuals shared the same space because each individual was interested in pursuing his or her own interests.

10.2 Manifestation of Attitudes towards Foreigners

The attitudes towards foreigners were manifested in a range of ways. The language used in describing the immigrants generally was a manifestation of the underlying attitudes described in the previous section; the tone used in discussing the “foreigner” issue was also reflective of the general resentment towards foreign nationals, particularly African immigrants. There was a difference in how quantitative respondents addressed the issue of how attitudes were manifested. In the quantitative data, respondents disagreed that derogatory terms were used by locals to refer to migrants as *makwerekwere*, for example, that propaganda was used to address migration issues, that hate speech was used against foreigners, that violence was used against foreigners, that migrant shops and businesses that belonged to foreigners were looted and destroyed. The majority of respondents (68.6%) reported that the attitude towards foreigners did not manifest through the use of derogatory terms such as referring to foreigners as *makwerekwere* (Annexure 3, Section 10, Table A10.4). Furthermore, 82.2% of the respondents reported that the attitude towards foreigners was not manifested through propaganda against foreigners. Those who reported that the attitude towards foreigners was not manifested through hate speech against foreigners constituted 79.8%. When respondents were asked whether violence against foreigners was manifested, 82.6% said no, and when asked if looting and destruction of shops and businesses that belonged to foreigners also were common manifestations of attitudes, 79.0% said no. Indeed, the information shared in the quantitative data deepened the analysis of the qualitative data and revealed nuances in how attitudes were manifested. The most glaring manifestation of the attitudes towards foreigners was the resistance by the locals to refer to African immigrants by their names, and the widespread tendency to derogatory labels such as *makwerekwere* – widely used in the literature. In the qualitative assessment, derogatory terms were also evident in the language used in describing African immigrants:

Participant #: Yes we do call them that, especially the ones from Zimbabwe, mazwaziri, mashangani, mashweshwe. We don’t call them with the suitable names (FS_FGD_Unit-3).

The resistance to correctly address foreigners was reflective of the widespread tendency to denigrate and oppress the vulnerable “other” within the South African context. Under apartheid, Africans in South Africa were considered to be illegal in White cities, unless they had permits. The general tendency of the South African public is to denigrate the “other” who is considered less powerful and vulnerable to abuse and exploitation because of their perceived illegality.

Attitudes towards foreigners in the informal settlements were also manifested in how they were treated by their host communities. Study participants from different informal settlements reported that African immigrants were treated favourably in their communities, they were not harassed nor subjected to prejudices and they were viewed as being human just like the local people. These attitudes were expressed in various ways:

Participant #: The ones here are fine, they are treated well. They live like us. Nobody bothers them and they not bother anybody (GP_FGD_Tswaing).

Participant #: Yes we do work well with them..., even though is us who need them the most, because all the shops here are occupied by them and they sell in low prices (NW_FGD_Claudia).

These extracts suggested that there were settlements where immigrants were treated favourably, welcomed and not openly subjected to prejudices which got out of hand and led to violent attacks. Study participants reported that since the immigrants did not bother anyone, the local population did not bother them. Participants in various discussions were however careful to note that attitudes towards foreigners manifested in negative and violent ways:

Participant #: I'll put it like this...because we have not seen community members saying that they do not want them because they are "this"; I can say that that happened in other places, that has not happened here. But we are still living with them. Some of them...I can't remember which newspaper it was where someone was getting stabbed and they killed him...they were really hurt by that and some of them said that it is not right, and it shouldn't happen in a community. Because these people that we call "foreigners" are our brothers, we all come from there (KZN_FGD_Fairleigh).

The hostile and prejudicial attitudes towards foreigners were manifested in attacks directed at them in the informal settlements and elsewhere. The general perception was that violence directed against immigrants happened in other places, in Gauteng and Durban. When violence broke out in Durban, the same violence broke out in Zamani informal settlement but the residents reported being able to quickly contain it. In other informal settlements in KwaZulu-Natal the study participants were of the view that violence against African immigrants was happening in other places but not in their own settlements. The hostility and violence directed at African immigrants was due to their perceived vulnerability – they are "illegal" and the perceived illegality and reporting crimes against them to the police was similar to exposing their illegality. Immigrants are easy targets of robberies not only because of their perceived illegality but also because of their type of occupations – they are involved in trading and therefore considered to have cash at their disposal.

The manifestation of attitudes towards foreigners was largely drawn from South African participants in the informal settlements. The findings of this baseline study do not reflect the voices of the immigrants to be able to confidently claim a comprehensive understanding of the manifestation of attitudes towards the immigrants. Further research including the voices of the immigrants is required to understand how attitudes towards them are manifested. Despite the manifestation of negative attitudes towards foreigners, there are certain attitudes, unspoken but manifested nevertheless, which are more powerful than the fierce outbursts of violence that are from time to time depicted in the media. Such attitudes were expressed by participants across informal settlements in the country. Despite all the negative attitudes, the derogatory language used to label African immigrants and the hostility and violence directed towards them from time to time, there was a strong recognition that these same immigrants that were "othered", marginalised, targeted for violent assault and attacked were relatives, brothers, fathers, children and grandchildren. The relationship between the local population of informal residents and immigrants was also manifested in the kinship ties that had been forged:

Participant #: ... it was where someone was getting stabbed and they killed him...they were really hurt by that and some of them said that it is not right, and it shouldn't happen in a community. Because these people that we call "foreigners" are our brothers, we all come from there (KZN_FGD_Fairleigh).

Participant #: The foreigners okay...yes there are foreigners here but we respects them and we treat them as others equal to us (FS_FGD_Mafikeng).

Kinship ties forged were a powerful manifestation of the relatedness of local Africans and immigrants. The use of terms that depicted the connectedness and relatedness of African South Africans and immigrant Africans indicated that even in the informal settlements there was a strong recognition that the “othering”, brutalizing and hostility towards immigrant Africans did not erase the common identity as Africans whose difference was the separation by borders but not by ancestry as echoed in the phrase borrowed from *Isidingo* – “brothers from another mother”.

10.3 Perceptions of Locals towards the Role of Foreigners in South Africa

Informal settlement dwellers reported that foreigners played an important economic role in their communities. The low prices of goods in informal settlements helped the residents get by on meagre resources:

Participant #: Yes we do work well with them..., even though is us who need them the most, because all the shops here are occupied by them and they sell in low prices (NW_FGD_Claudia).

The notion that the informal residents needed the foreigners because of the low prices pointed to the symbiotic relationship between the foreign traders and the local population in the informal settlements. The foreign traders were perceived to provide basic needs at prices affordable to the poorest of the poor who resided in informal settlements throughout the country:

Participant #: I don't see any issues with non-South Africans because you find that they sell stuff that they have done with their own hands that we are incapable of doing. So I don't mind them walking around and doing their work. What I don't like is when they come around asking if you have finished paying your debt because they want you to buy something (KZN_FGD_Babanango).

Foreigners were considered to possess skills which the local population did not have. As the extract below suggests, foreigners made products with their hands and sold them to the local population because of the skills they possessed. The skills that the foreigners possessed could be passed on to the local population if both the locals and foreigners worked collaboratively:

Participant #: Just to add; there is a slogan that says “working together we can do more”. I don't see how living with foreigners is a problem because if we work together, there are some skills that he/she can give me that I didn't even know of. Let's say that person has skills that I can also live with, and that can help curb unemployment. Let's say a person comes from Lesotho, like my brother, and he comes here and shows me how to make a straw hat. That hat is expensive, R300/R400, so I can live with that person (KZN_FGD_Poortjie).

There was also recognition that the skills that the foreigners possessed were what earned them income that the informal dwellers also desired to have. The skills that the foreigners possessed were considered to be important in addressing the high unemployment rate, a theme that run throughout the discussions on attitudes towards foreigners:

Participant #: To be honest I don't have a problem with them, they will help us when they can. If you don't have money for bread they will help until payday (WC_FGD_Drakenstein).

In addition to helping out neighbours with food, the foreign traders were lauded for extending credit to their customers. Informal dwellers that did not have money, could go to a foreign trader and ask for groceries on credit until they got paid. Thus, while contributing to the economy by creating vibrant small enterprises, the foreign traders helped in curbing hunger among the local communities which also contributed to the broader economy when the people were able to continue working because they had access to food that they could pay for at the end of the month.

10.4 Summary

This chapter has demonstrated several challenges and opportunities to addressing attitudes that have prevented diverse communities from engaging and finding common solutions. The data presented herein have implications for the ability of authorities to address housing issues that impact both South African citizens and foreign nationals living and working in and around informal settlements. Both qualitative and quantitative data show attitudes towards foreign nationals manifested in many ways, from being stereotyped as a burden to the economy or being viewed as incubators of criminality. Within the context of housing and informal settlement upgrading, diverse world views are used to explain the state of social cohesion within informal settlements. Also of note is that some researchers have highlighted the role of the media and their crucial role in shaping public perceptions, and many have suggested active communication programs on the benefits of coexistence.

11. SUMMARY

Understanding the current status of informal settlements that have been targeted for upgrading is crucial to any future assessment of the impact of such upgrading on the lives of people living in these settlements. It is particularly important because it establishes the starting point for a programme such as the UISP. This study serves as a baseline for informal settlements targeted for upgrading, and these were drawn from municipalities in different provinces. This baseline study provides an overview of the status of sampled informal settlements targeted for upgrading across provinces. Ideally, baseline studies should be conducted per project to provide an overview of the context of the specific settlement before upgrading in order to be able to assess the impact of interventions implemented during upgrading.

The decision to systematically conduct a baseline assessment at this point in time particularly for those settlements that are likely to be upgraded in the next few years, provided an opportunity to not only develop a feasible methodology for conducting it but also establishing the starting points (or indicators) that will be useful for future impact evaluations. This is also important in a context in which government operates on results-based management, and each sector or programme must demonstrate value for money in measurable impact. This study represents the first such attempt by the DHS to establish a baseline and also to lay the basis for effective ongoing monitoring and evaluation activities.

In addressing housing policy, the Habitat Agenda underscores the importance of decentralising housing policies to local level and linking housing policy with macroeconomic, social, demographic, environmental and cultural policies (UN Habitat, 1996). In emphasising the notion of consultation, the Habitat Agenda underscores the importance of community participation both in the design and implementation of housing programmes, including the upgrading of informal settlements.

The UN Habitat's goals and indicators as they relate to shelter, social development and eradication of poverty, environmental management, economic development and governance, are relevant in understanding the context of slums/informal settlements, and therefore can be adapted as baseline indicators in assessing the impact of upgrading slums. In addition to the existing indicators, the UN Habitat added the MDG goal 7 (Ensuring environmental sustainability) and its target, namely, "By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers" (UN Habitat, 2009:42). The definition of this target is "the proportion of urban population living in slums as the percentage of the population living in a slum household that lacks one or more of the following basic services: improved water, improved sanitation, durable housing, sufficient living area or security of tenure" (UN Habitat, 2009:42). Informal dwellers thus represent the poorest, most deprived people who live without access to potable water, adequate sanitation, shelter and security of tenure.

In the UN Habitat lexicon, informal settlements are characterised by the lack of water, sanitation, overcrowding, non-permanent structures and lack of tenure in all its various definitions (UN Habitat, 2006). These characteristics are referred to as the indicators of informality and slum conditions. The existence of urban deprivation as represented by the extensiveness of informal settlements globally alongside affluence of well-planned and serviced formal settlements in essence presents what the UN Habitat has christened the "urban divide" (UN Habitat, 2010:6). The expansion of urban areas has been characterised by the growth of informal settlements, and despite efforts to improve the living conditions of slum dwellers, few countries have made marked improvements. The UN target was to ensure that about 227 million people should have moved out of informal settlements between 2000 and 2010. In this period, Asia made significant strides with improvements being made in the lives of 172 million informal residents (74.0% of the global slum population) (UN Habitat, 2010). The most significant improvements to the lives of informal dwellers were achieved in China, India, Indonesia and Vietnam.

Africa lags behind in improving the lives of informal residents. Between 2000 and 2010, the continent improved the lives of 24 million people living in slums (UN Habitat, 2010). In sub-Saharan Africa,

improvements in the lives of informal dwellers were achieved in Rwanda, Ghana, Senegal, Guinea and Uganda. Globally, the region that achieved greatest success was Latin America and the Caribbean where 30 million people moved out of informal settlements between 2000 to 2010 (UN Habitat, 2010). The Dominican Republic, Argentina and Columbia accounted for most of the improvements that were achieved in the lives of slum dwellers.

Policy Approaches to Informal Settlement Upgrading

The proliferation of informal settlements in different contexts has always been met with varying responses by the authorities. Gulyani & Basset (2007), in discussing the upgrading of informal settlements, noted that due to the overwhelming focus on upgrading of informal settlements in Asia and Latin America, very little has been documented about upgrading of such settlements in Africa, except for South Africa. The prioritisation of other regions has resulted in a knowledge gap in terms of the existing knowledge on the evolution and process of upgrading, as well as the impact of upgrading in Africa in general. This is despite the fact that there is a 30 year evolution of upgrading of projects in Africa. Gulyani & Basset (2007) observed that although upgrading in Africa started in the 1970s with large programmes comprising of infrastructure and housing, subsequent upgrading programmes became smaller in terms of package of upgrading, as well as the number of informal settlements upgraded.

The 1980s were a period when the World Bank financed site and service schemes in selected projects in African cities. Upgrading has over the years evolved to adopt an enabling approach where slum communities are assisted with the regularisation of land tenure and the provision of communal infrastructural services such as water and sanitation to ensure hygiene. Increasingly, governments have proceeded to provide services to ensure health and safety without necessarily extending security of tenure.

Key elements to consider in the upgrading of informal settlements include security of tenure, health and safety, economic revitalisation of communities, financing for upgrading, community participation and empowerment, as well as institutional arrangements. These elements have been discussed with reference to informal settlement upgrading globally and form a useful basis for explicating the status of informal settlements targeted for upgrading in South Africa.

Validity and Appropriateness of Theory of Change underlying the UISP

Part of the original intention of this study was to critique the theory of change of the UISP with the intention of making proposals for adjustment. However, it became clear during the research process that such a TOC only existed implicitly. It is, therefore, needed to be defined clearly first, and then tested to the extent possible during the baseline study.

The study drafted an explicit TOC for UISP based on the review of relevant policy and programmatic documents, and more importantly through active engagements with the officials from the departments of human settlement, as well as planning, monitoring and evaluation in the Presidency, the custodians of housing policies and responsible for the monitoring and evaluating progress in the sector. Clearly, the proposed TOC is dynamic and likely to change as the housing sector and policies around upgrading of informal settlements change. To unravel the underlying TOC, the study had to assess the design of the UISP which represents the initial phase in the review of policy. Notable is the fact although the study began on the process of design assessment, the exercise was partial and incomplete as policy/programme design assessment was not the aim of the baseline study but an exercise that was undertaken to help unravel the underlying TOC of the UISP.

Assessing the appropriateness of the TOC for UISP entailed analysing the programme's intent, goals and, more importantly, the desired outcomes. The ultimate goal was that of improving the quality of life of people and their communities through eradication of informal settlements. Ensuring a decent standard of living for the population also entails ensuring that people have adequate housing in addition to other basic

services such as water and sanitation, social services, energy and safety amongst others. These are part of the two key stages of the UISP relating to the provision of basic infrastructural services aimed at securing health and safety and the incremental development of the top structures. The key tenet of the UISP is that by improving tenure security, health and safety, and empowering the communities, the quality of life of people living in informal settlements will improve. This makes intuitive sense, and clearly the conceptual basis and logic of upgrading informal settlements in situ remains as relevant and broadly valid today as it was when it started. However, the social and economic context is not static, and the expectations of people are equally not static, suggesting that the implementation of the UISP needs to adapt to the changing context of informal settlements in South Africa.

The analysis of the UISP suggests that for a programme to be plausible and appropriate, key stakeholders and the intended beneficiaries of the programme need to be involved in its design. The UISP did not have a specific and/or explicit TOC that informed its current design. Without a clearly articulated vision/ultimate goal, the research had to glean and construct it from a range of existing documents. The activities and the objectives of the UISP provide a useful basis for the construction of baseline indicators to determine the status of informal settlements in South Africa before upgrading, and these same indicators can be deployed in determining the impact of upgrading informal settlements.

The Status of Informal Settlements Targeted for Upgrading

Methodological issues

A number of methodological issues related to this baseline assessment are worth highlighting. First, establishing the sampling frame of informal settlements that had been targeted for upgrading was difficult. This was partly because of the lack of a consolidated data base at national level due to the decentralised nature of the UISP implementation. Furthermore, additional difficulties were encountered due to the fact that available data from the provincial DHS were not collated. Therefore there was no clarity on the exact number of informal settlements targeted for upgrading. The key issue that arose was that the provincial DHS data seemed to categorise settlements in terms of projects and not necessarily in terms of informal settlements. Therefore there was a need to set standards in terms of how data on human settlements was to be collected and collated from the municipal, provincial and national level in order to achieve the required consistency. The research team, together with the DHS, had to generate such standards through various means, including visits to relevant municipalities. Secondly, identifying the number of households in each settlement without actually visiting the sites was much more challenging than initially thought, and for that reason the research team conducted an environmental scan using the World Imagery and Google Earth to define the boundaries and count the dwellings in these areas. The sampling for visiting points and households was therefore based on this approach. Although during the actual fieldwork some settlements and visiting points could not be found, it was possible to visit a sufficient number of informal settlements ($n = 78$) and conduct over 3 000 household interviews. This was achieved because of an effective community entry strategy involving the municipal officials, community leaders, gate keepers and indeed the local police. Third, the qualitative assessment provided an opportunity for in-depth exploration and analysis of pertinent contextual elements related to informal settlement upgrading. A mixed method approach employing both qualitative and quantitative methodologies was, therefore, the most appropriate methodology for establishing the status of informal settlements.

Previous studies on the impact of informal settlement upgrading were based on few case studies (DHS, 2011) and even in these studies, attributing change to the UISP was difficult as precise data on baseline status was inconsistent. The merits of the current baseline assessment lie in the fact that the study generated sufficient cases (78 informal settlements) in which the status of the informal settlements was established and indicators were developed. Previous studies on the impact of development programmes suggest that although the experimental design has been largely applied in the physical sciences, the same design is now increasingly being used in evaluating the impact of development interventions (Gonzalez-Navarro & Quintana-Domeque, 2010:2; BenYishay & Tunstall, 2011). Given the data on the 78 informal settlements,

it is now possible to employ the experimental evaluation design, as the baseline has generated sufficient cases that can be utilised as either controls or treatment in evaluating the impact of upgrading. Using randomisation and experimental evaluation design, the DHS in designing the impact evaluation for the settlements targeted for upgrading can utilise the indicators developed in the baseline assessment to clearly establish the extent of change that is directly attributable to the upgrading programme. In the urban pavement programme in Mexico, randomisation and experimental design evaluation was effectively used to establish how providing pavement infrastructure had improved the social and economic well-being of residents in Acayucan City in Mexico (Gonzalez-Navarro & Quintana-Domeque, 2010:2).

History and security of tenure

The demographic profile of informal settlements indicates that although over 50% of households were male-headed, the population of informal settlements was predominantly African (87.6%) and female (53.1%), and close to two-thirds of informal settlement dwellers are younger than 35 years (69.4%). This finding is important when assessed against the fact that the census data reports the numbers (not percentages) of informal dwellers by province but does not disaggregate the data by race, gender and age. Without disaggregating the data on informal settlements by key variables such as race, gender and age, among others, it is difficult to design effective interventions to address the myriad of challenges that confront informal settlement dwellers. The concentration of a young, predominantly female population in informal settlements which represent the most deprived areas in the country calls for urgent action to improve the lives of these groups that are most vulnerable. The White Paper on Housing (1994) calls for public private partnerships to address the housing crisis that has persisted in post-apartheid South Africa. Interventions to improve the lives of informal dwellers should not only come from the Department of Human Settlements, but require a multi-sectoral approach that involves different state departments, non-governmental organisations and the private sector to have an impact in the lives of informal dwellers.

The demographic profile and the qualitative data suggest that up to three generations of families can and do live in informal settlements. This finding negates previous studies which have cast informal settlements as temporary spaces for rural-urban migrants seeking opportunities in the cities. The baseline findings that informal settlements are home rather than transit points for the urban poor, vindicates the decision of the DHS to design and implement the UISP. This study argues that there is a need to further strengthen the upgrading programme to ensure that people in informal settlements are provided with adequate housing which encompasses both the dwellings, infrastructural and social services to ensure improving their quality of life.

Most of the informal settlements included in the baseline assessment emerged after 1994, and have remained without upgrading for more than 20 years. This is perhaps explained by the removal of restrictions to urban and rural migration. There were indeed different forms of tenure in informal settlements in the country. The land occupied by informal dwellers in urban areas was largely owned by the local municipality or government. The situation was different in the rural areas where land belonged to private developers and traditional authorities. These different forms of land ownership suggest that the upgrading programme needs to take into account the different tenure options and negotiate with different stakeholders for upgrading to occur, a notion contained in the UISP. The study found that households in informal settlements were so poor that they could not afford to make any improvements in their dwellings as basic needs such as food took priority.

Sharing of dwellings and sites in informal settlements is associated with high levels of overcrowding and the accompanying high population densities. Sharing was largely a phenomenon in informal settlements in provinces with large metropolitan areas such as KwaZulu-Natal, the Western Cape and Gauteng. While the UISP indicates that relocation is not an option in the upgrading process, there is a need to address the issue of densities in informal settlements targeted for upgrading.

The baseline study finding that most households (56.0%) occupied their dwellings rent-free, is consistent with the literature that suggests informal dwellers occupy empty space(s) in the urban peripheries where it is affordable to live. In its report on the status of informal settlements, the HDA (2012) draws on different data sets such as the Census 2001; Community Survey 2007, General Household Survey 2009 which all indicate that a large proportion (50%, 46% and 34% respectively) of informal dwellers occupy their land rent-free. Although the HDA report (2012) makes reference to traditional types of dwellings, unlike the current baseline study, the HDA (2012) report does not delve into the issue of documentation to prove the type of occupation by residents of informal settlements. While renting and sub-letting features were not common in the sampled settlements, the study found that such living arrangements did exist. Since the UISP accommodates the different categories of residents in informal settlements, community surveys are supposed to disaggregate data to indicate tenure status in order to ensure that all the residents are accommodated in the upgrading of the settlement. Renters and sub-tenants are stakeholders in the upgrading process whose views should form an integral part of the upgrading.

The Prevention of Illegal Eviction from Unlawful Occupation of land Act (1998) (PIE) (amended in 2008) protects illegal occupants of land, such as informal dwellers, from being arbitrarily evicted from land without arrangements for alternative accommodation being made. Although the Act protects illegal occupants from eviction, regardless of who owns the land, the protection from eviction ensures that the illegal occupiers (including informal dwellers) are not arbitrarily rendered homeless, but it does not guarantee security of tenure as the residents have no proof of ownership. The threat of eviction by the lawful owner still remains unless the occupants can have a recognised proof of permission to occupy. This seems to be the case with informal settlements sampled for the baseline study where 60% of households had no proof of their occupation rights.

The lack of documentation that proved the right to occupy a given site was a challenge for most informal settlement residents. As the existing literature indicates, ensuring security of tenure does not necessarily imply the allocation of a title deed, but, rather, it is about securing the rights of informal residents to their residential space so that informal dwellers are not arbitrarily evicted. In ensuring the tenure rights of informal dwellers, all the different groups living in such settlements need to be taken into account. The design of the upgrading needs to ensure that existing dwellers are not excluded from the benefits of upgrading either due to their status as tenants or sub-tenants.

Regularising tenure for informal dwellers opens up opportunities and benefits for the residents. The provision of water and electricity and spaces for trading has been shown to increase the entrepreneurial activities in informal settlements. Upgrading also results in improved educational outcomes for children in such settlements. To ensure maximum benefit for informal residents, analysts have argued that security of tenure should be a phased process as issuing title deeds immediately makes the land tradable and results in the residents being replaced by higher-income groups (Syagga, 2011; Kombe & Kreibich, 2000; Annez et al, 2014).

In discussing land management in informal settlements in Tanzania, Kombe and Kreibich (2000) have argued that the once-off issuance of title deeds is constrained by the lack of resources and the length of period it takes to ensure that residents have proof of ownership/ occupation. The analysts (Kombe & Kreibich, 2000) suggest that there is need to recognise the informal land management systems which are embedded in the practice and value system of communities and institutions. Recognition of local practices of land management implies that local government has to work with the local institutions that are involved in land management and recognising the land registers at the community level. Such an approach is incremental/progressive as it implies that land ownership is not a once-off process. Given that the process can take years before title deeds are eventually issued, the land registers give informal residents the assurance that their occupation rights are recognised and therefore protected. In the South African context, Smit and Abrahams (2010) in conceptualising progressive/incremental security of tenure, postulate that it entails the

use of “instruments that may arise from policies or administrative practices to give tenure security. Examples of administrative mechanisms for tenure security are occupation certificates, shack numbering linked to registers, giving informal settlement residents an address, agreeing on a block or layout or introducing basic services” (Smit & Abrahams, 2010:3). The recognition of tenure as conceptualised by Smit and Abrahams (2010) also employs legal recognition which involves the employing of “a legal procedure in terms of a recognised law to grant legal status to an area” (Smit & Abrahams, 2010:3). An example of instances where the legal recognition of tenure has been applied, is in the City of Johannesburg where amendments were made to township establishment allowing for rezoning of areas in terms of the town planning scheme. In this baseline we argue that both the administrative approach and the legal recognition of tenure constitute the elements of the progressive/incremental approach to security of tenure and are recommended for ensuring secure tenure in settlements targeted for upgrading in South Africa. In South African informal settlements creating similar registers that not only have the names of the household heads but also their beneficiaries, would give informal dwellers the comfort and assurance that they cannot arbitrarily be evicted when their names are in a register that is held by the community and also the local authority.

The findings from this study suggest that improvement of dwellings in informal settlements was hardly done, and households did not borrow money to improve their dwellings either. When improvements were done by informal settlement residents, they addressed critical aspects only, such as the roof of a dwelling in order to ensure protection from the elements. These findings are consistent with previous studies which indicate that improvements to dwellings in informal settlements were made when local government, national or multilateral agencies intervened (Gulyani & Bassett, 2007). Without financing for upgrading by local, national or multi-lateral agencies, it is difficult for informal dwellers to improve their own dwellings. The literature does, however, indicate high rates of investment in informal settlements once these have been upgraded.

The baseline study shows that most informal dwellers neither invest in their dwellings unless it is absolutely critical, nor borrow funds to improve their dwellings unless it is absolutely critical. While the state is not viewed as a creditor for housing finance, the findings of this study suggest that the government is considered (by 35% of households) as the main source funding for accessing adequate housing.

The existing literature suggests that a range of obstacles stood in the way of informal dwellers owning land. The findings in this study indicate that income was a key obstacle to land ownership. Income speaks to the lack of affordability to purchase land for housing, which, in turn, results in illegal land invasions and occupation. Thus, evictions are a common feature in informal settlements. However, the findings of this study indicate that there had been few evictions in the settlements sampled, a finding that may imply acknowledgement that such formed part of the urban landscape. The tolerance towards informal settlements can be attributed to the shift in policy from eradication towards support through the UISP.

Access to basic services

The overarching finding of the baseline study was that all the informal settlements targeted for upgrading in all provinces lacked basic services and infrastructure to support decent living. More than 50% of the respondents relied on public or communal water taps, with very few having water sources within their dwellings and/or even their yards. However, the quality of water was generally perceived to be good for drinking. The majority of those households which had access to municipal water supply did not pay for the service as they could not afford to pay. Although the policy on a specific amount of free water also applies to informal settlements, most of the residents shared communal standpipes and hence they did not pay for the water they consumed. Noise pollution was a major challenge because of the congested structures and general behaviours of residents.

Sanitation was equally lacking, with most of the residents using pit latrines. Where water-borne sanitation existed, it was largely communal. Also of concern was the high number of households that still used bucket toilets and/or the veld, predisposing these communities to water-borne disease(s), and disease related to poor sanitation was high. Issues of safety for women and children arose in places where residents used the open veld. The lack of sanitation in places where the open veld was used is also associated with the contamination of storm water and local streams. Inadequate sanitation in terms of few toilets that are sparsely located in informal settlements exposes women and girls to assault and rape as they access such services at night (Amnesty International, 2010; Corburn & Hildebrand, 2015; Gonsalves et al, 2015). The distance between toilets and dwellings in informal settlements is also a factor in exposing women and girls to violent crime such as rape. The fear of assault when accessing toilets at night results in women and girls either using buckets or simply not drinking fluids at night, and this can result in constipation (Corburn & Hildebrand, 2015). It should also be borne in mind that it is more costly to clean contaminated water for recycling back to the city than providing a clean form of sanitation. Rubbish removal remained a significant challenge in these areas, with some of the informal settlements located near dump sites. Interestingly, about one quarter of respondents felt that having litter lying around was not a problem to them, which seems to suggest an acceptance of the living reality in informal settlements.

Most residents acknowledged that the energy sources for cooking, lighting and heating was inadequate. The common sources of energy in informal settlements included paraffin, wood, gas, electricity, coal and, occasionally, generators. The main sources of energy varied in nature and use, for instance paraffin was largely used for cooking and lighting, whereas, for heating, people had to rely on their warm clothes and blankets.

The reliance on fossil fuels (paraffin and coal) to meet the energy needs in informal settlements contributes to indoor air pollution, thus aggravating respiratory related illnesses. The finding on the dependence on fossil fuel for lighting and cooking is consistent with the previously reported impact evaluation of upgrading informal settlements study (DHS, 2011) which found high levels of indoor air pollution leading to poor indoor air quality. The provision of electricity in these areas was minimal.

Access to social services remained a challenge, particularly for informal settlements in rural areas. In some urban areas, informal settlements were located on the fringes of the city or in strategic places close to work opportunities and services. In general, essential services were either far and/or costly for the residents to access. For instance, emergency services, which are indeed critical for such areas, were associated with accessibility limitations and responsiveness of such services.

Informal settlements by their nature are vulnerable to environmental challenges including fires, floods, noise pollution and uncollected waste. Seasonal fires and floods were recurring disaster(s) in these settlements, as people used forms of energy that put them at risk to fire. Some of the informal settlements were located in flood plains and therefore were vulnerable to such disasters on a yearly basis.

Physical environmental risks and vulnerabilities

Most of the informal settlements sampled had variable physical vulnerabilities and risks due to the type of structures or location or population densities or the geology of the area. Since the objective of upgrading should be to reduce vulnerability (Abbott, 2002), the findings of the baseline study highlight the physical environmental vulnerabilities and risks in the sampled informal settlements, which include location on hilly topography (Mpumalanga), location on or very near a dumping site (Gauteng), and location in areas vulnerable to flooding (Western Cape). Physical vulnerabilities were also posed by the inadequacy/inappropriateness of construction materials used for the dwellings. In the areas sampled, a variety of semi-permanent materials were used for the roofing and walling of the dwellings, materials that provided minimal protection from the elements.

The current physical vulnerabilities in these settlements manifested themselves as disasters on an annual basis and many properties, and some lives, were being lost unnecessarily. The assessment of risks and vulnerabilities needs to also be referenced in the database created by this study with geo-codes, maps and exact pictures taken during the fieldwork as part of building the current status of these settlements.

Health, food and nutrition security

The health, food and nutrition security situation was confirmed to be worse in informal settlements for a variety of reasons related to the socio-economic status of residents and their way of living. Access to drinkable water and good sanitation services was limited in these areas, and so was waste removal. These findings are consistent with literature on the status of sanitation and water in South Africa (Stellenbosch Municipality, 2011; City of Cape Town, 2005) where the general trend is that the few available sanitation and water facilities are either not functional or are shared by too many people. In Langrug informal settlement in Stellenbosch where 91 toilets had been provided, only 83 toilets were functional. As a result, each of the remaining toilets was shared by 91 residents (in a population of 4 088). The same situation was experienced with regard to water, where 57 taps had been provided but only 12 were functional. As a result, the remaining taps were shared by 91 people each. As found in other studies in informal settlements and confirmed in the baseline study, the prevalence of diarrhoeal and respiratory diseases, including TB and Acute Respiratory Infections (ARI) for children, was high. Ill health was compounded by lack of access to basic primary health care services in these areas. One of the established indicators of human progress is the reduction in infant and child mortality and, clearly, although the results of the baseline study are not nationally representative but rather selected settlements representative, the number of reported morbidity and even deaths was high and of concern.

The expired MDGs and the recently launched SDGs place a premium on human and sustainable development, which includes ensuring that hunger is eliminated. Because of the poverty levels in such informal settlements, the number of reported food shortages and the limited dietary diversity documented by the baseline study suggest that these communities are vulnerable to nutrition-related disorders. Indeed, households were constantly worried about food availability and therefore any form of upgrading of such populations needs to go beyond providing basic services and infrastructure and include the creation of economic opportunities.

Although the baseline study looked, by design, at selected health, food and nutrition security indicators, the overwhelming finding was that most indicators were of concern. This is not unexpected, given the difficult physical, environmental, social and economic deprivation that the residents in informal settlements experience. Nonetheless, these basic indicators will be useful in exploring improvements and impact following upgrading as part of the monitoring and the impact evaluation process.

Crime and safety

The baseline study explored levels and experiences of crime in informal settlements through its household survey. Crime was reported to be a major concern across provinces, with provinces like Limpopo experiencing the highest rate of crime. Qualitative assessments revealed that people did not feel safe and secure in these areas.

The commonest form of crime was theft, followed by mugging in most of the selected settlements. These types of crimes are generally expected in such poor and congested areas, a situation that is sometimes also fuelled by substance abuse, including alcohol. Even neighbours perpetrated crimes against other neighbours. The most vulnerable, women and children, felt unsafe in such environments. Gender-based violence and mob justice occurred in all settlements across provinces, with Gauteng having the highest rate of mob justice. It should be noted, however, that the way the questions on gender-based violence were asked was general in nature and did not thus provide respondents an opportunity to volunteer details of intimate partner violence, which is the most common form of gender-based violence in South Africa.

The level of trust in the police in these settlements was low, even though the communities still believed that the police could effectively reduce crime in their areas but should be considerably more responsive to crime and the needs of the settlements, especially since community perceptions were that crime had increased overall.

Economic activities

The level of economic activities in a given area usually influences the quality of life and behaviour of the residents. Contrary to expectation, the study found that the distribution of places of work was mostly in the formal sector, which indicates that some of these settlements could largely be seen as dormitories where people reside, but work elsewhere. It also suggests that there are limited opportunities for local residents to start a local business.

General perceptions on poverty revealed that fewer households felt they were still in the poorest category today in comparison to three years ago. At the same time, perceptions on unemployment revealed that most respondents believed it got worse in the past two years. Overall, economic opportunities were limited in informal settlements with very few local businesses that employed local residents. The informal economy in these settlements was either depressed or non-existent to an extent that it did not generate sufficient local wealth. This was partly attributable to low levels of savings and high levels of borrowing in these communities. The most common types of micro-enterprises were hawking or selling goods, spaza shops, hair salons and shebeens.

Social capital, community participation and empowerment

One of the envisaged outcomes of upgrading informal settlements is that it improves social cohesion as the general standards of living of people improve. The study sought to establish existing social networks, as well as forms of community participation and empowerment. The levels of such networks were generally low. Moderately low levels of community spirits and togetherness were observed in these communities based on both qualitative and quantitative results.

The type of social groups identified in the informal settlements included churches and sports clubs. The existence of sports grounds did not lead to the creation of sports clubs or participation in the clubs that existed. Participation in sporting clubs was gendered, and men were reported to participate more in sporting clubs than women. Most of the informal settlements did not have recreation facilities such as sports grounds, and those that did get involved in sporting clubs had to be creative and improvise in the available spaces in the settlement just to keep the clubs active.

Local organisations were critical to the implementation of development projects at the grassroots level. Similarly, local organisations were critical to the upgrading of informal settlements in South Africa, as such organisations were reservoirs of the social capital necessary in mobilising communities for development. The local organisations helped identify the critical stakeholders that needed to be consulted and involved in the upgrading of informal settlements. What emerged from the findings of the baseline study was the fact that some of the local stakeholders might not be readily identifiable and only through the process of stakeholder mapping in the communities could all stakeholders be identified to ensure that the blockages to upgrading were or could be minimised.

In the UISP, like in international experience (DHS, 2009; Amao, 2012; McPherson, n.d.; Majale, 2008; Ndinda, 2006; 2007), community participation is underscored as a key element in ensuring effective upgrading of informal settlements. Although the ward committees', the most cited structures that represent the interests of the informal dwellers, involvement of the communities in implementing improvements was limited, with communities arguing that local government simply implemented projects without much consultation with the residents. The exploration of participation in planning and implementation of

developments in informal settlements indicated that contractors are often used to provide services which leaves out the local communities. Involving communities in identifying challenges is important but so is involving communities in resolving the challenges. Thus the seeming contradiction in terms of ward committees being the structures most cited in terms of representing community interests and the qualitative findings indicating that communities are not involved in implementing developments can be explained by how participation is designed. Seeking the opinions of targeted beneficiaries using established community structures is only a partial element of participation. Including targeted beneficiaries resolving the identified challenges and solutions is another element of participation, and that seems to be where the challenge lies. Analysts have argued that participation is a time-consuming process but is also much more empowering as communities have a greater sense of ownership, can identify with the final product, and the size and quality of dwellings is much better than contractor-built housing (Amao, 2012; Ndinda, 2007; Majale; 2008). As Ndinda (2009) argues, the participation of communities, and women in particular, in every phase of housing development is what ensures their empowerment in the housing delivery process. How participation is designed by local government is as important as how it is implemented.

Attitudes towards foreigners

The findings shared in this study should be viewed as preliminary and are by no means intended to generally represent the entire narrative about local sentiments towards foreign nationals within the informal settlement context in South Africa. The findings are rather intended to create dialogue with policy makers, the migrant communities and local authorities about how they can work together, and provide information, as well as address common challenges in housing security faced collectively by local South African citizens and foreign nationals. South Africa is somewhat unique in that it has a predominantly urban-based foreign migrant population, meaning that access to housing services within informal settlement contexts are provided at local government level in the same way as they are provided to South African citizens, rather than there being specific housing service delivery to foreign nationals. The assumption is, therefore, that tensions may arise between local South African citizens and foreign nationals living (and working) in informal settlements in terms of access to services such as housing, sanitation, water and related services. This means that assessing attitudes towards foreign nationals within informal settlement contexts is more than just to document key trends, sentiments and attitudes, but also to inform policy directives addressing better ways to build a xenophobia-free socially cohesive society.

In the study findings, both xenophobic sentiments and positive attitudes are acknowledged. To nurture positive relationships, a multipronged strategy is needed. For example, an integrated approach that nurtures social cohesion and solidarity is necessary where all informal settlement dwellers (foreign or local) coexist as members of the same communities. The approach must take into account the specificities of each informal settlement in terms of the foreign national population, taking both South African citizens and migrant communities' situations and concerns (including perceived economic disadvantages) into account and involving a variety of stakeholders including local government. According to social anthropologist Fiona Ross (2004, 2010), spaces in South African context are never neutral, and as the history of South Africa's racially segregated planning in the apartheid era demonstrates, spatial planning was profoundly ideological and thus not neutral in intent, carving and material outcome. In her volume entitled: *Raw Life, New Hope: Decency, Housing and Everyday Life in a Post-apartheid Community*, Ross (2010) suggests that everyday life among residents of informal settlements reveal special apparatuses of the past where disadvantage of lower socioeconomic citizens still persists and residents are at the periphery. Thus, in order to redress such spatial separation, we must rethink the idea of how we think of community (Meth, 2013; Ross, 2005). In essence, a space or place has much to do with one's own position in it. In this context, the subtext is that living in an informal settlement, whether one is a foreigner or a local, is always undesirable and therefore interventions to address housing issues through upgrading informal settlements have to take into account both historic (dis)advantage and the current context of migration. It is clear that the role of the local government in community participation and information sharing is critical in ensuring that the right information about entitlements to housing solutions is made available and that residents are made aware of

the necessary processes for housing tenure. Some researchers have also highlighted the role of the media and their crucial role in shaping public perceptions (Golding & Murdock, 1996; Aragon, 2005). Many of the suggestions made, involve active communication programs effectively extolling the often unnoticed benefits of coexistence.

Both qualitative and quantitative data revealed the view that some South African informal settlement respondents had negative attitudes towards foreign nationals living and working in and around informal settlements. Negative attitudes towards migrants were severe, and in many cases worsening. Contrary to the views of some, foreign nationals by and large were scapegoats in the ongoing debate on housing security in South Africa. Changing such sentiments requires collective efforts by different levels of government, and as such it is considered by most to be responsible for the initiation and promotion of these changes. Furthermore, non-governmental organisations, local citizens, civil society organisations, as well as migrant communities themselves, can also bear responsibility in changing attitudes. The baseline study data indicates that, all in all, the principle of equal and fair treatment was a preferred approach in addressing challenges in access for both migrant communities and South African citizens. Furthermore, it is disconcerting to note that negative attitudes towards foreigners incubated a strong negative force for social integration and social cohesion. Discrimination was perceived to be the important integration barrier throughout. Other significant integration barriers included linguistic, educational and institutional factors. Internal barriers (social, cultural, and religious norms, immigrants' own opinions about themselves, lack of motivation and intergenerational mobility) were also serious culprits of non-integration.

Quantitative data showed that there was no single explanation for attitudes toward foreign nationals within the informal settlement context. The situation was more complex with intricate interrelated factors. On the one hand, observable characteristics, such as scapegoating, as well as perceived advantages that migrants competed for resources geared for South Africans, influenced negative attitudes, which, in turn, impacted on social relationships and successful integration of migrants. The fact that both the qualitative and quantitative data reported a perceived increase of foreigners in informal settlements, and both foreign nationals and local South African citizens subtly engaged in positive friendships which had slightly improved, at best, and deteriorated, at worst, over the past several years is an indication of an incubation of hostility. Nevertheless, when respondents were asked how they would rate attitudes of people (from very friendly to very hostile) in their informal settlement towards foreign nationals, the majority indicated friendly with nearly a third of the respondents opting for the "neither friendly nor hostile" reply option.

The baseline study data indicate the importance of housing solutions that facilitate access to social integration for diverse groups, including both foreign nationals and South African citizens. The situation of both migrants and local informal settlement dwellers can be improved to the extent that action can change the institutional and societal factors that were found to have a strong impact on the social and economic wellbeing of populations.

In summary, recent work on the post-apartheid housing policies has paid little attention to how diverse constituencies (in this case locals and migrants) grapple with new opportunities for living. For local South Africans, concern with access and entitlement to housing opportunities in the post-apartheid era overshadows their often unhealthy perceptions of foreigners, fostered in negative attitudes that are influenced by competition of scarce resources and manifested via violence and other exclusions. Tracing out attitudes towards foreigners and how these are crystallised, the findings of the baseline study documented that negative attitudes towards migrants are informed by poor knowledge of immigration laws, housing processes and are also fuelled by lived experiences of informal settlement dwellers and competition for scarce resources. The UISP has some suggestions on how the upgrading process should deal with migrants and moving forwards, it will be beneficial to assess to what extent this process is being followed and whether the implementation guidelines provide adequate guidance to implementers on how to address issues of social fragmentation and social cohesion. What is clear from the study, is that some of the issues

cannot be dealt with by a housing intervention. Policy makers need to accept the fact that there might be limits to what UISP can do. Thus housing interventions have limitations in addressing social cohesion, but could be linked up with other levers that are currently being implemented by other government departments to address and prevent escalating negative attitudes towards foreigners in order to build fully integrated communities.

Baseline study limitations

The baseline study focused on informal settlements that were targeted for upgrading. The findings cannot be generalised to the whole population of people living in informal settlements in South Africa, as the final weights were not subjected to benchmarking. The data on the total number of such people living in informal settlements in South Africa was not available for benchmarking. Therefore, the study can only be generalised to people living in informal settlements which were targeted for upgrading based on the 2014 list obtained from the DHS. The findings of the sub-group analyses need to be interpreted with caution due to the resultant small number of observations. Some of the sampled informal settlements did not have boundaries and thus their boundaries had to be delineated by the HSRC GIS team, in consultation with local municipal officials and should not be considered as their official proclaimed boundaries. It is important to note that this process might have resulted in under- or over-counting of households in some informal settlements. Furthermore, data collection took place between June and September 2014, which could result in seasonal trends in responses for outcome indicators such as health (e.g. flu), crime and economic activities.

12. RECOMMENDATIONS

The recommendations from this study relate to the status of informal settlements targeted for upgrading, the theory of change and areas for further research:

1. The UISP, as it currently stands, needs to be revised to address existing gaps such as lack of a clearly articulated vision, mission and the end goals of the programme.
2. The baseline study partially assessed the design of the UISP. Policy/programme design assessment should ideally be conducted at least two years after implementation of the programme. The current attempt at assessing the design of the UISP occurred ten years after its implementation and in this baseline study the design assessment was only partial. This baseline assessment also calls for a comprehensive design assessment of the UISP.
3. The UISP needs to include smart objectives, intended outputs and outcomes based on agreed upon norms and standards of informal settlement upgrading. There is a need for specific UISP targets to ensure that the envisaged change is measureable and that specific timelines for achieving the envisaged change are also specified in the programme.
4. Data on informal settlements in some instances does not exist, or it is inconsistent and inaccurate. The labelling of RDP projects as informal settlements distorts the available information; the sharing of names among informal settlements presents counting and tracing problems. There is a need to ensure that:
 - a. Municipalities have a record of all informal settlements within their jurisdiction.
 - b. The informal settlements are clearly identified with unique names to avoid miscounting.
 - c. Data related to key variables on informal settlements in each municipality is collected.
5. It is recommended that the National Department of Human Settlements (DHS) should:
 - a. Create a template for the information required on each informal settlement so that the information collected across municipalities and provinces is consistent to create a national database.
 - b. Use GIS teams from the DHS to verify the data on informal settlements to ensure that the information in the database of informal settlements is always up-to-date.
 - c. Consider that while the conceptual definition of an informal settlement is clear from the UN definitions and the UISP, the size is not clear. The need for scope therefore arises from the fact that settlements that had less than 50 households were left out of the sample for the study. There is a need for both municipalities and the DHS to clarify at what point a settlement qualifies to be considered an informal settlement eligible for upgrading.
6. With regard to future impact evaluations, the baseline assessment developed a wide range of indicators based on the UISP and established the status of informal settlements before upgrading. The same indicators need to be used for establishing the effectiveness and impact of upgrading the sampled informal settlements:
 - a. With such a large number (n=78) of informal settlements where baseline data is available, the DHS can employ the experimental design evaluation where some settlements are used as treatment and controls in assessing the impact of upgrading the sampled informal settlements.
 - b. The indicators developed need to be utilised in the impact evaluation to determine the level of change that is attributable to upgrading in general, and the UISP in particular.
7. The magnitude and levels of deprivation in informal settlements suggest that:
 - a. The DHS needs to formulate a policy that addresses growth of informal settlements and their upgrading in South Africa.
 - b. The Treasury/DHS needs to increase funding for the UISP, in particular, and to municipalities to help deal with the challenges in informal settlements, and improve the quality of life of residents who live there.
8. The demographic profile of informal settlement residents who are predominantly African, female and young (below 35 years) has implications for the disaggregation of national data into key variables such as race, gender and age. Such a disaggregation is important in the design of

- appropriate interventions and the effective targeting of such interventions in order to have the greatest impact in addressing the significant challenges faced by informal settlement residents.
9. Most informal dwellers are long-term residents in such areas with up to three generations living in the informal settlements. Lack of and inadequate services in the settlements puts residents at risk of illness and injury.
 - a. Municipalities need to provide communities with adequate infrastructural services to ensure health and safety.
 - b. There is a need to employ a decongestion policy during upgrading to allow for decent structures, spaces and services to be provided to the targeted (*in situ*) households.
 10. Informal dwellers share sites and dwellings with tenants and sub-tenants. The UISP needs to clearly outline the processes for ensuring that such residents are also provided for during the upgrading and consolidation of top structures.
 11. The fact that government was identified as the main funder for adequate housing points to the need to create awareness about other sources of funding that households can access to reduce the dependency on the housing subsidy programme. The DHS in partnership with the National Housing Finance Corporation and retail banks need to provide financial education to ensure that households are aware of the housing finance options available. In partnership with the National Home Builders Registration Council (NHBRC), the DHS also needs to create awareness about the available range of affordable housing construction technologies that can shelter households at a much lower cost than the conventional “brick and mortar” approach to housing provision.
 12. The revised UISP needs to effectively involve the relevant stakeholders in informal settlements. These include grassroots organisations that work with informal dwellers, private developers involved in implementing the UISP, the different tiers of government that have specific roles such as financing (DHS), provincial DHS (accrediting municipalities to implement UISP), national DHS (custodian of human settlement policies and programmes), agencies such as the Housing Development Agency (HDA), and the NHBRC that regulate building norms and standards.
 13. The lack of knowledge about municipal by-laws and whether these were applicable to the informal settlements points to the existence of an information gap among residents. Municipalities must ensure that informal residents within their jurisdiction know and understand the municipal by-laws and the relevance of these to the residents. Such engagements will also contribute to building better relationships with informal dwellers.
 14. Although informal dwellers acknowledged that they had a recognised form of tenure, they had no proof of their tenure status. The regularisation of tenure for informal dwellers needs to be completed on a progressive basis to ensure that dwellers have security and that their sites are not immediately tradable to people with a higher income. An incremental approach to tenure and documentation that legitimises security of tenure for informal residents is required.
 15. Lack of documentation that proves tenure makes informal residents vulnerable to eviction by individuals or institutions that might lay claim to their land. Where municipalities have granted tenure, whether in the form of permission to occupy the land or other such proof, residents need to be issued with the necessary documentation that proves their tenure in order to contribute to a better sense of security and safety.
 16. There is a need for the UISP to also consider security of tenure of informal dwellers living on land under traditional authority.
 17. The existence of different forms of land ownership in the same province suggested that, if upgrading is to occur, municipalities would need to negotiate with different land owners before any development can be implemented.
 18. In terms of identifying land suitable for settlement, the “one-size-fits-all” approach cannot be adopted in the upgrading of informal settlements as the conditions in each settlement are different and/or unique. Settlement specific conditions need to be considered in establishing whether a settlement is suitable for upgrading or relocation. Where informal settlements are located on farms,

- for example in KZN, the local government needs to establish eco-villages to ensure that residents have a source of livelihood through farming.
19. Confirmation of land ownership is not an adequate criterion on which upgrading can be decided upon and the following is necessary:
 - a. There is a need to establish the suitability of the land for human settlement, which is a function of the NHBRC.
 - b. Local government together with the NHBRC should investigate the geo-technical conditions in informal settlements targeted for upgrading to avoid disasters in areas that are characterised by shale and dolomite.
 - c. Where reinforced strip foundations for dwellings are required, these should be approved by the NHBRC.
 - d. Where relocations are required, these should be expedited through the assistance of the Housing Development Agency which needs to identify alternative land for relocation. The latter should be done in a way that does not destroy the social networks and cohesion of communities.
 - e. Informal settlements located in areas prone to flooding require that the drainage system is functional and that water is diverted away from the dwellings.
 - f. Informal settlements located in areas prone to mudslides need to be relocated to avoid the loss of life and injury.
 20. Informal settlements experience a range of environmental challenges ranging from strong winds that destroy dwellings and furniture, littering, unhealthy living conditions due to being located near or on dumping sites, unstable soil conditions due to being located on mine dumps, vulnerability as a result of being located on flood plains and areas prone to mudslides. In such cases, the following are recommended:
 - a. Littering should be addressed through the provision of waste disposal bins at strategic points in the informal settlements.
 - b. However, a more sustainable solution would be to accompany the provision of waste disposal facilities with an environmental education programme to ensure that residents understand the importance of keeping their environment clean and the link to their general health and wellbeing.
 21. The majority of informal dwellers do not borrow money to improve their dwellings. The only improvements informal residents make to their dwellings (e.g. roofing) are those critical to their health and safety. The inability of informal dwellers to make any improvements to their dwellings suggests that there is a need for local government to assist residents with building materials to ensure their personal and environmental health, safety and security. Building technologies that foster job creation and labour-intensive building should be encouraged. Construction methods that allow non-destructive and expansion techniques are recommended so that the changing household requirements can be taken into consideration and provide flexible housing.
 22. Informal settlements represent high levels of deprivation and pockets of poverty on the fringes of affluent urban areas with limited basic services, and therefore:
 - a. The upgrading process should put greater emphasis on ensuring that informal dwellers have access to basic services such as water, sanitation and electricity and hence reduce their vulnerabilities to diseases and conditions of poverty. This needs to be supported through norms and standards and closer monitoring of upgrading plans.
 - b. The provision of infrastructural services to informal dwellers needs to take into account the densities and distances between the dwellings as this can make a difference in reducing gender-based violence targeted at women, and also help reduce illnesses related to the lack of and poor sanitation.
 23. The UISP identifies *in situ* upgrading as the option for most settlements. There is a need to consider physical and environmental challenges and the density of informal settlements in determining the upgrading options. *In situ* upgrading cannot be implemented in settlements located on mine dumps

or areas where waste from cities is dumped. In such instances, relocation would be the more viable option. Informal settlement upgrade programmes should consider all factors related to a community before embarking on upgrade. These factors include proximity to services and schools, work opportunities, residents' skills and sustainable development.

24. With regards to the health, food and nutrition status of informal settlements residents, the following is recommended:
 - a. For informal settlements that are far away (more than 5 km) from the nearest health facility, the Department of Health should establish points for regular mobile clinic visits and/or increase community outreach programmes by the Ward Based Community Outreach Teams.
 - b. The Department of Education through its school health programme should not only provide supplementary feeding but also screen children for all basic health ailments, and include health education.
 - c. The Department of Social Development needs to intensify its outreach activities in informal areas so as to identify households that are eligible for government support and make referrals in cases that require health or police interventions.
 - d. Depending on the location of the informal settlement and the availability of land, the Department of Agriculture should introduce the idea of community food gardens to enhance food availability and accessibility to informal dwellers.
25. Informal dwellers have access to bonding social capital. Bonding social capital is valuable in ensuring that informal residents have a sense of connectedness to those among whom they live. Bridging social capital in informal settlements is valuable in ensuring that residents are connected to resources within the settlement. However, the connection to resources outside the informal settlements remains limited. There is a need to link informal dwellers to more valuable forms of bridging social capital.
26. Linking social capital in informal settlements is limited. The linking institutions accessible to informal settlement dwellers are state-related and specifically designed to support upgrading. Beyond this, informal dwellers have little social capital that can unlock opportunities beyond the informal settlement. There is a need to link informal settlement residents to more non-state institutions for sustainable development in their contexts.
27. The current UISP seems to be tightly aligned with the macroeconomic policies (neo-liberal free market) but not with the national development plans or agenda, which is more developmental. Communities need state support before they can begin to help themselves. There is a need to create linkages with the relevant national development policies and programmes to enhance the potential impact of upgrading of informal settlements as envisaged in the underlying theory of change and programme logic.
28. DHS should establish multi-agency working groups to deal with issues of integration and social solidarity/cohesion among foreign national and local South Africans as a preventive measure to potential scapegoating and xenophobic violence. This should include diversity and attitudinal training on xenophobia as well as dissemination of information to informal settlement dwellers about the foreign nationals' contributions to the community. The key stakeholders in such an agency would include the immigrants, NGOs that work with immigrant populations, local leaders, the United Nations High Commission for Refugees (UNHCR), local and national government led by the Department of Home Affairs, among other stakeholders.
29. The provision of power (electricity/solar/wind) is critical in addressing the perennial winter fires which are often the result of using candles for lighting and paraffin stoves for space heating. The provision of electricity/solar/wind power is not just a function of local government. The Department of Energy needs to devise solutions to ensure that solar power is harnessed for use in informal settlements where it can have the greatest impact in saving lives while also providing a clean and affordable source of energy. How solar power is implemented in informal settlements and other resource-poor settings should be a function of collaborative efforts between the Departments of Energy, and DHS.

30. The increase in crime in informal settlements has not been accompanied by a similar increase in police response, which might be explained by the conditions in the informal settlements. Where informal settlements exist, there is a need for local government to ensure that paths between the dwellings in informal settlements are wide enough for emergency vehicles to pass through.
31. The level and risk of crime is generally higher in informal settlements because of the population densities, poverty and lack of basic services such as street lighting and shared water and sanitation facilities. Introducing basic services and supporting community initiatives for reducing and reporting crime, will assist in reducing crime and the incidence of mob-justice.
32. Much of the borrowing informal settlement residents seek is for accessing consumer goods, including food. Informal settlements represent the areas of highest levels of deprivation within cities and towns. Local government together with NGOs need to set up food and nutrition support programmes to ensure that no one in informal settlements is without food, which is a basic human right.
33. A range of networks and groupings exists in informal settlements and these should be identified in each informal settlement targeted for upgrading in order to reach as many residents as possible for participation in the upgrading process and ensure sustainability in the settlement.
34. Unemployment rates are high in informal settlements and the rate is higher for women compared to men. There is a need for the state to create employment opportunities that target informal dwellers, and women in particular.
35. The Expanded Public Works Programme (EPWP) and (Community Work Programme) CWP seem to have minimal impact on employment in informal settlements. Therefore, the focus should rather be on constructing dwellings using building technologies that are labour-intensive in order to create jobs and empower communities.
36. The participation of informal dwellers in ward committees represents a partial element of participation in making decisions regarding their settlements. It is important to ensure the participation of communities in the whole value chain of informal settlement upgrading, as doing so would ensure that dwellers own both the process and the products of upgrading thus contributing to their empowerment as well as the sustainability of the resulting developments.

ANNEXURE 1a

DETAILED METHODOLOGY

This was a cross-sectional baseline study that employed both quantitative and qualitative approaches because of its complexity and multi-components. The quantitative methods included a household survey conducted using a structured questionnaire and an initial environmental scanning of the selected informal settlements. The qualitative component included documents review, focus group discussions and key informant interviews that were conducted using a semi-structured FGD guide and key informant interview guide. The study was conducted in all nine provinces of South Africa, with informal settlements (and by extension households) that have been targeted for upgrading as the target population.

Description Box

“Informal Settlements Targeted for Upgrading” means informal settlements that were included in business plans of metros and local municipalities as planned for upgrading, based on the lists provided by provinces, as well as metros in 2014.

1.1 Documents and literature review

A documents and literature review was conducted to systematically establish the international context, the national housing policy trajectory, programmatic and general context of the housing sector in South Africa and more specifically the UISP. The review was important in establishing the Theory of Change for the UISP, and it is this theory of change that guided the baseline study in terms of critical results areas, indicators and the underlying assumptions that explained the programme logic and pathways.

1.2 Data preparation for sampling

The data preparation begun with the initial sampling frame provided together with the Terms of Reference (TOR). Since the initial sampling frame provided by DHS had gaps and was inconsistent with the fields it provided, it was eventually discarded and a list of informal settlements was sourced by DHS from the different provinces. The second data set was also problematic as the information was inconsistent: Some provinces provided lists of projects and planned units while others provided informal settlements, still others provided information for specific municipalities rather than the whole province. This data set was deemed to be inconsistent and incomplete. The HSRC team went to the NUSP offices after recommendation from the DHS team but could not get the geocoded informal settlements that could be used for sampling. The DHS & DPME team went to provinces to establish the correct list. However, this exercise did not yield satisfying results. Although the third dataset (different spreadsheets from each province in 2014) was not adequate, it was nevertheless usable and other datasets were used to supplement it.

In each province, the following fields were extracted from these spreadsheets if they existed: province name, district name, municipality name, informal settlement name, X and Y coordinates and number of households. In cases where the name of province or district or municipality was not provided, it was added, if possible. The data was kept in separate files for each province and thereafter cleaning was done based on the informal settlement name. Records containing the same name, e.g. Thembaletu Zone 9, Kanana Ext 11 or Maquassi Hills Ext 13, were deleted. This was done to ensure that the same settlement does not get selected more than once in the sample. In North West, projects span across settlements and since there was no information about which settlements were included, the project names were used as was provided. After cleaning the data from all provinces the total number of informal settlements targeted for upgrading for the whole country was 1 185.

1.3 Sampling of Informal Settlements Targeted for Upgrading

Stratified random sampling was applied to obtain a national representative sample of informal settlements targeted for upgrading. The informal settlements were stratified into provinces, and the informal settlements were randomly selected for each strata (province) using the SPSS software. It is important to note that the sample size is a function of the number of settlements targeted per province and not of total number of informal settlements in any province. Therefore, there are more settlements selected in Northern Cape than in Mpumalanga, because there were more settlements targeted for upgrading in Northern Cape at the time the sample was selected (Table A1.1). The total number of informal settlements targeted for upgrading was 1 185 ($n = 1\,185$) and as proposed in the HSRC technical offer, a 10% sample size equated to 119 informal settlements ($n = 119$). In order to obtain proportional representation (PR) by province the following formula was used:

$$PR = (Provincial\ N / Total\ N) \times Sample\ size$$

Table A1.1: Total number of informal settlements (N) and selected settlements (n) per province

Province	N	n
Western Cape	256	26
Eastern Cape	180	18
Northern Cape	69	7
Free State	74	7
KwaZulu-Natal	80	8
North West	70	7
Gauteng	408	41
Mpumalanga	14	2
Limpopo	34	3
South Africa	1185	119

1.4 Geo-coding and defining outer boundaries for informal settlements

In instances where X and Y coordinates were not provided for settlements, the HSRC team called local municipalities to request information about the exact location of such informal settlements. All selected informal settlements were then geo-coded and the defined boundaries of those settlements were drawn, using World Imagery and Google Earth, as well as information from local municipalities such as street names and directions about the extent of the informal settlement. Stats SA sub-place boundaries data were used where possible. Even the NUSP list for the Northern Cape informal settlements did not have coordinates, hence local municipalities were also called to get the exact location of places. Some municipalities such as the City of Johannesburg, Ekurhuleni and City of Tshwane provided data on informal settlements in a shapefile format; therefore no boundary delineations were required.

1.5 Household sampling

The following formula was used to determine the appropriate sample size for households for this baseline study (Naing et al, 2006; Suresh and Chandrashekar, 2012).

$$N = \frac{Z_{\alpha/2}^2 * P(1 - p) * D}{E^2}$$

In this study, a 2% margin of error was used, together with a 95% confidence level, therefore $Z_{\alpha/2}$ is 1.96. For the design effect (D), 1 is usually used for simple random sampling but in this study a value of 2 was used because stratified random sampling was employed. The value of P is normally taken from previous studies using a similar population. However, a P of 50% was used as the prevalence or proportion for some of the indicators were not known or found in the literature. The incidence of diarrhoea was, for example 2% in children under the age of five years (Stats SA, 2010). To extrapolate this figure to the total population, would rely on gross assumptions and was therefore not considered as an indicator. In addition, the P of 50% is also a conservative estimate. This resulted in a sample size of 4 802.

This sample size was further adjusted to account for non-responses, as well as missing data (degree of attrition). This was adjusted using the following formula:

$$N = \frac{n}{1 - q}$$

Where N is the final adjusted sample size and n is sample size while q is the expected proportion of non-response or attrition. A non-response rate of 10% was assumed. The final adjusted sample size for this study was therefore 5 336 households across the country. This number 5 336 was divided by the 119 informal settlements to get a fixed number of households to be visited in each informal settlement. This resulted in 44.8 households and was rounded to 45. Therefore, a random sample of 45 households was selected from each of the 119 informal settlements targeted for upgrading and this yielded an overall sample of 5 355 households. An additional 45 households were also sampled from each of the 11 mining areas, hence 495 households. The overall households to be visited in this baseline study were 5 850 from the 130 settlements. However, not all sampled settlements were visited due to time and budgetary constraints, as well as service delivery protests. Hence, the fieldwork team managed to visit 78 settlements and 3 330 households across the country.

The reasons behind using a fixed number opposed to proportion to size in the selection of the visiting points were; firstly, sizes of informal settlements varied significantly, i.e. some informal settlements had more than 3 000 households while others had less than 100 households. Therefore, smaller informal settlements would have fewer households to be visited, which might not be sufficient for the purpose of monitoring and evaluation in subsequent years. Furthermore, the decision was also based on the 23 October 2014 sampling workshop discussion that recommended that a minimum of 30 households should be visited to provide higher chances of obtaining enough households during the second phase (after 3 to 5 years when the impact evaluation study will be conducted). Secondly, if the proportion to size of 10% sample of households approach was utilised, informal settlements with large number of households would automatically have a large number of households selected for interviewing. In cases where there were more than one household in a selected visiting point, the Kish grid was used to select the household to be visited during fieldwork (Kish, 1965). For future impact evaluations, household locations were geo-coded during the survey and where such information was not captured, it can be supplemented by contact telephone numbers. The questionnaire collected information on the contact details of the household head, as well as secondary and tertiary contact names and numbers.

1.6 Record of households

After defining the outer boundaries for selected informal settlements as indicated earlier, the dwelling frame of Statistics South Africa (Stats SA) and Eskom household data were used to obtain the total number of households in each informal settlement. Where none of the datasets had any records for households, the HSRC team manually digitised the household locations using World Imagery and Google Earth images. Because the two data sources are approximately two years old, it was expected that there might be differences between the data and the situation on the ground. This is due to the very nature of informal settlements which can be established or disappear in the very short time.

Table A1.2 shows the number of households in each of the visited informal settlements across the country. The table has two columns with household counts: one with data provided by DHS and one containing counts from HSRC. The DHS count refers to the number of households in a settlement targeted for upgrading and might not be the same as the total of all households in the settlement. The HSRC counts were done using satellite imagery. The two columns differ from each other because firstly, not all households in a settlement will necessarily be upgraded. Secondly, informal settlements change all the time and neither of the counts might reflect reality on the ground. Settlements with no household count for those targeted

for upgrading are empty in the DHS column. The HSRC household count was to be used for post-study weighting of the main fieldwork results.

Table A1.2: Household counts in sampled informal settlements

Province	Informal settlement	Municipality	DHS HH	HSRC HH
Eastern Cape	Amalinda Forest	Buffalo City		491
Eastern Cape	Dacawa (Mdantsane Zone 18)	Buffalo City		237
Eastern Cape	Ford & Msimango	Buffalo City	2500	1391
Eastern Cape	Joe Slovo Extention	Nelson Mandela Bay		191
Eastern Cape	Kyga/Greenbushes	Nelson Mandela Bay		246
Eastern Cape	Loerie	Kouga		49
Eastern Cape	Middle/Blikkiesdorp	Nelson Mandela Bay		467
Eastern Cape	Qaqawuli	Nelson Mandela Bay		1077
Eastern Cape	Walmer Q	Nelson Mandela Bay		908
Eastern Cape	Khayamnandi	Nelson Mandela Bay		200
Free State	Block A	Moqhaka	44	46
Free State	DND	Matjhabeng	88	59
Free State	MK Square	Mangaung	490	57
Free State	Phokeng & Kgotha	Matjhabeng		385
Free State	Selossha Ext. 14 (Bultfontein 1)	Mangaung		598
Free State	Tshiame D	Maluti-a-phofung	540	723
Free State	Unit 3	Matjhabeng	88	162
Gauteng	Chris Hani Ext.4	City of Johannesburg		668
Gauteng	Dark City	City of Johannesburg		509
Gauteng	Dark City	City of Johannesburg		509
Gauteng	Diepsloot West Ext.6	City of Johannesburg		589
Gauteng	Drieziek Ext.3	City of Johannesburg		8275
Gauteng	Dumping Site	Randfontein	116	741
Gauteng	Freedom Square	Ekurhuleni		1489
Gauteng	Ivorypark - Zone 1	City of Johannesburg		682
Gauteng	Kopanong Ext 1	City of Tshwane		348
Gauteng	Kudube Zone 5	City of Tshwane		949
Gauteng	Madelakufa 2 (Isekelo)	Ekurhuleni		259
Gauteng	Mafelandawonye 3	City of Johannesburg		692
Gauteng	Mayfield Ext 1 (Mangosotho/Zenzele)	Ekurhuleni		6769
Gauteng	New Eersterus Proper	City of Tshwane		1699
Gauteng	New Eersterus X2	City of Tshwane		1421
Gauteng	Orlando Park (Not Coalyard)	City of Johannesburg		198
Gauteng	Plot 45 Pienaarspoort	City of Tshwane		143
Gauteng	Rethabiseng	City of Tshwane		553
Gauteng	Soshanguve KK 2	City of Tshwane		236
Gauteng	Stinkwater X4	City of Tshwane		1359
Gauteng	Thintwa /Emalahleni	Ekurhuleni		279
Gauteng	Tokyo Sexwale (Reiger Park Ext 9)	Ekurhuleni		1788
Gauteng	Tsakane Ext 19 overflow	Ekurhuleni		158
Gauteng	Tswaiing Village	City of Tshwane		597
Gauteng	Wierda Caravan Park	Ekurhuleni		214
KwaZulu-Natal	Mazakhele Phase 2	UMuziwabantu		1043
KwaZulu-Natal	Babanango Phase 3	Ulundi		653
KwaZulu-Natal	Cato Crest <i>In situ</i> Upgrade	eThekwini	1500	3282
KwaZulu-Natal	Fairleigh Siyahlala	Newcastle	1300	1321
KwaZulu-Natal	Poortjie	Mkhambathini	481	62
KwaZulu-Natal	Sibongile Buffer strip (Muzomusha)	Endumeni	222	347
KwaZulu-Natal	Umlazi infill phase 1 Part 4	eThekwini	3526	48

Province	Informal settlement	Municipality	DHS HH	HSRC HH
KwaZulu-Natal	Zamani 2A	eThekweni	1171	359
Limpopo	Mohlakaneng Ext 106	Polokwane		2275
Limpopo	Roosenekal B	Elias Motsoaledi	150	79
Limpopo	Vaalwater Ext 3	Modimolle	500	494
Mpumalanga	Khayelisha/Kwazanele	Msukaligwa	500	72
Mpumalanga	Matsulu B	Mbombela	250	685
North West	Bokamoso 4	Rustenburg		1053
North West	Glaudina New	Mamusa	40	486
North West	Kanana ext 11	City of Matlosana		891
North West	Kanana Ext 13	Matlosana	133	2692
North West	Mafikeng PHP	Mafikeng		249
North West	Migdol	Mamusa	26	629
North West	Oukasie Ext 5	Madibeng	82	371
Northern Cape	7de Laan	Dikgatlong		163
Northern Cape	Augrabies	Kai !Garib		183
Northern Cape	Campbell	Siyancuma		128
Northern Cape	Louisvale	//KharaHais		314
Northern Cape	Rainbow Valley	Siyancuma	513	559
Northern Cape	Skerpdraai	Gamagara	300	321
Northern Cape	Transit Camp	Sol Plaatje	323	821
Western Cape	Asazani	Overstrand		559
Western Cape	Atlantis Witsand	City of Cape Town		1468
Western Cape	Chester Williams	Drakenstein		69
Western Cape	Kingston Town	Drakenstein		52
Western Cape	Kudu Street	Drakenstein		62
Western Cape	Nyanga Upgrade	City of Cape Town		162
Western Cape	Overhills	Overstrand		329
Free State	Nyakallong*	Matjhabeng		200
Gauteng	Bekkersdal Afghanistan section*	Westonaria		511
Limpopo	Roosenekal*	Elias Motsoaledi		109

*Mining settlements

1.7 Data management and analysis

1.7.1 Data collection instruments

The design of the study instruments used in collecting the data during fieldwork was informed by the questions set in the terms of reference. The research team constructed questions based on the objectives of the UISP. Thus the study instruments covered twelve modules to ensure that the domains of assessment aligned with the objectives of the UISP. In addition, the wave of xenophobic violence a few months before the fieldwork necessitated the inclusion of a module to explore the attitudes of informal settlement dwellers towards foreigners and how the residents thought that the challenges of violence and intolerance to differences in their communities can be resolved. The fieldwork covered twelve modules which were included in the household questionnaire (Annexure 4) instruments as follows: Household roster, Education, Economic activity, Health, nutrition and food security, Borrowing, credit and savings, Microenterprises, Housing and tenure, Infrastructure and service delivery, Residential satisfaction, Social capital, networks, participation and empowerment, Crime and safety, and Attitudes towards foreigners.

The instruments used in collecting empirical data were household questionnaires, key informant interviews (KII) with municipalities and community leaders, and focus group discussions (FGD) with residents of informal settlements. Municipal officials were those identified by the departments of human settlements in each municipality. The officials are referred to as such because once the rank is identified in this report, it amounts to disclosing their actual identity and this goes against ethical conduct of research. The community leaders were identified through the meetings that the teams held with the community representatives before

the commencement of data collection in each informal settlement. In each settlement selected for FGDs, the participants were recruited with the help of the gatekeepers. In qualitative research, gatekeepers are individuals that are considered to be knowledgeable about the research setting, are known and trusted by study participants and who can negotiate access to the research site (Devers & Frankel, 2000). The research team would on arrival explain the type of FGD (male or female) required, the number of participants and the age range of the participants required for the discussion to take place. Using the eligibility criteria identified in the study protocol, FGDs were conducted in selected informal settlements across the nine provinces.

The data collection instruments were tested during the pilot of this study which was conducted in April 2015. The content of the data collection instruments was validated against the TORs. The second phase of validation entailed checking the content of the data collection against the objectives of the UISP. All the data collection instruments were presented to and approved by the DHS and DPME teams. After this process, the pilot study was conducted in two settlements, urban and rural, to test the instruments. The pilot results were also presented to the DHS and DPME team. The approved tools were refined and used in the training of the fieldworkers.

1.7.2 Data collection

Data collection took place between June and September 2015. The overall target for this baseline study was to visit 5 850 households in the 130 selected settlements across the country. However, not all sampled settlements were visited due to time and budgetary constraints, as well as service delivery protests. The fieldwork team visited 78 settlements and 3 330 households across the country. In cases where there were more than one household in a selected visiting point, the Kish grid was used to select the household to be visited during fieldwork.

1.7.3 Data checking

Once data were collected, quality checked and edited in the field, household questionnaires were then sent back to Pretoria (HSRC head office). The data were further checked by office data checkers and recorded before being submitted to Data Capturing Centre of the Research Methodology and Data Centre in the HSRC. The questionnaires were packed in informal settlement boxes (one box per informal settlement).

1.7.4 Data capturing

A dedicated Data Capture Centre official was assigned to develop a data-capturing design template. Upon completion of this design template, the research team met with the Data Capturing Centre management team for finalising the template. Then data capturers were trained in data capturing, using the Census and Survey Processing System (CSPRO) software programme. The household questionnaires were then systematically allocated to data capturers for manual data entry. After completion of data capturing, the Data Capturing Centre management team went through verification and cleaning process to make sure that outliers and inconsistencies in the dataset were identified. In case where there were inconsistencies, the questionnaires had to be re-captured. After this verification process, data were converted from CSPro to Statistical Package for Social Sciences (SPSS) by the Data Capturing Centre management team and sent to the research team for further data cleaning and verification, as well as analysis. The household questionnaires were also repacked according to their respective informal settlement boxes and sent back to the research team.

1.7.5 Data cleaning

Household questionnaires from the Data Capturing Centre were re-checked and recorded by office data checkers. The data were then subjected for further data verification and cleaning by the research team. This was done by running frequencies in SPSS to determine duplicate records, outliers and inconsistencies in the captured dataset. These questionnaires with outliers and inconsistencies were then picked from their respective informal settlement boxes for verification and further cleaning of the database.

1.7.6 Data weighting

Due to the fact that there were 1185 informal settlements targeted for upgrading and only 10% was sampled from each province, this meant that settlements did not have equal chance of being sampled. Therefore, sample weights were applied to correct this potential bias due to unequal sampling probabilities. Further, sample weights were applied at household level as households in the sampled settlements did not have equal chance of being selected. In addition not all sampled settlements and households were realised. Therefore, the sample weights were computed based the realised settlements and interviewed households. The final weight was computed by multiplying informal settlement weight by household weight. It is important to note that weights were only applied to the main sample (2 380 households) and not applied in the additional mining settlements (113 households) as they were not part of the informal settlements targeted for upgrading.

1.7.7 Data analysis

For data analysis, both Stata and SPSS programs were used to get descriptive statistical analyses in the form of frequencies of responses and cross tabulations. Microsoft Excel was also used for further formulation of tables and figures for this baseline report. It is important to note that all tables and figures in this baseline report present unweighted counts and weighted percentages. Furthermore, percentages have been rounded and may not always add up to 100%.

1.7.8 Response rate

Of the 3 330 visited households (3 202 from the main sample and 128 from mining areas), the majority of visited households, 3 088 (93.0%) were valid, while 242 (7.0%) were invalid. Invalid households could include households that had been destroyed, vacated, business enterprise buildings or churches. Among the 3 088 valid households, 2 493 (81.0%) were interviewed while only 108 (3.0%) refused to take part in the study. The “Other” category constituted about 15.0% of the valid households. The other category included “No one at home”, “No one eligible”, “No one living there” and “Incapacitated”. Out of the 2 493 interviewed households, 2 380 households were from the main sample, while 113 households were from the mining settlements. It is important to note that only the households from the main sample are included in the weighted data. Data from additional mining settlements (113 households) was not included in this baseline report as it did not form part of the sample design. Table A1.3 shows the final response rate for the main sample by province. Free State (99.2%) and KwaZulu-Natal (99.1%) had the highest response rate, while the Northern Cape had the lowest percentage with 89.8%. The Northern Cape also had the highest refusal rate (10.2%), followed by Gauteng (5.9%). Mpumalanga was the only province with no refusals. There were around 8 900 household members residing in the 2 380 interviewed households across the country. It is worth noting that sometimes the total sample (n) for both household level analysis and individual level analysis varies from the above-mentioned figures (2 380 households and 8 900 persons). The reason for this variation is because some household respondents did not respond to all questions for household level analysis and also household respondents did not provide all required information about their household members for individual level analysis.

Table A1.3: Response rate by province

Province	Interviewed		Refused	
	Number (n)	Percentage (%)	Number (n)	Percentage (%)
Western Cape	207	97.2	6	2.8
Eastern Cape	318	96.1	13	3.9
Northern Cape	168	89.8	19	10.2
Free State	261	99.2	2	0.8
KwaZulu-Natal	209	99.1	2	0.9
North West	199	97.5	5	2.5
Gauteng	867	94.1	54	5.9
Mpumalanga	60	100.0	0	0.0
Limpopo	91	94.8	5	5.2
Total	2380	95.7	106	4.3

1.8 Qualitative methods

The qualitative component had four sub-components: a) Focus Group Discussions, b) Key Informant Interviews, c) Settlement photographing, and d) Environmental scanning.

1.8.1 Key informant interviews (KIIs)

The study designed two types of key informant interview guides. One set was administered among community leaders (n = 26), and the second set was administered among municipal officials (n = 23) responsible for human settlements in the areas sampled for the study.

The community key informant guide covered topics such as the background of the specific informal settlement, origin of the residents in the settlement, reasons for settling in the specific settlement, tenure arrangements, upgrading process, availability of basic infrastructural services such as water, sanitation, drainage, and waste removal. In addition to exploring the material conditions of residents in the informal settlements, the study also sought to establish the levels of social cohesion among the informal dwellers. Questions were asked about participation in service delivery protests and causes of the protests; levels of violence and destruction of property during service delivery protests, and whether the communities always resolve challenges through violence. The study also sought to establish the type of environmental challenges and municipal responses to disasters in the settlements. Also explored in the key informant guides were elements of the environment and access to the city, which covered aspects such as the mode of transport, accessibility, affordability and quality of the transport.

Housing finance was also covered, including elements such as sources of income, sources of housing finance, credit, participation in informal credit saving schemes and whether the sources of finance and credit are in anyway invested into home improvement. Social capital covered questions related to linking and bonding capital, social networks and the value that informal residents attached to their social networks and social cohesion. The module on attitudes towards foreigners explored how informal dwellers resolved differences with one another, levels of tolerance towards foreigners and how the police were dealing with the presence of foreigners in the informal settlements. Also explored were elements of policy and the views of communities on state policy towards immigrants, and community perspectives on state response on intolerance towards foreigners, and how different tiers should deal with the prevailing attitudes towards foreigners.

The questions posed to the key informants at the community level were similar to those posed to the municipal officials. The difference in the two key informant guides was in the level of detail required from municipal officials. For example, the questions on infrastructural services, upgrading process and empowerment, as well as tenure arrangements were much more detailed in the municipal key informant guide than in the key informant guide administered to the community leaders. The questions in the municipal KII were a mix of open-ended and semi-structured questions, and the community key informant guide comprised of open-ended questions.

1.8.2 Focus group discussions (FGDs)

Thirty-six FGDs were planned with sampled communities across the nine provinces. Twenty-five FGDs were conducted. Gauteng had the highest number of FGDs conducted (5) while the Northern and Western Cape had the least (1 each). Each focus group comprised between six to ten participants; men and women of different age groups. In total, 178 people participated in the FGDs.

The FGD guide was similar to the KII guide for community leaders. The FGD guide included general questions about living conditions, including poverty in the settlements; who were considered to be poor and how the poor survived in the informal settlement. These were followed by questions on tenure arrangements, upgrading and empowerment processes, availability of infrastructural services, housing finance, social capital, community participation and safety, community mobilisation and the perceptions and attitudes towards foreigners.

1.8.3 Response rate

The qualitative component of the study included 23 FGDs that were conducted with both male and female participants (n = 171) in selected informal settlements targeted for upgrading (Table A1.4).

Table A1.4: Profile of FGDs participants by province and enumeration area

FGD	Gender	Number of Participants
EC. JOE SLOVO	Females	8
FS. MAFIKENG	Females	7
FS. UNIT 3	Females	7
FS. MK SQUARE	Males	8
GP. DIEPSLOOT	Males	7
GP. FREEDOM SQUARE	Males	5
GP. MADELAKUFA	Females	10
GP. ORLANDO	Males	7
GP. TSWAING	Females	6
KZN. BABANANGO	Females	10
KZN. FAIRLEIGH	Males	8
KZN. POORTJIE	Males	9
KZN. ZAMANI.	Females	8
LP. MOHLAKANENG	Males	8
LP. ROOSSENEKAL	Males	6
LP. VAALWATER	Females	5
MP. KWAZANELE	Males	8
MP. MATSULU	Females	10
NC. PROMISED LAND	Females	10
NW. GLAUDINA	Females	6
NW. KANANA	Males	9
WC. DRAKENSTEIN	Females	10
Per gender		
Gender	FGD	Participants
Males	11 FGDs	81 Participants
Females	12 FGDs	90 Participants
Total	23	171 Participants

In addition to FGDs, interviews were conducted with key informants in the selected municipalities (n=22) and communities (n=24) (Tables A1.5 and A1.6)

Table A1.5: Profile of Key Informants – Community by enumeration area

KII_Community	Gender	Number of Participants
FS. UNIT 3	Female	1
FS. MK SQUARE	Male	1
GP. DIEPSLOOT	Male	1
GP. FREEDOM SQUARE	Female	1
GP. MADELAKUFA	Male	1
GP. TSAKANE	Female	1
GP. ORLANDO	Female	1
GP. RETHABISENG	Male	1
GP. NEW EERSTERUS	Female	1
KZN. BABANANGO	Female	1
KZN. FAIRLEIGH	Male	1
KZN. POORTJIE	Female	1
LP. MOHLAKANENG	Male	1
LP. ROOSSENEKAL	Female	1
LP. VAALWATER	Female	1
MP. KWAZANELE	Female	1
NC. PROMISED LAND	Female	1
NC. CAMPBELL 1	Male	1
NC. CAMPBELL 2	Male	1
NW. MAFIKENG	Male	1
NW. GLAUDINA	Male	1
NW. KANANA	Male	1
WC. NYANGA	Male	1
Per Gender		
Males	12	
Females	12	
Total	24 respondents	

Table A1.6: Profile of Key Informants – Municipality by enumeration area

KII Municipality	Gender	Participants
EC Cambridge	Male	1
EC Joe Slovo	Male	1
FS MK Square	Male	1
FS Tshiame D	Male	1
FS Unit 3	Male	1
GP Rethabiseng	Male	1
KZN Fairleighs	Male	1
KZN Babanango	Female	1
KZN Cato Crest Umlazi	Male	1
KZN Zamani	Male	1
KZN Poortie	Male	1
KZN Mazakhele	Male	1
KZN Sibongile Bufferstrip	Male	1
LP Roosenekal	Male	1
LP Mohlakaneng	Male	1
MP Kwazanele	Male	1
MP Matsulu	Male	1
NC Promised Land	Male	1
NW Gludina	Male	1
NW Kanana Ext 13	Male	1
NW Mafikeng	Male	1
WC Nyanga	Female	1
Per Gender		
Males	20	
Females	2	
TOTAL	22	

1.9 Photographs

In this study, photographs of informal settlements were taken to capture the environment before upgrading. Photography as a research instrument augmented the textual evidence with pictorial representations of the context of informal settlements at baseline. Photography provides its own type of narrative which aids readers to better understand the context described.

Confronted with the reality of informal settlements where crime is rife and the danger of being mugged for cameras so real, the researchers found different ways of documenting the baseline status of the informal settlements. Each research team was issued with a tablet to assist in communicating, as well as in taking the photographs. The photographs were submitted to the research team in real time, which meant that even if the tablet was stolen, the study already had the pictorial evidence of the informal settlements.

In Gauteng, using tablets was not always possible. Settlements were described as so dangerous that even the police do not venture into them. In such settlements, the research teams risked and used their own cell phones to take pictures of the settlements that they visited. In most instances, it was only safe to take photographs in the presence of community gatekeepers who would then answer any questions posed by community members about the photos being taken. At least 236 photographs of informal settlements were taken.

1.10 Environmental scanning

The Environmental Scan was initially designed to inform the field work. However, it proved difficult to gather all information before the field work and the scan was used as a detailed post-survey settlement database. Following the sample design, the HSRC team called local municipalities to request information about the exact location of informal settlements for which team had no X and Y coordinates. All selected informal settlements were then geo-coded and the outer boundaries were drawn, using World Imagery and

Google Earth as a backdrop, together with information from local municipalities such as street names and directions about the extent of the informal settlement. The Stats SA sub-place boundary data were used where possible. Some municipalities, such as City of Johannesburg, Ekurhuleni and City of Tshwane, provided data on informal settlements in a shape file format. Therefore, no boundary delineations were required. This process of requesting information about the exact location of informal settlements was a success, with responses coming mainly from GIS personnel and town planners within the local municipalities. The Environmental Scan checklist was designed to observe conditions in each settlement and completed by the fieldwork teams. Responses were recorded in a spreadsheet to facilitate analysis and interpretation, and include 75 settlements from the main sample, as well as three settlements from the mining towns. Environmental scanning entailed providing information about availability and access to basic services, the location of each informal settlement, roads, water, storm water drainage, electricity connection, risk and vulnerability of the informal settlements.

1.11 Ethics approval

The study received approval from the Research Ethics Committee (REC) of the HSRC (Research Ethics Committee Reference No: No REC 9/21/05/14).

1.12 Baseline study limitations

The baseline study focused on informal settlements that were targeted for upgrading. The findings cannot be generalised to the whole population of people living in informal settlements in South Africa, as the final weights were not subjected to benchmarking. The data on the total number of such people living in informal settlements in South Africa was not available for benchmarking. Therefore, the study can only be generalised to people living in informal settlements which were targeted for upgrading based on the 2014 list obtained from the DHS. The findings of the sub-group analyses need to be interpreted with caution due to the resultant small number of observations. Some of the sampled informal settlements did not have boundaries and thus their boundaries had to be delineated by the HSRC GIS team, in consultation with local municipal officials and should not be considered as their official proclaimed boundaries. It is important to note that this process might have resulted in under- or over-counting of households in some informal settlements. Furthermore, data collection took place between June and September 2014, which could result in seasonal trends in responses for outcome indicators such as health (e.g. flu), crime and economic activities.

ANNEXURE 1b

DETAILED DATA PREPARATION AND SAMPLING PROCESS

This section presents the data preparation and sampling approach for the study, taking into account the fact that the purpose is to develop baseline indicators for use in assessing the impact of upgrading in future. The section first discusses data preparation and thereafter the methodological approach is used in sampling per province.

1.1 Data preparation

The data preparation begun with the initial sampling frame provided together with the Terms of Reference (TOR). Since the initial sampling frame had gaps in and was inconsistent with the fields it provided, it was eventually discarded and a list of informal settlements from the different provinces was sourced by DHS. The second data set was problematic too, as the information was inconsistent. Some provinces provided lists of projects and planned units, while others provided informal settlements. Still others provided information for specific municipalities rather than the whole province. This data set was deemed to be inconsistent and incomplete. The DHS & DPME team went to provinces to establish the correct list. However, this exercise did not yield satisfying results. Although the third data set (different spreadsheets from each province) was not adequate, it was nevertheless usable and other datasets were used to supplement it. The DHS provided the following data files for this third data set in 2014:

- Eastern Cape: Eastern Cape Outcome 8 Informal Settlements Report_1.xlsx
- Free State: UISP Free State Database.xls
- Gauteng
 - ✓ CityofJohannesburg_Moabi Formalization Templates.xls
 - ✓ CityOFTshwane_Number of Informal Settlements per Region_1.xlsx
 - ✓ EkuRhuleniMetroEMM INFORMAL SETTLEMENTS INFORMATION (Current).xlsx
 - ✓ GautengProvincial_Informal Settlement Final Stats.xlsx
- KwaZulu-Natal: KZN Copy of LATEST DATABASE_IS_UPGRADE (2) .xlsx V3 06 08 2014.xlsx
- Limpopo: Copy of DATABASE_IS_UPGRADE.xlsx
- Mpumalanga: Mpumalanga Upgrading of Informal Settlements Database - NDHS Done.xls
- North West: Informal Settlements Planned 201415 NW.xlsx
- Northern Cape: Northern Cape Database_14 04 15.xlsx
- Western Cape: Western Cape.xls

In each province, the following fields were extracted from these spreadsheets if they existed: province name, district name, municipality name, informal settlement name, X and Y coordinates and number of households. In cases where the name of the province or district or municipality was not provided, it was added if possible. Based on recommendations agreed on during the sampling workshop between HSRC, DHS and DPME on 23 November 2014, the HSRC project team had to revisit the data files for the following provinces: Gauteng, Eastern Cape and Northern Cape. Below is the description of what was done for each of the three provinces in response to the recommendations and agreements from the abovementioned workshop.

In the case of Gauteng, the “GautengProvincial_Informal Settlement Final Stats.xlsx” file was used to get the informal settlements from non-metro areas. Informal settlements from metro areas were obtained from the individual metropolitan files as per DHS recommendation. For the City of Tshwane, the tabs named “Region 1” to “Region 7” in the “CityOFTshwane_Number of Informal Settlements per Region_1.xlsx” file were added up to get the total number of informal settlements for this metro. For the City of

Johannesburg, the tab called “MASTERLIST” in the “CityofJohannesburg_Moabi Formalization Templates.xls” was considered to obtain informal settlements targeted for upgrading. These separate metro files and non-metro data from the “GautengProvincial_Informal Settlement Final Stats.xlsx” were combined to get the final list of informal settlements for the whole province. For the Eastern Cape, the tab called “SUB TOTALS” which contained all the districts was used instead of the tab named “2010”, which contained only informal settlements from Nelson Mandela Bay Metro. As agreed with the DHS, all informal settlements in the Northern Cape that had less than 150 households were deleted from the provincial list. This was motivated by the recommendation that travelling to settlements with small numbers of households might inflate fieldwork costs.

The data was kept in separate files for each province and thereafter cleaning was done based on the informal settlement name. Records containing the same name, e.g. Thembaletu Zone 9, Kanana Ext 11 or Maquassi Hills Ext 13, were deleted. This was done to ensure that the same settlement does not get selected more than once in the sample. In North West, projects span across settlements and since there was no information about which settlements were included, the project names were used as is. After cleaning the data from all provinces, the total number of informal settlements targeted for upgrading for the whole country was 1 185 (see Table 1).

1.2 Sampling of informal settlements targeted for upgrading

Sampling for Impact Evaluation

It is of critical importance in the sampling approach of both informal settlements and households to construct a sample that allows to credibly detect a given effect size within evaluation budget constraints (Khandker et al, 2010). Worth noting, however, is that this particular study is not an impact evaluation but a baseline assessment that will facilitate a future impact evaluation to the extent possible.

The Need for Randomisation

It is important to randomise the selection of informal settlements that are exposed and those not exposed to a treatment (in this case UISP) to measure effect. Randomisation allows for removal of systematic pre-existing differences so that only chance determines which informal settlement is allocated to the treatment group and control group. The effect of the treatment is then assessed by looking at the difference between the mean measure in the treatment group and in the control group.

Ideally, the selection process has two stages, and in this study it will be expanded to three: i) selection of Primary Sampling Units (PSU), in this case, informal settlements targeted for upgrading; ii) the selection of Units of Analysis, in this case households within the selected informal settlements (PSU); iii) the selection of a relevant household on a stand where there is more than one household, using the Kish grid.

Practical considerations for sampling of informal settlements for future impact assessment of UISP

While it is theoretically possible to use the above sample size calculation formula to establish the number of informal settlements targeted for upgrading for future impact evaluation, there are a number of key practical considerations that made it impossible to do so.

First, the UISP was designed and implemented without an explicit theory of change (TOC) and explicit targets which would have provided clarity on the principal outcome metric. Furthermore, the outcome metric in the proposed TOC is a compound metric, that is, “sustainable human settlements with improved quality of life for households” with no specific indicators and set targets.

Second, the UISP was not designed and implemented as an experiment with clear cases and controls to allow for credibly measuring effect size. It is indeed outside the scope of the project team to prospectively determine which informal settlements will actually be upgraded and which ones will not be upgraded, as this

depends on the provincial and municipal plans and implementation. The focus of the study is only on those informal settlements that have been targeted for upgrading and hence our sampling frame as described above.

Third, the sampling frame of informal settlements targeted for upgrading had a number of key data variables unavailable upfront, such as the project phase and commitment of budgets which would have given some indication of how many would be upgraded (cases) in 3 or 5 years, and how many would still be not upgraded (controls) when the impact study will hopefully be done. Knowing the project phases would have assisted in identifying those settlements that were going to be upgraded in the short-to medium term, and those that were going to be upgraded in the long term.

Fourth, the number of households in each of the informal settlements was available in some provinces and not in others, which meant that selection of households could only be done after the GIS mapping to establish the boundaries of the selected settlements and then counting the number of dwellings/households in each informal settlement (size of settlement).

Fifth, the selection of informal settlements targeted for upgrading needed to take into account monitoring and evaluation needs of the DHS by geographical area. Therefore, the geographic spread of the selected informal settlements had to be taken into account in the selection process.

Consequently, the sampling approach described below is based on the assumption that not all of the informal settlements selected for the study will actually be upgraded in 3 or 5 years' time when the impact evaluation will be conducted. Those informal settlements that would have been upgraded will become the treatment cases and those not yet upgraded become or contribute to the controls. This means that the number of settlements selected must be large enough to ensure that there will be sufficient numbers of upgraded and not upgraded settlements. The attendant risk of this approach is the remote possibility of all the settlements having been upgraded by the time of the impact evaluation and also not having sufficient geographic spread of controls to take into account the contextual differences that are critical to explaining change or no change. To retain some power in the study sample, the PSU were selected randomly within a province and the households were also selected randomly as described later. The steps outlined above provide a quasi-experimental design for the study.

Sampling approach

Stratified random sampling was applied to obtain a representative national sample of informal settlements targeted for upgrade. The selection of informal settlements was done using the SPSS software and the random selection option was used for each provincial file. The sample size is a function of the number of settlements targeted per province. Therefore, there are more settlements selected in the Northern Cape than in Mpumalanga, because there are more settlements targeted in the Northern Cape. The total number of informal settlements targeted for upgrading was 1 185 ($N = 1\,185$) and as proposed in the technical offer, a 10% sample size equated to 119 informal settlements ($n = 119$) (Table A1b). In order to obtain proportional representation (PR) by province the following formula was used:

$$PR = (Provincial\ N / Total\ N) \times Sample\ size$$

Table A1b: Total number of informal settlements and selected settlements per province

Province	N	n
Western Cape	256	26
Eastern Cape	180	18
Northern Cape	69	7
Free State	74	7
KwaZulu-Natal	80	8
North West	70	7
Gauteng	408	41
Mpumalanga	14	2
Limpopo	34	3
South Africa	1185	119

How informal settlements were selected per province

In order to select the mentioned number of informal settlements in each province (Table 1), random sampling was performed using SPSS. Further adjustments, such as re-running of the random selection, were considered in cases where the initial random selection did not fulfil the purpose of monitoring and evaluation, such as selected informal settlements coming from only one district out of five in a particular province. This part of the research design is the only place where researchers intervened to obtain required outputs and which can be regarded as quasi-experimental.

It is worth noting that it was only in two provinces that the initial random sampling was satisfactory, i.e. Mpumalanga and Eastern Cape. For the Free State, the initial random sampling of seven informal settlements was not satisfactory as it did not provide a good geographic distribution, and a re-run was done until an optimal selection was reached. The final sample has three informal settlements from Lejweleputswa, two from Mangaung, one from Thabo Mofutsanyane and Fezile Dabi districts. This was found to be satisfactory, as many informal settlements targeted for upgrading in this province were both from Lejweleputswa and Mangaung, a mining area and metro area respectively. In addition, all four districts with informal settlements targeted for upgrading were covered. In Limpopo, a re-run was also performed until an optimal selection was reached, as the first or initial sampling of the three informal settlements came from two districts out of three and two out of six municipalities. The final selection came from all three districts that have informal settlements targeted for upgrading, which was found to be reasonable enough for monitoring and evaluation.

For Gauteng, the initial random sample was also not satisfactory as it had some informal settlements with fewer households, i.e. 26 and 30 households, which would not be appropriate for the purpose of this study. The optimal sample contained informal settlements with more than 100 households where this field had information. In addition, at least all five districts of the province are represented in the sample. It is necessary to mention, though, that most of the informal settlements were from the three metro districts. The other consideration was that the informal settlements should not be from the same area or location. However, this criterion had to be compromised or relaxed in order to reach an optimal sample for Gauteng. This is evidenced by the inclusion of Tsakane, Ekurhuleni and Soshanguve, City of Tshwane informal settlements in the final sample.

For KwaZulu-Natal, eight informal settlements from the 10 districts were reached after several random sampling runs. It is believed the current sample of informal settlements is appropriate enough for monitoring and evaluation as it covers at least six of the 10 districts that have informal settlements targeted for upgrading. Only eThekweni has more than one (three) informal settlements while all other five districts including uMgungundlovu has one informal settlement each. This is reasonable as almost half of the informal settlements in the province come from eThekweni metro.

For the Northern Cape, as informal settlements with the households less than 150 were already excluded from the eligible selection, geographic distribution was the major criterion that was considered for adjusting the sample to be optimal for monitoring and evaluation. Like in other provinces, the initial random sample did not yield appropriate results, hence several runs had to be conducted. The final sample has seven informal settlements from all five districts of the province, with Francis Baard and Pixley ka Seme having two informal settlements, while the other three have one each.

For North West, as per the findings by the DHS and DPME team who visited provinces for clarification of information regarding informal settlements targeted for upgrading, only projects information was available. This presented a challenge as the DHS and DPME team found that a project may consist of households from different informal settlements. Therefore, a consensus agreement from the 23 October 2014 sampling workshop was that sampling should be done, using these projects as they are and the exact details will be revealed during fieldwork and environmental scanning. The first random sample was not satisfactory, hence more runs were performed. The final sample has seven informal settlements from all four districts of the province.

Lastly, for the Western Cape, several random sampling runs were also performed in order to get an appropriate sample for monitoring and evaluation. The final 26 informal settlements that were selected come from all six districts of the province. It is worth noting that only two informal settlements were selected from the City of Cape Town. The reason behind this was that the City of Cape Town provided projects, not informal settlements, and almost half of these projects had the “N2 Gateway” name in them. The remaining five districts provided informal settlements with necessary information as requested.

Mining towns

Based on the *Integrated Sustainable Human Settlements in Mining Towns progress report of September 2014*, the total number of informal settlements in mining towns was 62 ($N = 62$). These were located in 11 municipalities, and in order for each municipality to be represented, one informal settlement was randomly selected in each municipality.

ANNEXURE 2

LITERATURE REVIEW

GLOBAL CONTEXT OF INFORMAL SETTLEMENTS AND APPROACHES TO UPGRADING

Introduction

In addressing housing policy, the Habitat Agenda underscores the importance of decentralising housing policies to local level, and linking housing policy with macroeconomic, social, demographic environmental and cultural policies (UN Habitat, 1996). In emphasising the notion of consultation, the Habitat Agenda underscores the importance of community participation both in the design and implementation of housing programmes, including the upgrading of informal settlements.

The UN Habitat goals and indicators as they relate to shelter, social development and eradication of poverty, environmental management, economic development and governance are relevant in understanding the context of slums/informal settlements and therefore can be adapted as baseline indicators in assessing the impact of upgrading slums. In addition to the existing indicators, the UN Habitat added the MDG goal 7 (Ensuring environmental sustainability) and its target: “By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers” (UN Habitat, 2009:42). The definition of the target suggests that “The proportion of the urban population living in slums is the percentage of the population living in a slum household that lacks one or more of the following basic services: improved water, improved sanitation, durable housing, sufficient living area or security of tenure” (UN Habitat, 2009:42). Informal dwellers thus represent the poorest, most deprived people who live without access to potable water, adequate sanitation, shelter and security of tenure.

Magnitude and Challenge of Informal Settlements

In the UN Habitat lexicon, informal settlements are slums, and these are characterised by the lack of water and sanitation, overcrowding, non-permanent structures and a lack of tenure in all its various definitions (UN Habitat, 2006). These characteristics are referred to as the indicators of informality and slum conditions. The existence of urban deprivation as represented by the extensiveness of informal settlements globally alongside affluence of well-planned and serviced formal settlements, in essence presents what the UN Habitat has christened the “urban divide” (UN Habitat, 2010:6). The expansion of urban areas has been characterised by the growth of informal settlements, and despite effort to improve the living condition of slum dwellers, few countries have made marked improvements. The UN target was to ensure that about 227 million people should have moved out of informal settlements between 2000 and 2010. In this period, Asia made significant strides with improvements being made in the lives of 172 million (74 per cent of global slum population) informal residents (UN Habitat, 2010). The most significant improvements to the lives of informal dwellers were achieved in China, India, Indonesia and Vietnam.

Africa lags behind in improving the lives of informal residents. Between 2000 and 2010, the continent improved the lives of 24 million people living in slums (UN Habitat, 2010). In sub-Saharan Africa, improvements in the lives of informal dwellers were achieved in Rwanda, Ghana, Senegal, Guinea and Uganda. Globally, the region that achieved greatest success was Latin America and the Caribbean, where 30 million people (UN Habitat, 2010) moved out of informal settlements between 2000 to 2010. The Dominican Republic, Argentina and Columbia accounted for most of the improvements that were achieved in the lives of slum dwellers.

Policy Approaches to Informal Settlement Upgrading

The proliferation of informal settlements in different contexts has always been met with varying responses by the authorities. Gulyani & Basset, (2007), in discussing the upgrading of informal settlements, noted that due to the overwhelming focus on upgrading of informal settlements in Asia and Latin America, very little had been documented about upgrading of such settlements in Africa, except for South Africa. The prioritisation of other regions has resulted in a knowledge gap in terms of the existing knowledge on the evolution and process of upgrading, as well as the impact of upgrading in Africa in general. This is despite the fact that there is a 30 year evolution of upgrading of projects in Africa. Gulyani & Basset (2007) observed that although upgrading in Africa started in the 1970s with large programmes comprising of infrastructure and housing, subsequent upgrading programmes became smaller in terms of the package of upgrading, as well as the number of informal settlements upgraded.

The 1980s were a period when the World Bank financed site and service schemes in selected projects in African cities. Upgrading has over the years evolved to adopt an enabling approach where slum communities are assisted with the regularisation of land tenure and the provision of communal infrastructural services such as water and sanitation to ensure hygiene. Increasingly, governments have proceeded to provide services to ensure health and safety without necessarily extending security of tenure.

As Gulyani (2007) argued, “The mechanisms for enhancing tenure security have changed ... there has been a major change in views regarding sequencing – in a direct reversal of the early view that tenure security is a precursor for housing and infrastructure investment, current programmes tend to use infrastructure investment as the means for enhancing tenure security and encouraging housing investments ... this change is positive and represents one way to achieve what we argue is a first step vis-à-vis tenure: sufficient security” (Gulyani & Basset, 2007: 487).

Gulyani and Basset (2007) posit that the first generation of upgrading projects in Africa were site and service schemes whose purpose was to address the acute housing crisis in African cities and were known as “First Urban” and “Second Urban” programmes which were large in scope and geographical coverage. For example, in Zambia, fourteen informal settlements targeted for upgrading accommodated close to half of Lusaka’s population. As Gulyani & Basset (2007) argued, these projects were generally “complex, multisector projects that prioritised community development and poverty alleviation in addition to housing and physical development objectives” (Gulyani & Basset, 2007:489). The second generation upgrading projects supported by the World Bank have been much more focused both conceptually and narrowed in terms of scale and geographic scope. The focus has been on upgrading one or two specific projects within a city rather than in whole cities. For example, one programme, the Save our Neighbourhood Programme, implemented in Bamako, Mali in 1993, focused on a range of areas such as the ensuring of secure tenure, planning the area which in some instances included relocating residents, the provision of infrastructural services such as water, sanitation, drainage, roads and electricity. Although focused on Bamako as a whole, the programme started with a pilot project. In Ghana, the World Bank in 1997 supported upgrading in two informal settlements in terms of providing very specific services – water, sanitation, roads and drainage. Scaling down of upgrading to focus on fewer projects and limited interventions was due to a critique of the first generation of upgrading programmes that were complex and limited funding. The second generation of upgrading programmes had limited interventions, but a range of stakeholders providing support in a number of areas. Gulyani and Basset (2007) underscored that despite the shift in size of projects and interventions, the focus in upgrading had remained on the provision of infrastructural services, and for a good reason, as they were central to ensuring the health and safety of residents. Literature on informal settlement upgrading shows an evolution of state policy towards slums evolving from intolerance towards informal settlements in urban areas to a more supportive attitude as evidenced in attempts at upgrading in various contexts.

Like elsewhere, India introduced the sites and services scheme (1983-1984) with support from the World Bank. In Mumbai, the sites and services scheme entailed the provision of government subsidies and loans to service sites and access routes. This programme, however, was confronted with challenges from the start due to the difficulty in acquiring suitable land for development for low-income households. Despite deliberate attempts to target low-income households, most of the sites remained unaffordable to the targeted beneficiaries. Only half of the 40 000 sites targeted were developed in Mumbai. In other Indian cities such as Ahmedabad, the situation was the same in that the sites and services schemes largely benefitted the higher-income groups. As the analysts argued “it appears that the World Bank’s trilogy of affordability – cost recovery – replicability has all but collapsed in the face of local complexities and obstacles” (O’Hare & Abbot, 1998:279).

From 1980 onwards, India adopted the community action programme to deal with slum and squatter improvement. The community action, as the term indicates, had its roots in the organising experiences of the slum communities in improving their settlements. Where the organised groups of informal dwellers existed to improve their settlements, these had the support of NGOs. While the community action approach represents the future not only in India but elsewhere in developing countries, the challenge with the approach is that often the representatives of slum dwellers are not always entirely representative and may in fact have their own agendas. The danger in the community-led approach is also that people’s own initiatives may serve to “absolve the municipal and other public authorities of some of their responsibilities and may be attractive to such bodies simply because it appears to offer cheap alternatives to more formal ‘top-down’ intervention” (O’Hare & Abbot, 1998:281). While countries such as India did not attempt to formulate national policies on slums and slum upgrading, regions were tasked with the responsibility to deal with the housing crisis posed by such settlements.

In Egypt, like other governments in developing nations such as India, the Egyptian government solution to the challenge of informal settlement was carried out through three strategies:

1. Dealing with the informality through urban and regional planning
2. Development of new towns and settlements
3. Upgrading and regularisation of informal settlements

Egypt allowed the expansion of informal settlements without the government making any attempts to either regularise or control or support them. The upgrading of informal settlements in Egypt was first attempted by the World Bank in the 1970s. Examples of settlements upgraded with World Bank support include Helwan (1978), Manshiet Nasser (1979), Ismailia (1977) and Nasseriya (Aswan) (1986). These settlements represented the Egyptian government’s first attempts to move away from the provision of public housing to supporting housing development among the poor. The effectiveness of the upgrading of informal settlements in Egypt was varied. As El-Batran & Arandel (1998) reported, “Where participation by the local population and government was actively sought, they contributed to the integration of residents into the urban network by providing basic infrastructure and social services, and regularizing tenure” (El-Batran & Arandel, 1998:229). The shift in the attitude of the Egyptian government was a result of pressure from international donors (El-Batran & Arandel, 1998). The imposition of the structural adjustment programme that advocated the redirecting of infrastructural resources to support economic growth was also a contributing factor. Another factor that caught the attention of the authorities was that in the absence of state support in informal settlements, the communities began organising themselves and started providing their own water, clinic, and mosques. Most of these social amenities were supported with funds from religious organisations, thus there was a concern that informal settlements were becoming the place for the mushrooming of Islamic fundamentalist groups.

Effectiveness of Informal Settlement Upgrading

Informal settlement upgrading includes housing improvements, provision of basic infrastructural services, social amenities such as schools, clinics, shops, access roads and community halls for multi-purpose use. While target 11 of the MDG 7 focuses on the improvement of slums with a view to addressing the deprivation, social exclusion and marginalisation that slum dwellers experience, the effectiveness of slum improvement programmes varies with context.

While upgrading helps to secure the health and safety of households in informal settlements, it also brings problems (Blattman et al, 2013). Mukhija (2001), in discussing informal settlement upgrading in Mumbai (India), argued that the emphasis on providing security often implies that the physical conditions where upgrading should occur receive less attention. The different constituencies involved in upgrading of informal settlements in Mumbai from the 1970s through to the 1990s included the World Bank, Bombay Urban Development Project (BUDP) in 1985. The target was to upgrade 100 000 units (12% of the population of Mumbai's informal dwellers). The challenge of upgrading and providing security of tenure was that most of the land where the slums were located was privately owned. The upgrading was to be completed in 5 years; however, an extension of 4 more years was granted to allow for the completion of the upgrading. At the end of the upgrading programme, only 22 204 units had been built. The explanation provided for the failure of the World Bank funded upgrading was that the programme lacked "a strong constituency for *in situ* slum upgrading on a cost-recovery basis" (Mukhija, 2001:216). Mukhija underscores that "in both the rich countries and in the poor countries, by and large, these programmes led to a loss in the total number of available housing units" (Mukhija, 2001:214).

The focus on restricting the development of slums and clearing the existing ones in Mumbai meant that little support was provided to the residents by local government. However, World Bank support in *in situ* upgrading from the late 1970s and 1980s resulted in the provision of basic services. World Bank support was, however, pegged on the notion of cost recovery, affordability and replicability. The Slum Improvement Programme (SIP) which started in 1976 was followed by the Slum Upgrading Programme (SUP) (1983/84), which was also supported by the World Bank. The focus of SIP was to provide "infrastructural services such as water, drainage, latrines, pavements, lighting and electricity" (O'Hare & Abbot, 1998:278), and by 1989, about 3 million slum dwellers had benefitted from the programme which had cost about R500 million. The SUP programme placed emphasis on community consent and participation in the upgrading process. The programme included leasing land to slum communities at favourable rates, and also accessing loans by groups of slum residents for use in improving the environmental and housing conditions. Although about 100 000 households benefitted from the programme within the first three years, challenges that obstructed its greater success included the difficulty in acquiring land for development which, in some instances, required political intervention. Applications for municipal-owned land had to be made through the Mumbai municipality but the acquisition of state-owned land was much more complex. The success of the SUP was curtailed by the bureaucratic procedures involved in the acquisition and packaging of land for development.

In Egypt, where the government was the sole implementing agency, the upgrading of informal settlements was less effective. As El-Batran & Arandel noted, "They achieved at best the provision of infrastructure" (El-Batran & Arandel, 1998:229). Although upgrading was also extended to the desert areas, the overriding concern among the residents of these areas was the regularisation of tenure. Thus upgrading of settlements without granting tenure rights put the state on a collision course with the residents. Title to the land was of critical importance to the residents of desert informal settlements. As the analysts underscored (El-Batran & Arandel, 1998), the upgrading of informal settlements in Egypt in the 1980s was a failure, and the Egyptian government reverted to its earlier policy of providing complete units. The latter was only a partial solution to the housing crisis, as the informal dwellers could neither afford to rent or purchase the complete units. The ineffectiveness of the Egyptian upgrading programme was attributed to the failure to replicate upgrading as a national programme.

In the site and service schemes there seems to have been a move away from full implementation of the housing programmes to partial support in the form of infrastructural services, while households were expected to make their own contributions in cash and kind. This was particularly the case in the site and services schemes implemented with World Bank funding in areas such as Mathare, Dandora and Kayole in Kenya. Over the years there has been a shift from the top-down approach to a more participatory approach where communities with the support of NGOs take on a more pro-active role in the planning and implementation of upgrading programmes. Examples of community action/participation include the upgrading of informal settlements in Kitale Kenya (Majale, 2008).

Security of Tenure in Informal Settlements

Various analysts have underscored the importance of secure land tenure (The World Bank, 2006; Graves, 2015; Gonzalez-Navarro & Quintana-Domeque, 2010; Field, 2005; McIntosh et al, 2013; Mpe & Ogra, 2014; Mears, 2007; Kombe & Kreibich, 2000; Barret & Beard, 2002; Riley, Fiori, & Ramirez, 2001; Acioly Jr, 2001; Peters, 2009; Obeng-Odoom, 2012; Onyebueke, 2001; Tipple, 2004; Kigochie, 2001; Majale, 2008; and Febade, 2000). Syagga (2011) has argued that tenure is the best distinguishing characteristic of informal settlements which are often considered to be illegal settlements because they are often situated on land that does not belong to the residents (Syagga, 2011; Unger, 2013). Thus, informal dwellers are frequently subject to legal battles to remove them from the land that they occupy illegally. The importance of legal tenure in South Africa, as in other contexts where people were forcefully removed from their land or violently dispossessed of land, remains critical. Security of tenure recognises the right of residents to dwell on their land and to utilise the land to raise capital for investing on the land or in business. Official recognition of people to dwell on land opens up opportunities that they would otherwise not access. Various analysts (Obeng-Odoom, 2012; Baharoglu, 2002; Durrand-Lasserve, 2006; Kombe & Kreibich, 2000; Syagga, 2011; Annez, Bhatt, & Patel, 2014) have observed that regularising land tenure has benefits for residents, some of which include increased investment, increased labourforce participation, particularly among women, as well as better educational outcomes (Annez *et al*, 2014).

Kombe and Kreibich (2000), in discussing urban governance as it affects land management, postulate that the regularisation of informal land for housing development should be carried out incrementally. The analysts argued that a once-off type of approach to land regularisation is constrained by the scarcity of resources, as well as the social dynamics that have to be factored into the process. Kombe and Kreibich (2000) also argued that the recognition of informal land management systems which are a reflection of the people's attempts to deal with their social and economic and political context is important, as these attempts are embedded in the value system of the communities and their institutions. Such recognition entails working with the existing grassroots institutions and land registers in the informal settlements. The notion of working with community institutions and their land registers points to an incremental approach to land regularisation.

The high rate of informal land transactions in Tanzania, the absence of local government in these transactions, and the lack of up-to-date cadastrals had led to the decentralisation of land management, resulting in greater efficiency on land development and housing supply in Tanzania. Decentralisation of land management essentially means that the social regularisation of land management and development is left to local institutions. The social regularisation of land management is not only vital in ensuring efficient housing development in informal settlements, it is also with land conflicts and land ownership in ways consistent with the social norms of the communities concerned. The stakeholders involved in the social regularisation of land include community leaders, local committees, and community-based organisations, as well as private individuals who, in the process of regularising land ownership, also acquire vital experience and skills. Decentralising land development is not only important for local communities but it also facilitates the provision of infrastructure and aids in collection of property taxes. Decentralisation of land management also entails ensuring that communities establish local land registers, and that these are up-to-date with the land transactions in the community.

Syagga (2011) has distinguished the notions of legality and legitimacy in conceptualising security of tenure for informal settlements. Legitimacy refers to “tenure regularization as opposed to legality which refers to tenure legalization’ (Syagga, 2011:6). Without some form of legitimacy to the land, residents are often hesitant to make investments in their dwellings due to the uncertainty of their tenure. While legalising tenure might be considered ideal by local government as this helps to generate additional revenue in the form of taxes, legalisation has often worked against informal dwellers, particularly due to the high costs involved in the transfer and registration of land, as well as the interest that it draws from middle-income groups who purchase the land. Legalising and providing security of tenure can be a complex and long-drawn process due to the range of interest groups involved.

In most informal settlements in developing countries, different groups lay claim to the land when upgrading becomes a reality, therefore suggesting that innovative ways have to be devised to reconcile the different interests. Syagga (2011) suggested that the creation of a Community Land Trust (CLT) can help resolve the multiple and competing claims laid to informal land by the different stakeholders (tenants, resident landlords and absentee landlords). Where upgrading involves the provision of the top structure, all members qualify for the units. However should a member decide to leave the trust by selling his or her unit, the sale price for the units are regulated by the Trust. The importance of tenure lies in the fact that when residents are secure they are able to invest in their dwellings and general neighbourhood (Kigochie, 2001).

Health and Safety

Informal settlements are associated with a variety of health challenges due to the physical, environmental, social and economic deprivation that the residents experience. These include diarrhoea, particularly among children, communicable diseases such as tuberculosis (TB), HIV and AIDS, and violence against women, all of which aggravate the vulnerability of residents (WaterAid, 2008). Infant and child mortality is generally considered to be higher in slums than other areas in cities. Unger (2013) noted that, in Nairobi, child mortality rates in informal settlements were 2.5 times higher than in other areas of the city as a result of increased risk factors for water-borne, vector-borne and parasitic diseases due to “flooding, poor water drainage, open sewers and overcrowding” (Unger, 2013:3). Slum areas are reservoirs for infant and child morbidity and mortality. Children who live in areas without water have a 4.8 times higher risk of dying from diarrhoea. The infant mortality in New Delhi slums was reported to be 36%, while the child mortality rate was 50% for children under 7 years of age (Unger, 2013). Stagnant water in slums provides a conducive environment for the breeding of mosquitoes, which puts infants and children at risk of contracting malaria, a major killer in Africa. Informal residents are also vulnerable to psychosocial illnesses arising from the stress of confinement in small spaces, sleep deprivation due to high levels of noise, stress and general pain. Lack of, or poor sanitation, poses serious health risks and is a major cause of cholera, dysentery and respiratory infections that largely affect children younger than 5 years of age (WaterAid, 2008). Access to adequate sanitation has been identified as the single most important public health intervention in the reduction of the under 5 mortality. As WaterAid reports, the public health gains of investment are tremendous; for every \$1 invested in sanitation, the rate of return is \$9 to the national economy in terms of increased productivity and less strain on health services (WaterAid, 2008). Access to water not only improves health but also plays an important role in the development and success of home-based enterprises and small and micro-enterprises. Upgrading of informal settlements also helps to reduce the costs associated with accessing water (Majale 2008).

The physical state of informal settlements poses risks to the health and wellbeing of children living in them. These include fragmented families, normalisation of low educational achievement, exposure to anti-social habits such as drug dealing and trafficking and sexual exploitation, the constant threat of eviction, violence, natural disasters (floods, mudslides), as well as poor working conditions. All combine to increase the risk of vulnerability of children living in slums (Unger 2013).

Where local government fails to provide services to slum dwellers, people resort to the courts to access services. This is particularly the case in India where Numerous Public Interest Litigation cases (LILs) have been filed by individual citizens or citizen groups seeking legal remedies for pollution' (Gessler *et al*, 2008:55). To ensure environmental health in places like Delhi, the court had taken to "managing the construction of wastewater treatment plants and, in Jaipur as well as Delhi, solid waste management, the responsibility of municipality is being monitored by the courts. Having recourse to the law has become a way of protecting the urban environment when government systems have failed" (Gessler *et al*, 2008:55).

Economic Vitality: Income Levels and Sources of Income in Informal Settlements

Apart from the poor living conditions, informal settlements globally are characterised by high levels of unemployment, irregular sources of income, poor working conditions and underemployment (Unger, 2013; Majale, 2008; Kigochie, 2001). Informal settlements reflect people's own initiatives to provide not only shelter but also livelihoods in the absence of state support. Informal settlements support a range of income-generating activities which are either carried out in the homes or outside the dwellings. Income-generating activities in informal settlements include retail in groceries, fruit and vegetables sold to the residents and passers by, sale of food in the neighbourhood, manufacturing activities (mainly of clothing, furniture, bricks, other construction materials, shoes), repair work (vehicles, shoes, dresses) and service industries such as salons, barber shops, washing and cleaning (Kigochie, 2001; Tipple, 2004; Majale, 2008).

Tipple (20, in a study exploring the elements of space, income and servicing of home-based enterprises in Bolivia, India, Indonesia and South Africa, was able to draw distinctions in the type of enterprises operated in the different contexts after upgrading of the settlements. While noting as common the letting of rooms across the different countries, the analyst also identified the trading in groceries, operation of mini-restaurants, bars and shops, the sale of food on the streets or in schools as common, but there were also differences. In the Cochamba informal settlement (Bolivia), the manufacturing of clothing, specifically denim jeans, jackets, children's clothes and T-shirts, was common. In the Bhumeheen informal settlement in New Delhi (India) home-based enterprises included "outworking based on piecework in embroidery ... clusters of TV turner assemblers and thread cutters" (Tipple, 2004:373). In Bhanyu Urip, Surabaya, informal settlements in Indonesia, the home-based enterprises included "manufacturing traditional Javanese furniture, decorated birdcages for export, masks ... rattan handicrafts and shoe uppers" (Tipple, 2004: 373). In South Africa the identified home-based enterprises, in Phase two, Extension Five in Stanza Bopape, an area East of Mamelodi, included the trading in groceries, provision of household services, provision of traditional healing services and the sale of traditional beer. The distinctions in economic activities in the different contexts suggest that the levels of entrepreneurship vary by context and also level of skills and that might explain the differences in the levels of manufacturing in the different informal settlements.

Although valuable home-based enterprises also pose challenges to the environment, Tipple (2004) argued that the operation of enterprises within a residential area overloads the services provided, such as water, electricity and sanitation. Environmental pollution through producing toxic waste is also a possibility, and such outcomes require a level of control.

Financing of Informal Settlement Upgrading

According to the UN-Habitat, "the most important sources of financing for slum upgrading come from within a country and are both public and private" (UN-Habitat (2003:2). Existing literature however suggests that in Africa most of the funding for upgrading programmes has been a mix of international funding and local resources. Writing about the financing of upgrading programme in Africa, Gulyani and Basset (2007) pointed to the important role that the World Bank and USAID played in financing programmes. To illustrate the role of the World Bank in upgrading, the analysts Gulyani and Basset, (2007) posit that the First Urban Upgrading programmes were funded by the World Bank to the tune of millions of dollars. In Zambia, for example, the World Bank spent about US\$42 million in a period of seven years. In Senegal, the Sites and Services project cost an estimated US\$14.2 million in a period of nine years. Gulyani and Basset (2007) also

estimated that the First Urban upgrading programmes in Africa cost in the range of US\$4.2 (Botswana) and US\$122 million (Cote d'Ivoire).

Although Gulyani and Basset (2007) did not indicate the cost of the Second Urban upgrading programmes, the reduced scale and scope of projects suggested that much less was spent on upgrading the targeted projects. What is notable, however, is that apart from the national and local governments, a range of other stakeholders were involved in the upgrading of informal settlements. In Zambia, for example, upgrading of the Chipata Community Water Supply was financed by Care International. In 1997, the World Bank began financing the provision of basic infrastructural services (water, sanitation and roads) through the Urban Environmental Sanitation programme which was rolled out in seven informal settlements. Similarly, the focus on financing basic infrastructural services was evident in Burkina Faso where the World Bank through the Urban Living Conditions Project (PACLV) worked with communities to identify their priority needs, which were all invariably related to infrastructural services, namely potable water and drainage.

Bilateral organisations such as the Gesellschaft für Technische Zusammenarbeit (GTZ) have also been involved in financing upgrading programmes in Africa. An example is the Small Towns Development Project that was started in Kenya (1988) by the GTZ with a core focus on the provision of a road network and water. The programme was also financed by the National Co-operative Housing Union. In Senegal, the GTZ was involved in upgrading through financing the Dalifor Project, which started as a pilot involving 7 000 residents. Through this support, the project created a local organisation, the Foundation du Droit à la Vile (Right to the city) with the GTZ providing technical assistance. By 2001, the project was upscaled to include 240 000 people in the satellite city of South Pikine. In addition to financing of upgrading programmes by the multilateral and bilateral organisations, international NGOs such as Oxfam, Care International, Action AID, NOvib, Association Francaise de Volontaires du Progres have also been involved. In addition, local community-based organisations (CBOs) and NGOs are also involved in making their contribution to upgrading of informal settlements in Africa.

In summary, the experience gained in upgrading of informal settlements suggests that the financing for slum upgrading is not the sole responsibility of local or national government but requires the involvement of a range of stakeholders to address the different components of upgrading. As the UN-Habitat noted, both public and private investment is required and that includes the contribution of residents as shown in the upgrading of informal settlements in Kitale, Kenya (Majale, 2008). The contributions of both international, local and grassroots stakeholders are important in the improvement of informal settlements. Recent funding trends suggest that the core focus of financing upgrading is to secure health and safety with a view to improving the overall quality of life of the residents.

Community Participation and Empowerment in Upgrading

Various scholars have discussed the notion of participation in the development discourse (Eversole, 2003; Cornwall, 2003; Chambers, 1994; Rahnema, 1993). While some commentators posit that the term has acquired development orthodoxy (Cornwall, 2003), others present a more complex and nuanced understanding of the term as utilised and applied in development practice (Rahnema, 1993). Participation is a term that means different things to different stakeholders. In its very basic form, participation refers to “the action or fact of partaking, having or forming part of” (Rahnema, 1993:116). For Eversole (2003) “participatory development refers to involving the ‘beneficiaries’ or more generally the ‘local people’ in development processes” (Eversole, 2003:781). The analyst postulated that in participatory development the local people “are thus understood as active subjects rather than passive objects of their own development” (Eversole, 2003:781). By definition, participation is a neutral term and only when in the hands of development practitioners and stakeholders, does the term become political and mean different things to different interest groups.

The concept of participatory development hinges upon a power shift: Outside professionals no longer attempt to control the development process solely on their own terms. Rather “local” knowledge and viewpoints are sought (Eversole, 2003:781). Ownership of the development process and outcome and utilisation of the capabilities of the community underlie participatory development. Eversole (2003) presents participation as an unproblematic concept, one that is required to ensure that empowerment occurs in the implementation of the development process.

Analysts such as Rahnema (1993) and Cornwall (2003) problematised the notion of participation. Rahnema (1993) argued that participation is not a value-free concept. It has been used by groups on different ends of the ideological divide to legitimise their actions. Rahnema (1993), in critiquing the way the term has been used and abused in development discourse, posited that “participation could either be transitive or intransitive; either amoral or immoral; either forced or free; either manipulative or spontaneous” (Rahnema, 1993:116). The analyst distinguished between “manipulated, or teleguided forms of participation, and spontaneous ones. In the former, the participants do not feel they are being forced into doing something, but are actually led to take actions which are inspired or directed by centres outside their control” (Rahnema, 1993:116). While emphasising that participation is a concept that is embedded in the social functioning of most societies, the analyst (Rahnema, 1993) cogently argued that the failure of development programmes throughout the Third World to reduce poverty in the first development decade (1960-1970) brought about a radical shift in the way the notion was perceived by different interest groups. Thus, from the 1970s, a term that in the previous decade (1960s) had “subversive connotations” became a buzzword for legitimising the actions of both leftists, as well as those of dictators in the Third World. Governments, development agencies and multinationals appropriated the term to justify their activities.

Whether “participation” is used for political reasons, or as economic motive to achieve effectiveness of programmes, or as a fundraising device, or to legitimise the involvement of private businesses in the development process, the notion of participation is considered an asset by groups with radically opposed agendas. Participation can be used to meet specific development objectives or can be an end in itself. In most instances, participation is viewed as being instrumental to the empowerment of deprived and excluded communities or groups in society. Rahnema (1993), however, argued that empowerment perceived as a process where one group views the other as needing power is in essence a different version of state power. The analyst posited that people have power but not in the way this is conceptualised in the participatory development paradigm. In fact, the analyst underscored that empowerment derived from the conceptualisation of participation yielded little in terms of entrenching people’s power. For Rahnema (1993) real participation and empowerment is derived from grassroots organising of communities.

A range of approaches and techniques to ensure participation of local communities or beneficiaries have been advanced. These include participatory rural appraisal (PRA), participatory appraisal of needs and the development of action (PANDA) (Eversole, 2003), participatory poverty assessment (PPA) of the World Bank formulated in the 1990s among other approaches. Participation however means different things to different stakeholders; it is a term that can be used by development agencies to denote consultation with local communities in implementing top-down development. However, it can also be utilised by capitalists to justify their activities in poor communities while at the end of the continuum participation might be the genuine involvement of grassroots communities in prioritising and driving their own development agenda. Despite the contestation around the term, participation denotes the involvement of communities and is important because without it, if beneficiaries have no part to play in planning and implementing development in their own settlements, attempts to upgrade informal settlements can be futile.

With regard to slum upgrading, the notion of participation should not be viewed as the panacea for dealing with the challenges in these communities. Despite the scathing critique of participation advanced by Rahnema (1993), the analyst also argued that viewing participation as just an approach, methodology or slogan is equivalent to holding a reductionist perspective of its potential. The analyst further argued that

“To understand the many dimensions of participation, one needs to enquire seriously into all its roots and ramifications, these going deep into the heart of human relationships and the socio-cultural realities conditioning them” (Rahnema, 1993: 126). Real participation as Rahnema postulates is that which involves grassroots movements which embody “new forms of leadership and ‘animation’, and in combining the inner and outer requirements of participation” (Rahnema, 1993:127). Participation from Rahnema’s conceptualisation is not simply partaking in activities but also entails “the substitution of various modern methodologies, project designs, organization schemas, and fund-raising constraints, by more traditional and vernacular ways of interaction and of the sacred in one’s everyday relationships with the world...” (Rahnema, 1993:127). The spiritual dimension of peoples in the developing countries is intrinsic to their identity and to their involvement in transforming their conditions. Real participation is only achieved when people have intrinsic freedom to be, it is a process that is open-ended and not one with pre-determined conclusions.

Feminist critiques of participation have argued that on its own, participation can entrench existing forms of inequalities and social exclusion. Writing about the importance of participation in development, Cornwall (2003) interrogated the notion of participation stressing the importance of constantly interrogating which voices and what realities are represented in programmes and projects that are labelled participatory. The analyst suggested that development practitioners needed to be aware and alive to the reality that those whose voices were loudest could give the illusion of projects being participatory. However, as Cornwall argued there is need to be deliberate and draw out the different voices in the community. As the author noted, “Unless efforts are made to enable marginal voices to be raised and heard, claims to inclusiveness made on behalf of participatory development will appear rather empty” (Cornwall, 2003: 1338).

In order to deal with the challenge of marginalizing the voiceless in the name of participatory development, Cornwall argued that “The ethic of participatory development and of Gender and Development (GAD) is ultimately about challenging and changing relations of power that objectify and subjugate people. Yet ‘gender’ is framed in both participatory and ‘gender-aware’ development initiatives in ways that continue to provide stumbling blocks to transforming power relations... Making a difference calls for an approach that can deal with the diversity of experiences and interactions that are part of everyday life rather than imposing categories and concepts from conventional ‘gender’ approaches. To do this calls for strategies that are sensitive to local dynamics of difference and that build on the ‘gender issues’ that men as well as women can identify with and mobilize around” (Cornwall, 2003:1338).

Participation of residents is viewed as being critical in the success of informal settlement upgrading programmes. In comparing two upgrading programmes in Kenya (Building in Partnership: Participatory Urban Planning Project [BIB:PUP] and Kenya Slum Upgrading Program [KENSUP]), McPherson underscores the importance of involving residents in informal settlement upgrading. Using the case study of one of the informal settlements (Kipsongo) that was upgraded under BIB:PUP, explains that from the onset, the stakeholders in the upgrading of the settlement formed a committee to oversee the improvements. The committee comprised of local residents, representatives of local government and development practitioners. Together with the local NGOs and CBOs the stakeholders identified the most pressing challenges of the settlement to be water, sanitation, youth unemployment and poor infrastructure. In implementing the upgrading programme the committee sought to address the problem of infrastructure and unemployment by employing the youth from the settlement in the provision of the basic infrastructural services. Given that the community members were installing the infrastructure, they not only gained experience and acquired new skills but also, “the community took greater care in the construction of the facilities than would have outsiders ... this form of participation enabled development of self-reliance among residents for future housing issues to be solved independently” (MacPherson, n.d.: 88)

In the KENSUP programme, which was a joint initiative between the Kenya government and UN-Habitat implemented at Soweto “village” in Kibera targeted 60 000 residents that rented dwellings from illegal

landlords. The KENSUP programme was largely non-participatory as residents “were not part of the planning committee and did not voice their need for new housing. Instead, at the very most, UN-Habitat informed stakeholders of aspects of the programme and arranged ‘social mobilization activities’ and ... This appears to violate or at least manipulate human rights law...” (MacPherson, n.d.:90). The result of upgrading in Kibera was very different from that in Kipsongo in Kitale. The analyst noted that the high building standards used in the upgrading of Soweto-Kibera would result in residents losing their dwellings to the middle class as happened in previous upgrading of the broader Kibera informal settlement. Thus upgrading in Soweto was not necessarily going to result in poverty reduction as happened in Kipsongo. As MacPherson emphasized, “meaningful reduction in poverty through more appropriate, secure housing, better access to services, and empowerment have not been achieved by KENSUP ... and are unlikely to be achieved through any other non-participatory projects” (MacPherson, n.d.: 90).

While participation is not the panacea for poverty reduction in the upgrading of informal settlements, top-down planning fails to address the priorities and concerns of informal dwellers and results in a narrow understanding and solution to the housing challenges in informal settlements. As analysts indicate where participation is integrated as an approach to upgrading, there is a need to understand the heterogeneity that exists within communities, the priorities, assets, and capabilities of informal settlement residents.

Institutional Arrangements in Upgrading of Informal Settlements

In most countries, the institutional arrangements in the upgrading of informal settlements seem to have undergone a range of shifts. Most upgrading programmes supported by the World Bank from the 1960s onwards utilized a top-down model where financing was provided to national governments which then allocated funding to municipalities to implement programmes designed by the World Bank. In addition to the funding, the World Bank also provided technical expertise to oversee the implementation of the upgrading programmes. In the 1990s, the institutional arrangements in the upgrading of slums had not changed much. As Nijman (2008) argued, “The growing recognition of the global problems of slums in recent years coincides with neoliberal public policy shifts among national governments, major supranational institutions such as the World Bank, and many smaller non-governmental, private organizations. Development policy agendas (rural and urban) have been reshaped in ways that de-emphasise central State control and that shift responsibilities to local (urban) government, NGOs and the market ... while the challenge of slums has assumed global proportions, the remedies are increasingly sought at local level” (Nijman, 2008: 73-74).

Syagga (2011), citing the case of upgrading in Kenya, argued that the stakeholders in slum upgrading in Kenya included the tenants in the informal settlements, owners of the informal dwellings who were resident in the settlements, landlords that did not live in the settlements, owners of the land where the informal settlements were sited, and the institutions that supported the upgrading process which included both the local and national government, civil society organisations (CSOs) private sector and international development agencies – multi- and bilateral partners (Syagga, 2011:4). Nijman (2008), discussing the influence of neo-liberalism on slum upgrading, which the author refers to as slum “rehabilitation”, noted that upgrading of informal settlements was largely underlain by neo-liberalism. Within a neoliberal framework, state intervention is limited to the development of policy. The low involvement of the state in slum redevelopment creates the space for other actors to get involved and these include civil society. Yet as Nijman (2008) cogently argued, civil society as represented by non-governmental organisations (NGOs) of different sizes and capacity cannot replace the role of the State or even usurp the responsibility of the State towards citizens. In a scathing criticism of how NGOs operate, the analyst argued that the accountability of NGOs/civil society was not to the people that they claim to serve but rather to their funders. Although NGOs play an important role in poverty alleviation in slums which represent the greatest levels of deprivation, their scope and scale of operation is limited, and in most instances their activities tend to exclude certain categories. In other words, NGOs play an important role in slum rehabilitation but their role cannot replace the role of the State in providing for its citizens.

To summarise, in the neo-liberal context in which informal settlement upgrading takes place, key stakeholders and players include the NGOs in their entirety, namely from community-based organisations, resident associations, neighbourhood associations, quasi-state agencies, private developers, builders and financial institutions (Nijman, 2008). Within such a framework, the role of the State in upgrading remains limited, and poverty alleviation is left to market forces despite the abundance of policy and rhetoric regarding poverty reduction. The key stakeholders in the upgrading process as identified in different countries include national governments, donor agencies such as the World Bank and UN Habitat, municipal councils and the informal settlement dwellers and grassroots organisations that exist in the informal settlement areas.

Summary

The section has provided an international context of informal settlement upgrading and traced the evolution of policy approaches employed to address the question of informality in housing by governments and international agencies such as the World Bank. The policy approaches to tackling informal settlements have ranged from slum clearance at a period when slums were viewed as blight on the urban landscape, to more supportive or enabling approaches which recognised slums as people's solutions to their own housing needs. Support to informal settlements has ranged from the provision of basic infrastructural services that improve health and safety to the regularisation of tenure to ensure the safety and security of residents from arbitrary evictions.

The critical appraisal of the existing literature suggests that a range of indicators can be employed to determine the status of informal settlements at baseline, that is before upgrading, and the same indicators can be employed to determine the changes that occur in the informal settlements and lives of residents after upgrading. Some of the indicators identified in this chapter include secure tenure, health and safety, economic indicators, financial resources, and the existence of an institutional framework, among others. The UN Habitat indicators provide a useful guideline for the construction of indicators to establish the baseline status, the effectiveness and the impact of upgrading. While the quantitative indicators for determining the baseline status of informal settlements and the impact of upgrading are useful, these do not fully capture the changes that occur in the lives of people in upgraded informal settlements. Such changes include the improvement in happiness levels as a result of greater access to water, sanitation, improved transport and greater access to the city. Such gaps in the literature can be captured by the use of qualitative data collection tools supported alongside by the quantitative measures.

THEORETICAL CONCEPTUALISATION OF EVALUATION DESIGN FOR THE BASELINE STUDY

Introduction

Despite various programmes to upgrade informal settlements in low and middle income countries, informal settlements remain pervasive in those countries. The evaluation designs with a view of explicating how to determine the impact of upgrading the settlements targeted for upgrading in future is clearly of the essence as is the conceptualisation of evaluation designs and how these have been applied in designing baselines and impact evaluations in different contexts, as well as the methodology(ies) that can be employed in conducting a baseline study together with their specific strengths and weakness.

Conceptualisation of Evaluation Designs and Applications

Designing baselines for impact assessment

Various studies have alluded to the use of baseline studies prior to the upgrading of informal settlements. In the urban road pavement programme implemented in the Acayucan City in Mexico, a baseline study was used for two reasons. Firstly, the baseline was meant to “provide information on lagged outcomes that can be used as control covariates when estimating the effects of treatment on outcomes, which might improve precision of estimates but at the cost of bias” and, secondly, because a baseline “can provide evidence about

whether the randomization actually worked or not”(Gonzalez-Navarro & Quintana-Domeque, 2010:10). The value of the baseline data lies in the fact that it would provide the context and status of the informal settlements before the UISP is implemented in the targeted settlements. In designing the baseline study, it is also important to consider relevant issues around future impact assessment. A baseline represents the initial phase before impact evaluation, and the concern then becomes how the design of the baseline study relates to the impact evaluation designs.

Many research designs have been employed to evaluate the impact of development programmes on the lives of targeted beneficiaries. The experimental design, which is largely used in the physical sciences, is now increasingly being used to determine the impact of development programmes, and a case in point is the urban pavement programme in Acayucan, Mexico, between 2006 and 2009. The study sought to establish how the provision of pavement infrastructure had improved the welfare and economic activities of the communities where it was implemented. In deploying the experimental design, the study randomly selected a pre-approved set of street projects comprising of unpaved streets which were connected to the pavement grid of the Acayucan City. The analysts postulated that “randomization ensures that, when the sample subjected to random assignment is large enough, the control-treatment samples will not be different in the distribution of their observed and unobserved characteristics ... the comparison of the post-treatment means that it can provide a consistent estimate of the average causal effect of this kind of public infrastructure as in the current study setting” (Gonzalez-Navarro & Quintana-Domeque, 2010:2).

Marcano and Ruprah (2008) studied the impact of the Chile’s Progressive Programme (PHP) that was initiated in 1991 for the purchase of new houses with a view to reducing the housing backlog in the country. They also argued that Chile’s PHP was initiated to curb land invasions that had been prevented by the military regime prior to 1990. The evaluation found that the programme had far-reaching impacts on the welfare of the beneficiaries, and that the return to investment was much higher (12%) than estimated by the Chilean government. It is therefore important to collect baseline data which eventually become useful in establishing the extent of change as a result of the implementation of a specific intervention or programme. In discussing evaluation designs, it is critical that an understanding exists of what is meant by the concept of evaluation. In the sections that follow we discuss the concept of evaluation.

Evaluation designs

Hansen (2005) posited that the concept of evaluation has been used to refer to two distinct approaches which are: programme evaluation, and organisational evaluation. Organisational evaluation seeks to assess an institution's effectiveness through focusing on the efforts of the organisation under review (Hansen, 2005). Programme evaluation seeks to assess the performance of programmes which are generally defined as “organized, planned, and usually ongoing efforts designed to ameliorate a social problem or improve social conditions” (Rossi et al, 2004:29 cited in Hansen, 2005:448). The models used in the evaluation of programmes can apply to organisations. Essentially, evaluation as a concept denotes “a study designed and conducted to assist some audience to assess an object’s merit and worth” (Stufflebeam, 2000:35 cited in Hansen, 2005:448). Impact evaluations are designed to answer one key question: “what is the impact” of funded interventions? For instance, “what is the impact of infrastructure improvements, regardless of the funding source?” (BenYishay & Tunstall, 2011).

Various analysts have discussed the importance of designing impact evaluations to ensure that the intervention designed can produce accurate data on the actual impact of the specific evaluation on the communities and individuals included in the evaluation (White, 2009; ADB, 2011; Cattaneo et al, 2007; Yin, 1981; Khandker, Koolwal, & Samad, 2010). Khandker et al (2010) argued that the purpose of impact evaluations is to “help policy makers decide whether programs are generating intended effects; to promote accountability in the allocation of resources across public programs; and to fill gaps in understanding what works, what does not, and how measured changes in well-being are attributable to a particular project of policy intervention” (Khandker, Koolwal, & Samad, 2010:3). The value of an impact evaluation lies in

answering “whether and to what extent a development intervention has delivered its intended effects” (ADB, 2011).

In discussing theory-based impact evaluations, White (2009) argued that such evaluations possess the potential to address questions related to “what” and “why”. White (2009) postulated that a theory-based evaluation “maps out the causal chain from inputs to outcomes and impact and tests the underlying assumptions”, thus tackling the questions of the “why” in the evaluation. There are six principles underlying a successful theory-based impact evaluation which include: identifying and mapping out the causal linkages in the programme, understanding the context, expecting diversity, employment of a counterfactual, rigorous analysis, and the utilization of mixed methods. The purpose of an evaluation should determine how it is planned and organised, the data collected and how such data is disseminated and utilised (Hansen, 2005).

A major challenge with impact evaluations is to isolate specific impacts and claim that these are directly attributable to a certain intervention. White (2011) argued that to establish the impact of an intervention, it is vital to design a counterfactual that can provide “a plausible comparison group, which in many cases is difficult to obtain”. The inclusion of a counterfactual in the design of an evaluation, whether it is experimental or non-experimental, helps to provide a rigorous estimate of the impact of the specific intervention. As ADB (2011) suggests, “Impact evaluations attempt to assess the ‘treatment effects’ of a development program, which is the difference between outcome of an economic agent (individual, household, village) participating in the program (treated) and that of the same agent not participating in the program (untreated)” (ADB, 2011:3). Key concepts in understanding randomised controlled trials include notions of the treated and untreated cases in a development program. Another key concept is the notion of the counterfactual in the design of an impact assessment. The counterfactual “shows how an agent that has not been exposed to a programme would have fared in its absence” (ADB, 2011:3). Counterfactual outcomes refer to “outcomes for participants had they not been exposed to the program” (Khandker et al, 2010:4).

Impact evaluations are important as they help to provide estimates of an intervention by isolating factors that might contribute to bias. Randomised controlled trials (RCTs) are now increasingly used in the social sciences to estimate the impact of development programmes (ADB, 2011; Khandker, Koolwal, & Samad, 2010). Notable is the fact that RCTs have their origins in the biological and physical sciences, and their application in the social sciences is challenging as the experiments that are done in the social sciences are carried out in the field rather than in laboratories. Evaluation using the experimental design is conducted through RCTs. The range of evaluation methods in the social sciences do, however, include the ‘before–after comparisons’, with-without comparison, difference-in-difference (DID) method, regression discontinuity designs (RDD), instrumental variables (IV), and randomised evaluation. While these evaluation techniques are valuable, the critique levelled against most of them has resulted in the preference in employing randomised evaluation techniques to assess the impact of development interventions. As the ADB notes, “Randomization is believed to generate gold standard evidence, which would be subject to less criticism” (ADB, 2011).

The randomised evaluation is operationalised through the selection of the treated cases and the untreated cases. The untreated cases provide a counterfactual for the treated cases in the programme. RCTs can generate reliable estimates of the impact of an intervention which is valuable because in projects that include multiple interventions it becomes difficult to assess the impact of a single intervention (ADB, 2011). Despite the value of RCTs, they also have limitations, for example, in an ongoing intervention the likelihood is that individuals can change behaviour, thus resulting in biased results. RCTs also pose ethical dilemmas in terms of explaining to the control group why they are excluded from an intervention that would clearly benefit them. A way of addressing such bias is to ensure that the control group/individuals are not informed about their exclusion. Other concerns with RCTs relate to concerns with “accounting for spill overs to non-

targeted areas as well as for selective attrition and ensuring heterogeneity in participation and ultimate outcomes” (Khandker et al, 2010:33).

A key concern with RCTs is external validity. Questions raised about randomisation relate to whether the results can be generalised and whether similar results can be achieved if the experiment is repeated in a different context by a different implementer. According to ADB (2011), “replication studies have to be conducted in different locations with different teams” (ADB, 2011:15). What randomised impact evaluations are able to do is to estimate the mean impact of an intervention on the entire population, as well as to estimate the mean impact of the intervention on the treatment group. The randomised control trial is able to demonstrate how outcomes of an intervention are distributed across the treatment and the control. The value of randomised control trials lies in the fact that these make fewer assumptions compared to impact assessments using non-experimental design, which tend to make assumptions in explaining the treatment effects of an intervention. RCTs have been deployed to understand the impact of interventions in sectors such as education, health, local governance, transport and energy. RCTs have also been used to examine the impact of interventions dealing with gender, ethnicity and finance. The UISP programme is implemented in a non-RCT type environment, and therefore this baseline assessment presumes the use of “before and after” approaches in the impact evaluation, and where practically possible, use of natural controls, that is, targeted settlements for upgrading that would not have been upgraded at the time of the impact evaluation.

Assessing qualitative and quantitative evaluation methods

The methods applied in establishing the impact of a programme is critical and has been the subject of debates within the social sciences, including this study. The concerns with methods relate to the value of using quantitative or qualitative research designs, using case studies or not using them at all, and the merits of using the different research approaches (Khandker, Koolwal, & Samad, 2010; Yin, 1981). Considering the debates adduced in favour of the different methodological approaches, the current study draws on the work of Khandker *et al* (2010) that provided a balanced perspective on methods for impact evaluation by underscoring the importance of impact evaluations that utilise both qualitative and quantitative methods. The analysts also laid emphasis on conducting both *ex ante* and *ex post* evaluation of programs while pointing to the associated costs, particularly where an *ex-post* evaluation is involved.

Qualitative analysis seeks to gauge potential impacts that the programme may generate the mechanisms of such impacts, and the extent of benefits to recipients from in-depth and group-based interviews. Whereas quantitative results can be generalisable, qualitative results may not be. However, qualitative methods generate information that may be critical for understanding the mechanisms through which the program helps beneficiaries (Khandker, Koolwal, & Samad, 2010:4). Quantitative methods are often used in impact evaluations to help determine the actual impact of a programme on the targeted beneficiaries. The data for establishing impact is gathered before and after an intervention. The use of mixed methods in both baseline and impact evaluations is therefore not uncommon.

Outcomes research has traditionally used quantitative methodologies to examine the utilisation, cost, and effectiveness of interventions through randomised and non-randomised experimental designs (BenYishay & Tunstall, 2011; Foster & Hope, 1993; Hansen et al, 2011; and Shaffer, 2012). Quantitative data assess statistical associations between qualitatively identified factors and outcomes in broader samples (households) (White, 2011; Ravallion, 2001).

Yet quantitative methods alone are not as well suited to measure other complex aspects of the service delivery systems, such as multifaceted social, cultural and organisational change, and perceptions of communities. Thus, the more nuanced aspects of an intervention may be appropriately examined with qualitative research methods (Thomson, *et al*, 2009). Thompson et al (2009) concluded that housing improvement was associated with positive impacts on socioeconomic determinants of health. A qualitative

approach seeks to explore and explicate how individuals and communities make meaning within their social context (Foster & Hope, 1993). Pairing quantitative and qualitative components in impact evaluation can achieve various objectives, including corroborating findings, generating more complete data, and using results from one method to enhance insights attained with the complementary method (Hansen, Andersen, & White, 2011: 110-113). Mixed methods, in which quantitative and qualitative methods are combined, are increasingly recognised as valuable, because they can capitalise on the respective strengths of each approach (Khandker, Koolwal, & Samad, 2010). Approaches to mixed-methods studies differ on the basis of the sequence in which the components occur and the emphasis given to each (Blum & Feachem, 1983). Through case studies, the synergy of combining methods in a baseline is demonstrated (Cattaneo et al, 2007).

Case studies can be used for baseline studies but the concern is always that case studies are regarded by some scholars with a quantitative bias as not valuable and have in fact led to scathing criticism, with some analysts considering case studies as “essentially intuitive, primitive and unmanageable” (Miles, 1979:597 cited in Yin, 1981:58). Yin (1981), does, however, correct the misconception held about case studies by underscoring that “the case study does not imply the use of a particular evidence. Case studies can be done by using either qualitative or quantitative evidence” (Yin, 1981:58). In this baseline study, we argue and indeed present data to suggest that even within case studies, both qualitative and quantitative data can be simultaneously collected to help explain the phenomenon under study, that is the baseline status of informal settlements targeted for upgrading. While the evaluation design for the baseline study on informal settlements targeted for upgrading is largely quantitative, the requirement by the DHS to draw on the experiential evidence meant that both quantitative and qualitative data were collected.

A systematic review of studies utilising mixed methods (qualitative and quantitative) approaches in assessing impact of upgrading as explained by Turley et al (2013) has contributed important conceptual, contextual, and methodological contributions. For example, a number of international studies that generally involved assessing improvement to the physical environment of the existing area (i.e. improving and installing basic infrastructure like water, sanitation, solid waste collection, electricity, storm water drainage, access roads and footpaths, and street lighting, as well as home improvements and securing land tenure) engaged a mixed-methods research approach. This systematic review concluded that in quantitative assessments, high risk of bias, heterogeneity and evidence gaps in most studies prevented firm conclusions on the effect of informal settlement upgrading strategies on health and socio-economic wellbeing.

According to Turley et al (2013), a limited but consistent body of evidence suggests that informal settlement upgrading may reduce the incidence of diarrhoeal diseases and water-related expenditure, and this information is better captured from informal settlement dwellers’ perspectives. Thus qualitative and non-experimental designs fill the knowledge gap in that regard. Turley et al (2013) further commented however, that the availability and use of reliable, comparable outcome measures to determine the effect of slum upgrading on health, quality of life, and socio-economic wellbeing would make a useful contribution to new research. Turley et al (2013) also observed that alternative techniques to control for bias in retrospective evaluations are necessary and possible, and that progress has been made in non-experimental impact assessments that use qualitative approaches. Given the complexity of implementing upgrading in informal settlements, evaluations should look to incorporate process and qualitative information alongside quantitative effectiveness data to determine which particular interventions work (or don't work) and for whom.

Methodologically, Turley et al (2013) contributed a framework that differentiates between quantitative approaches to impact assessments (i.e. *experimental approaches* that use randomised evaluations and *quasi-experimental approaches* that use methods such as regressions discontinuity design). According to Turley et al (2013) *randomised evaluations* are implemented prospectively, prior to project implementation, where baseline

data is collected, and one or more project components are randomly assigned to chosen participant groups (such as individuals, communities) to assess the efficacy of the intervention by measuring changes over time in treatment relative to control populations (those whose informal settlements have not been upgraded, for example) with follow-up data. Furthermore, randomised evaluation designs measure impact by further observing differences in expectation for those exposed to interventions (i.e. they are no different than those who are not), and thus a statistically significant difference in the outcomes between the groups can be attributed to the intervention. With regards to *quasi-experimental studies* (those that include control populations are generally identified *ex-post*, that is, retrospectively), such studies require careful planning to show how impact could be attributed to interventions, particularly because *quasi-experimental studies* require suitable comparison groups after the intervention has been implemented.

A review of empirical studies

International quantitative evaluation studies on upgrading strategies in low- and middle-income countries such as Mexico, Indonesia, Kenya and India have generally involved assessing improvement to the physical environment of the existing area, such as improving and installing basic infrastructure like water, sanitation, solid waste collection, electricity, storm water drainage (Turley et al, 2013; McIntosh et al, 2013; Field, 2005; Field & Kremer, 2006; and Archambault et al, 2012, access to roads and footpaths (Gonzalez-Navarro & Quintana-Domeque, 2010) and street lighting, as well as home improvements, securing land tenure, and financial support (McIntosh et al, 2013; Kling et al, 2004; Field & Kremer, 2006; Archambault et al, 2012; and Turley et al, 2013). In these studies, informal settlement upgrading strategies involved physical environment and infrastructure interventions and their effects on health, quality of life, and socio-economic outcomes of urban informal settlement dwellers. Because informal settlements in most of these countries are densely populated and exist on the margins (i.e. neglected parts of cities where housing and living conditions are exceptionally poor), improving the physical environment and infrastructure with data collected on the perspectives of informal settlement dwellers regarding their needs, preferences for and satisfaction with interventions received has dominated the discourse. Quantitative studies in this regard have included randomised controlled trials (RCTs), controlled before and after studies (CBAs), interrupted time series (ITS), controlled studies with only post-intervention data (CPI), and uncontrolled before and after (UBA) studies.

Kling et al (2004) discussed the importance of incentive programs (i.e. housing vouchers) in five cities in the United States of America designed to move low-income communities living in high poverty to public housing. The study utilised a randomised housing mobility experiment in which families living in high-poverty US public housing projects in five cities were given vouchers to help them Move To Opportunities (MTO) of private housing units in lower-poverty neighbourhoods. An experimental group was offered vouchers valid only in a low-poverty neighbourhood (i.e. a poor group was offered traditional housing vouchers without geographic restriction and a control group was not offered vouchers). Five years after random assignment, the families offered housing vouchers through MTO lived in safer neighbourhoods that had significantly lower poverty rates than those of the control group not offered the vouchers. Kling *et al* (2004) found no significant overall effects on adult employment, earnings, or public assistance receipt; the sample sizes in the study was, however, not sufficiently large to rule out moderate effects in either direction. Kling *et al* (2004) did however find significant mental health benefits of the MTO intervention for the experimental group. Notable were mental health benefits that the voucher offered for adults and for female youths. Beneficial effects for female youths on education, risky behaviour, and physical health were offset by adverse effects for male youths. For outcomes that exhibited significant treatment effects, the authors found, using variation in treatment intensity across voucher types and cities, that the relationship between the neighbourhood poverty rate and outcomes was approximately linear. Furthermore, the findings indicated a more general pattern for the mental health results, namely systematically larger effect sizes for groups that experienced larger changes in neighbourhood poverty rates.

A similar study by McIntosh et al (2013) adopted a randomised saturation design and reported that, although a huge infrastructure investment experiment in which \$60 million in spending was randomly allocated across a set of urban informal settlements in Mexico, overall health and wellbeing of residences (i.e. public health indicators) remained unaffected. Even though after validating that the program had the expected effects on the quality of physical infrastructure (i.e. social capital, private investment, and real estate values all improved under the upgrading program), several observations about the quality of lives of neighbourhood residents remained unchanged.

An example of retrospective evaluation was the study in South Africa conducted by the South African National Department of Human Settlements (2011), whereby a series of impact evaluations that assessed the effects of the upgrading of informal settlements programme (UISP) interventions in three South African provinces (Free State, Limpopo and Gauteng) yielded *causal* links between the rollout of the UISP and its outcomes. In this evaluation, the programme's effectiveness in realising policy objectives, as well as influencing UISP policy, revealed strong impacts in household demographics, asset accumulation, social interactions, satisfaction levels, household upgrading, crime rates, health and unemployment. The study also reported that the most visible impact of upgrading from a shack to a RDP home in the South African context was the change in the physical characteristics of the dwelling.

Field & Kremer (2006) and Field (2005) have argued that investing resources in informal settlement upgrading should be based on clear evidence regarding which specific interventions are more effective. In their analysis of upgrading interventions, they posed questions regarding the impact that upgrading projects have on the welfare of the population and how these can be improved to meet the needs of the urban poor. Monitoring and evaluation, therefore, is documented to be the key in assessing the effect of upgrading projects and provides targeted recommendations to address the many facets and complexities of implementing upgrading interventions at the micro (individual), meso (household) and macro (community/societal) levels.

According to Archambault et al (2012), few studies have addressed how complexities of implementing upgrading interventions at the micro, meso, and macro levels affect the uniquely poor health outcomes observed among informal settlement dwellers in developing countries. Several studies have highlighted the significant disadvantages faced by the informal settlement residents in major cities such as Nairobi or Mexico City (Archambault et al, 2012; Bocquier et al, 2010; Huchzermeyer, 2008; Gonzalez-Navarro & Quintana-Domeque, 2010). For cities such as Nairobi or Mexico City, for example, whose growth occurred amidst declining economies, rural-urban migration, and poor governance at the municipal level, a significant proportion of its citizens ended up living in informal settlements or informal settlement-like conditions (i.e. without proper access to basic social services such as sanitation and affordable clean water), not because it was what they preferred, but rather because of what was available.

ANNEXURE 3

ADDITIONAL TABLES OF FINDINGS

SECTION 3: FINDINGS

Table A3.1: Distribution of household members by sex, age and province

	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA	Total
	%	%	%	%	%	%	%	%	%	%	n
Sex											
Male	45.7	43.8	44.1	45.5	46.9	47.9	48.2	45.8	42.1	46.9	3706
Female	54.3	56.2	55.9	54.5	53.1	52.1	51.8	54.2	57.9	53.1	4288

Age											
0 to 4	13.2	8.4	11.4	11.3	11.5	11.2	10.9	12.2	12.5	11.1	852
5 to 9	8.6	11.8	13.9	13.9	9.8	11.7	12.5	9.3	10.5	11.7	948
10 to 14	6.2	10.2	12.0	10.7	9.2	8.8	8.7	15.1	8.4	8.8	787
15 to 19	6.1	8.1	11.0	9.8	11.1	11.3	8.5	9.0	11.0	9.0	783
20 to 24	12.5	7.5	8.5	9.5	11.9	12.0	8.7	14.0	7.8	9.4	758
25 to 34	26.6	17.0	15.1	17.9	18.3	14.4	20.0	14.0	19.5	19.4	1446
35 to 44	16.2	14.7	11.1	14.3	11.8	10.7	13.5	10.0	16.6	13.6	1090
45 to 54	7.4	9.1	8.4	6.9	6.9	12.0	10.7	9.3	11.4	9.9	761
55 to 64	2.1	9.1	4.6	3.7	5.9	6.2	4.3	3.0	1.5	4.7	402
65+	1.1	4.0	3.9	1.9	3.7	1.7	2.3	4.0	0.7	2.3	215

Table A3.2. Gender of household heads by province

Province	Male %	Female %	Total n
Western Cape	52.8	47.2	194
Eastern Cape	46.5	53.5	293
Northern Cape	43.8	56.2	162
Free State	39.0	61.0	253
KwaZulu-Natal	45.3	54.7	203
North West	64.0	36.0	192
Gauteng	58.0	42.0	805
Mpumalanga	53.5	46.5	56
Limpopo	50.1	49.9	79
Total	54.7	45.3	2237

Table A3.3: Education attainment for household members aged 20 years and above by age and by province

	No schooling %	Primary school %	High school %	Matric %	Tertiary %	Other %	Total n
Age (years)							
20 to 24	1.3	7.1	47.8	30.7	10.1	3.1	737
25 to 34	1.0	11.8	48.7	29.4	5.1	3.9	1415
35 to 44	4.6	19.2	46.7	21.4	2.7	5.4	1068
45 to 54	9.6	35.1	30.0	12.6	4.3	8.4	741
55 to 64	16.8	52.0	20.9	3.3	1.0	5.9	391
65+	33.1	51.2	8.6	3.0	0.2	4	197
Total	5.7	21.3	41.3	21.9	4.7	5.1	4549
Province							
Western Cape	2.7	20.1	53.5	19.1	0.4	4.1	474
Eastern Cape	3.3	29.0	44.8	17.6	2.0	3.5	716
Northern Cape	9.6	27.6	36.5	21.0	1.9	3.3	344
Free State	4.1	22.0	48.5	19.7	2.0	3.6	485
KwaZulu-Natal	6.3	27.8	27.8	27.6	3.9	6.7	610
North West	11.4	23.0	48.2	8.9	4.3	4.1	389
Gauteng	6.9	21.2	34.1	24.4	5.7	7.8	1963
Mpumalanga	16.6	31.5	21.7	24.0	0.0	6.2	118
Limpopo	12.3	22.2	41.6	7.9	7.0	8.9	231
Total	6.9	22.9	38.3	20.9	4.5	6.5	5330

Table A3.4: Literacy of household members aged 20 and above by age and province

	Cannot read and write %	Read Only %	Read and Write %	Total n
Age				
20 to 24	4.9	2.2	92.9	741
25 to 34	5.3	1.8	92.9	1419
35 to 44	9.2	2.6	88.1	1074
45 to 54	14.9	6.1	79.0	743
55 to 64	27.5	4.9	67.6	398
65+	46.6	10.0	43.4	214
Total	11.1	3.3	85.5	4589
Province				
Western Cape	4.4	1.3	94.4	456
Eastern Cape	10.9	3.0	86.1	724
Northern Cape	11.7	2.9	85.4	345
Free State	9.7	1.4	88.9	501
KwaZulu-Natal	13.8	6.6	79.6	621
North West	14.5	2.6	82.9	405
Gauteng	13.2	2.9	83.9	1982
Mpumalanga	21.8	6.9	71.3	128
Limpopo	20.4	4.8	74.8	236
Total	12.9	3.2	83.9	5398

Table A3.5: Enrolment in crèche, primary or high school for household members aged 19 and younger, by age and by province

	Yes %	No %	Total n
Age			
0 to 4	35.1	64.9	463
5 to 12	92.0	8.0	1184
13 to 19	85.6	14.4	780
Total	78.7	21.3	2427
Province			
Western Cape	69.7	30.3	165
Eastern Cape	84.2	15.8	292
Northern Cape	72.4	27.6	221
Free State	75.5	24.5	264
KwaZulu-Natal	78.3	21.7	248
North West	80.1	19.9	275
Gauteng	79.0	21.0	813
Mpumalanga	85.2	14.8	53
Limpopo	77.8	22.2	96
Total	78.7	21.3	2427

Table A3.6: Marital status of household heads by age

Age	Divorced or separated					Total n
	Married %	Living together %	Widowed %	Single %	Single %	
18 to 24	23.9	13.5	0.4	0.0	62.3	90
25 to 34	17.6	23.9	0.3	0.2	57.9	526
35 to 44	37.2	16.8	3.2	1.6	41.2	604
45 to 54	39.2	10.7	5.8	6.6	37.8	499
55 to 64	41.8	9.8	10.4	3.3	34.7	300
65+	41.6	0.2	32.2	5.8	20.2	165
Total	32.9	15.1	5.7	2.8	43.5	2184

Table A3.7: Duration of stay in settlement per household

Province	0 to 5 %	6 to 10 %	11+ %	Total n
Western Cape	40.0	24.5	35.6	203
Eastern Cape	16.9	22.1	61.0	308
Northern Cape	25.9	31.1	43.0	153
Free State	53.3	21.1	25.6	232
KwaZulu-Natal	22.4	19.5	58.1	180
North West	30.9	18.8	50.4	180
Gauteng	21.2	28.0	50.8	812
Mpumalanga	24.0	32.4	43.6	53
Limpopo	78.7	12.5	8.8	79
Total	28.6	24.6	46.8	2200

Table A3.8: Multiple responses for three main reasons for coming to live in the settlement

Reason for coming to live in the settlement	Responses		Percentage of Cases (%)
	Number (n)	Percentage (%)	
Forced to relocate	764	18.4%	40.6%
Availability of land	846	14.8%	32.6%
Better chance of receiving RDP housing	725	14.1%	31.0%
Better access to government services	430	12.1%	26.6%
Close to employment	492	11.2%	24.6%
Have friends/relatives/family here	354	6.5%	14.4%
Living costs are cheap here	345	6.4%	14.1%
Poor opportunities/options elsewhere	252	6.0%	13.3%
Close to town	148	4.3%	9.6%
Close to Clinics/Schools	121	1.9%	4.3%
Close to electricity	88	1.7%	3.7%
Close to transport	63	1.4%	3.0%
Safety/security reasons	32	0.5%	1.1%
Close to water	37	0.5%	1.1%
Close to sanitation	8	0.3%	0.6%

Table A3.9: Were you the first person/people to live in this dwelling?

Province	Yes		No		Do not know		Total n
	%	95% CI	%	95% CI	%	95% CI	
Western Cape	56.3	[48.7-63.6]	43.7	[36.4-51.3]	0.0		205
Eastern Cape	32.9	[28.7-37.5]	65.7	[60.4-70.6]	1.4	[0.4-5.5]	318
Northern Cape	47.3	[36.3-58.6]	49.7	[41.8-57.5]	3.0	[0.9-10.1]	165
Free State	75.0	[60.7-85.4]	23.9	[14.1-37.6]	1.1	[0.3-4.2]	257
KwaZulu-Natal	74.0	[61.9-83.3]	24.8	[15.9-36.5]	1.2	[0.3-4.8]	208
North West	26.4	[18.3-36.5]	73.3	[63.0-81.6]	0.2	[0.0-2.3]	199
Gauteng	54.8	[43.9-65.4]	43.9	[34.3-54.0]	1.3	[0.5-3.1]	851
Mpumalanga	79.8	[67.0-88.5]	19.9	[12.0-31.2]	0.3	[0.0-10.3]	60
Limpopo	77.3	[71.8-81.9]	22.7	[18.1-28.2]	0.0		89
Total	53.8	[46.6-60.9]	45.2	[38.5-52.1]	1.0	[0.5-1.9]	2352

Table A3.10: Type of dwelling the household respondents lived in before by province

Type of dwelling	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA	Total
	%	%	%	%	%	%	%	%	%	%	n
Dwelling/house or brick/concrete block structure on a separate stand or yard	37.6	34.2	69.8	41.5	27.5	35.3	40.2	45.8	15.0	37.0	947
Traditional dwelling/hut/structure made of traditional materials (wattle & daub/	15.3	17.2	6.5	13.6	58.8	28.8	17.0	33.8	9.0	20.0	448
Double-storey dwelling	0.0	0.5	0.0	0.0	0.4	0.0	1.2	0.3	0.0	0.7	10
Dwelling/house/flat/room in backyard	2.1	1.1	2.8	3.2	3.7	13.1	3.3	0.0	3.4	3.8	92
Shack (plastic/semi-permanent material/corrugated iron/cardboard)	42.1	44.3	19.6	40.9	7.4	22.2	36.1	20.0	72.2	36.5	763
Shipping containers	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
Caravan/tent	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.0	0.5	0.2	8
Other, specify	2.9	2.5	1.2	0.7	2.0	0.5	1.9	0.0	0.0	1.8	49
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	2320

Table A3.11: Location of previous dwelling household respondents lived in by province

Province	Urban %	Rural %	Traditional/Village %	Farm %	I don't know %	Total n
Western Cape	32.8	66.2	0.5	0.4	0.0	205
Eastern Cape	60.5	28.5	4.3	5.9	0.8	311
Northern Cape	48.1	40.0	2.1	6.3	3.6	163
Free State	44.4	32.0	2.1	21.3	0.2	257
KwaZulu-Natal	25.5	55.0	18.5	0.8	0.2	201
North West	22.9	48.1	13.3	15.7	0.0	195
Gauteng	49.2	38.9	8.6	2.1	1.2	827
Mpumalanga	25.0	38.8	20.4	15.7	0.0	56
Limpopo	49.2	33.9	8.5	8.4	0.0	84
Total	44.3	42.2	8.2	4.6	0.8	2299

Table A3.12: Region of previous dwelling household respondents lived in by province

Province	Another city in this province %	Another city in another province %	Another town in this province %	Another town in another province %	Another country %	Other %	Total n
Western Cape	13.3	11.4	2.6	14.6	0.0	58.2	191
Eastern Cape	30.3	1.4	29.8	5.3	0.9	32.2	289
Northern Cape	53.0	8.8	2.5	2.9	0.6	32.2	151
Free State	35.0	5.1	23.1	5.9	2.4	28.5	240
KwaZulu-Natal	20.8	13.9	21.5	12.6	2.4	28.8	199
North West	31.2	12.2	13.1	26.5	5.1	12.0	196
Gauteng	27.0	17.3	18.4	13.3	3.3	20.7	828
Mpumalanga	22.1	3.3	41.6	14.2	3.6	15.2	51
Limpopo	25.0	1.3	23.2	10.2	0.7	39.5	84
Total	26.6	13.0	17.8	13.3	2.6	26.7	2229

Table A3.13: Does your household share this dwelling/stand/yard with another household

Province	Yes		No		Do not know		Total n
	%	95% CI	%	95% CI	%	95% CI	
Western Cape	25.7	[19.3-33.3]	74.3	[66.7-80.7]	0.0		205
Eastern Cape	12.4	[8.5-17.7]	87.6	[82.3-91.5]	0.0		309
Northern Cape	11.4	[6.3-19.7]	87.8	[79.2-93.1]	0.8	[0.2-4.4]	163
Free State	6.8	[4.4-10.5]	93.2	[89.5-95.6]	0.0		240
KwaZulu-Natal	26.5	[11.3-50.5]	73.2	[49.7-88.3]	0.3	[0.1-2.0]	205
North West	20.3	[14.7-27.3]	77.9	[69.9-84.3]	1.8	[0.4-6.7]	197
Gauteng	22.1	[15.8-30.1]	77.2	[69.6-83.5]	0.6	[0.2-2.0]	837
Mpumalanga	10.4	[9.2-11.7]	89.6	[88.3-90.8]	0.0		57
Limpopo	13.1	[9.0-18.5]	86.9	[81.5-91.0]	0.0		89
Total	20.3	[16.2-25.2]	79.1	[74.4-83.2]	0.5	[0.2-1.3]	2302

Table A3.14: Type of occupation rights of households by province

Occupation rights	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA	Total
	%	%	%	%	%	%	%	%	%	%	n
Owned and fully paid off	4.1	10.9	25.8	4.4	5.5	14.2	14.4	36.0	0.5	11.6	237
Owned but not yet paid off	1.7	2.1	23.4	2.9	1.6	3.7	0.3	13.8	0.0	1.6	64
Rented	8.9	3.7	1.6	2.6	13.1	7.5	3.6	3.1	2.7	4.9	92
Occupied rent-free	80.7	45.1	44.1	70.6	71.1	26.5	58.3	12.1	45.2	56.0	1329
Permission to occupy from chief	0.0	5.3	1.1	1.4	1.2	3.0	2.3	28.2	0.3	2.3	83
Recognition from the city	3.3	28.7	0.3	15.5	1.4	38.1	18.2	3.1	39.6	19.5	387
Other	1.2	4.2	3.8	2.6	6.0	6.9	3.0	3.7	11.7	4.1	98
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	2290

Table A3.15: Did you receive any documentation that shows that you have the right to occupy site?

Province	Yes		No		Do not know		Total
	%	95% CI	%	95% CI	%	95% CI	n
Western Cape	35.6	[19.4-56.0]	64.4	[44.0-80.6]	0.0		23
Eastern Cape	34.5	[14.1-62.9]	61.1	[32.5-83.6]	4.4	[0.4-33.4]	41
Northern Cape	47.1	[32.4-62.4]	42.3	[25.4-61.3]	10.5	[6.2-17.4]	78
Free State	54.5	[41.9-66.6]	45.5	[33.4-58.1]	0.0		15
KwaZulu-Natal	17.0	[8.8-30.3]	63.4	[44.2-79.1]	19.6	[12.3-29.8]	27
North West	36.5	[8.3-78.5]	55.1	[20.8-85.1]	8.5	[3.2-20.4]	37
Gauteng	31.4	[15.3-53.8]	61.9	[41.7-78.7]	6.6	[2.4-16.8]	109
Mpumalanga	62.4	[55.3-69.1]	37.6	[30.9-44.7]	0.0		23
Limpopo	0.0		100.0		0.0		3
Total	33.4	[22.0-47.2]	58.9	[46.2-70.5]	7.7	[4.4-13.0]	356

Table A3.16: Type of ownership document for household respondents by province

Type of ownership	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA	Total
	%	%	%	%	%	%	%	%	%	%	n
Temporary occupation license	0.0	0.0	4.8	0.0	0.0	1.2	7.9	0.0	0.0	4.5	6
Share certificate	3.9	0.0	3.5	10.7	0.0	4.2	2.3	0.0	0.0	2.6	8
Title deed	0.0	18.3	10.6	0.0	94.4	7.8	23.9	0.0	0.0	19.9	24
Letter from the chief	0.0	0.0	0.0	0.0	5.6	1.2	15.8	86.1	0.0	10.5	18
Letter from municipality	68.5	3.4	77.1	76.6	0.0	63.0	16.7	13.9	0.0	31.6	68
No document	11.8	14.4	0.0	0.0	0.0	7.5	9.2	0.0	100	8.3	8
Other	15.8	63.9	4.0	12.6	0.0	15.1	24.2	0.0	0.0	22.5	24
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	156

Table A3.17: In this community are there any obstacles to you owning land and housing?

Province	Yes		No		Do not know		Total
	%	95% CI	%	95% CI	%	95% CI	n
Western Cape	5.8	[1.2-23.3]	87.6	[78.5-93.2]	6.6	[3.8-11.2]	205
Eastern Cape	26.3	[15.0-42.0]	61.6	[50.0-72.1]	12.0	[8.4-16.9]	316
Northern Cape	12.8	[8.5-18.7]	75.2	[69.5-80.2]	12.0	[8.1-17.5]	163
Free State	25.1	[12.7-43.7]	66.3	[52.0-78.2]	8.5	[6.0-12.0]	251
KwaZulu-Natal	12.4	[4.7-28.9]	65.4	[53.3-75.7]	22.2	[19.6-25.1]	207
North West	20.1	[16.9-23.6]	56.4	[47.9-64.6]	23.5	[15.8-33.5]	195
Gauteng	17.9	[12.6-24.9]	57.0	[51.4-62.3]	25.1	[18.9-32.5]	845
Mpumalanga	26.6	[21.2-32.8]	62.4	[55.2-69.0]	11.0	[9.9-12.3]	56
Limpopo	13.1	[9.6-17.6]	58.5	[45.9-70.0]	28.5	[15.3-46.8]	90
Total	17.1	[13.5-21.4]	61.7	[56.7-66.5]	21.2	[16.5-26.7]	2328

Table A3.18: Main obstacle to household respondents in owning land and housing by province

Main Obstacle	WC %	EC %	NC %	FS %	KZN %	NW %	GP %	MP %	LP %	RSA %	Total n
Income	32.7	9.9	16.8	73.0	8.7	9.9	13.0	27.4	0.0	14.6	94
Religion	0.0	2.9	0.0	3.3	0.3	0.0	0.4	0.0	0.0	0.7	4
Nationality	0.0	2.8	0.0	0.0	14.9	4.0	4.0	0.0	21.0	4.8	9
Tribe/language	1.3	2.9	0.0	0.0	0.0	11.1	2.7	23.9	0.0	3.5	13
Health status	0.0	1.7	6.8	1.0	0.0	0.0	1.6	0.0	9.7	1.8	13
Constant threat of eviction	1.3	9.4	0.0	12.0	44.0	6.7	2.2	3.5	2.5	5.9	48
Gender	3.9	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.3	2
Outsider	6.5	7.7	0.0	5.3	0.0	24.7	6.2	26.2	0.0	8.1	36
Other	54.2	62.7	76.4	5.4	32.1	42.3	69.8	19.0	66.8	60.4	253
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	472

Table A3.19: Are you aware of municipal rules (by-laws) which apply to residential areas?

Province	Yes, I am aware of most %	Yes, I am aware of some %	Yes, I am aware of a few %	No, I am not aware of by-laws %	Total n
Western Cape	11.0	10.1	21.7	57.2	207
Eastern Cape	2.2	7.6	7.1	83.1	316
Northern Cape	10.4	4.7	17.2	67.8	165
Free State	5.3	8.3	7.3	79.0	257
KwaZulu-Natal	2.4	11.0	16.9	69.7	207
North West	6.9	14.0	23.3	55.8	199
Gauteng	7.3	7.0	16.3	69.4	853
Mpumalanga	15.9	15.9	3.7	64.4	60
Limpopo	2.4	5.5	20.4	71.8	90
Total	6.5	8.2	16.6	68.7	2354

Table A3.20: Do municipal rules (by-laws) apply to this settlement?

Province	Yes		No		Do not know		Total
	%	95% CI	%	95% CI	%	95% CI	n
Western Cape	13.6	[5.5-29.9]	74.2	[59.5-85.0]	12.1	[10.3-14.3]	86
Eastern Cape	27.2	[15.8-42.7]	55.3	[35.8-73.4]	17.5	[7.9-34.4]	61
Northern Cape	45.7	[35.4-56.3]	29.0	[19.7-40.4]	25.4	[17.2-35.7]	62
Free State	31.6	[23.3-41.3]	49.5	[34.7-64.5]	18.8	[8.6-36.5]	58
KwaZulu-Natal	52.5	[43.6-61.3]	25.8	[16.1-38.6]	21.7	[11.7-36.6]	55
North West	67.8	[58.1-76.2]	32.0	[23.6-41.6]	0.3	[0.0-2.6]	81
Gauteng	41.7	[36.3-47.3]	43.7	[35.8-52.0]	14.6	[10.9-19.4]	338
Mpumalanga	5.7	[4.0-8.1]	37.5	[37.5-37.5]	56.8	[54.8-58.8]	32
Limpopo	26.6	[26.0-27.1]	23.0	[13.9-35.7]	50.4	[39.7-61.1]	32
Total	39.0	[32.2-46.4]	43.9	[36.3-51.9]	17.0	[12.8-22.3]	805

Table A3.21. In the past 5 years are you aware of any attempts to evict residents from this settlement?

Province	Yes		No		Do not know		Total n
	%	95% CI	%	95% CI	%	95% CI	
Western Cape	17.9	[13.2-23.7]	68.8	[61.0-75.7]	13.3	[10.2-17.3]	203
Eastern Cape	12.0	[8.5-16.7]	78.3	[73.2-82.6]	9.7	[7.2-13.0]	315
Northern Cape	5.1	[2.0-12.7]	72.8	[67.7-77.4]	22.1	[17.8-27.0]	167
Free State	11.1	[4.4-25.2]	80.1	[69.6-87.5]	8.8	[5.5-14.0]	252
KwaZulu-Natal	7.8	[5.3-11.4]	68.1	[64.8-71.2]	24.1	[20.9-27.6]	205
North West	7.6	[2.1-24.6]	89.1	[70.3-96.6]	3.2	[0.8-11.9]	196
Gauteng	21.6	[15.9-28.5]	68.8	[62.9-74.2]	9.6	[7.5-12.3]	858
Mpumalanga	19.0	[13.4-26.4]	77.5	[70.4-83.3]	3.4	[3.4-3.5]	59
Limpopo	11.9	[8.5-16.4]	70.1	[61.1-77.8]	18.0	[10.0-30.3]	89
Total	16.8	[13.3-21.0]	72.0	[68.0-75.7]	11.2	[9.4-13.4]	2344

Table A3.22: Have there been any attempts by the municipality to relocate residents of this settlement to another area?

Province	Yes		No		Do not know		Total n
	%	95% CI	%	95% CI	%	95% CI	
Western Cape	24.8	[20.0-30.2]	65.5	[60.1-70.5]	9.7	[7.1-13.3]	207
Eastern Cape	22.7	[14.5-33.7]	65.9	[58.5-72.6]	11.4	[8.7-14.7]	316
Northern Cape	4.3	[2.3-7.8]	81.7	[76.2-86.1]	14.1	[9.7-19.9]	167
Free State	8.2	[2.9-21.1]	81.9	[71.6-89.1]	9.9	[5.8-16.3]	256
KwaZulu-Natal	24.2	[20.4-28.5]	56.1	[49.8-62.3]	19.6	[15.0-25.3]	206
North West	15.0	[5.2-36.2]	77.9	[47.0-93.3]	7.1	[1.5-27.4]	198
Gauteng	27.5	[21.1-34.9]	61.7	[54.0-68.9]	10.8	[8.6-13.3]	854
Mpumalanga	6.5	[1.1-29.9]	90.4	[75.2-96.7]	3.1	[2.1-4.5]	60
Limpopo	18.6	[12.5-26.7]	62.9	[58.1-67.5]	18.5	[9.6-32.8]	89
Total	23.6	[19.7-28.1]	64.8	[59.7-69.6]	11.6	[9.8-13.6]	2353

Table A3.23: Do you know if your area has been approved for settlement by the municipality?

Province	Yes		No		Do not know		Total n
	%	95% CI	%	95% CI	%	95% CI	
Western Cape	38.1	[25.8-52.2]	31.4	[28.4-34.5]	30.5	[18.6-45.8]	203
Eastern Cape	46.7	[33.8-60.0]	34.0	[22.3-48.1]	19.3	[17.4-21.3]	313
Northern Cape	49.2	[28.4-70.2]	30.9	[17.3-49.0]	19.9	[13.6-28.2]	166
Free State	52.4	[38.1-66.4]	22.2	[11.3-38.9]	25.4	[15.3-39.0]	245
KwaZulu-Natal	55.5	[34.2-75.0]	21.3	[9.6-40.6]	23.2	[17.6-30.0]	204
North West	65.5	[50.9-77.8]	11.0	[6.7-17.5]	23.5	[14.6-35.4]	196
Gauteng	46.5	[40.4-52.7]	24.0	[21.6-26.5]	29.5	[24.2-35.5]	848
Mpumalanga	46.8	[41.3-52.3]	36.8	[32.7-41.0]	16.5	[8.9-28.5]	60
Limpopo	43.6	[31.8-56.1]	22.8	[19.9-26.0]	33.6	[21.5-48.4]	89
Total	48.0	[43.4-52.7]	24.4	[21.9-27.0]	27.6	[24.2-31.3]	2324

Table A3.24: If you want to improve your current dwelling where would you borrow finance from?

Borrow from	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA	Total
	%	%	%	%	%	%	%	%	%	%	n
Government housing subsidy	16.6	5.7	38.8	15.5	0.0	18.1	6.3	0.7	23.0	10.2	277
Micro-credit institution	3.6	0.3	0.0	1.0	1.1	1.6	1.4	0.3	2.3	1.5	27
Stokvel	0.2	1.1	4.8	1.5	2.0	0.3	0.4	10.0	0.0	0.7	36
Mashonisa	2.1	4.1	2.0	3.8	3.1	0.1	1.6	0.0	1.7	1.9	54
Formal bank	8.9	9.1	12.3	11.5	3.8	5.3	5.7	17.3	2.3	6.3	200
Hardware store savings or credit	0.9	1.4	1.5	0.0	6.0	3.2	1.2	0.3	4.6	1.9	41
Do not want to borrow money/improve dwelling	62.4	72.2	39.3	52.0	63.3	65.7	74.4	63.8	60.3	68.9	1418
Other	5.2	6.1	1.3	14.6	20.8	5.6	8.9	7.6	5.9	8.5	217
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	2270

Table A3.25: Have you, or any member of this household ever applied for a housing subsidy

Province	Yes		No		Do not know		Total
	%	95% CI	%	95% CI	%	95% CI	
Western Cape	54.7	[40.7-67.9]	44.8	[31.7-58.6]	0.5	[0.1-3.4]	206
Eastern Cape	33.8	[19.8-51.2]	64.9	[46.9-79.5]	1.3	[0.6-3.1]	313
Northern Cape	45.0	[25.9-65.7]	48.6	[30.8-66.8]	5.3	[3.1-8.8]	155
Free State	22.9	[12.6-37.9]	73.0	[59.1-83.5]	4.1	[1.4-11.8]	249
KwaZulu-Natal	30.7	[24.1-38.2]	65.4	[57.3-72.6]	3.9	[2.5-6.2]	208
North West	59.0	[43.0-73.4]	39.0	[26.2-53.5]	2.0	[0.4-9.5]	198
Gauteng	30.6	[24.7-37.3]	67.1	[60.6-72.9]	2.0	[1.1-3.8]	842
Mpumalanga	47.4	[43.9-50.9]	52.6	[49.1-56.1]	0.0		58
Limpopo	17.0	[10.3-26.8]	80.7	[69.2-88.6]	2.3	[1.2-4.3]	87
Total	35.1	[30.1-40.4]	62.7	[57.5-67.5]	2.1	[1.4-3.1]	2316

Table A3.26: Did the household undertake any form of improvements to the dwelling in the last 12 months?

Province	Yes		No		Total
	%	95% CI	%	95% CI	
Western Cape	12.4	[8.3-18.2]	87.6	[81.8-91.7]	206
Eastern Cape	21.1	[12.9-32.6]	78.9	[67.4-87.1]	310
Northern Cape	28.9	[16.5-45.5]	71.1	[54.5-83.5]	161
Free State	11.0	[8.4-14.4]	89.0	[85.6-91.6]	251
KwaZulu-Natal	15.3	[11.1-20.6]	84.7	[79.4-88.9]	208
North West	14.6	[9.7-21.4]	85.4	[78.6-90.3]	199
Gauteng	11.7	[7.7-17.3]	88.3	[82.7-92.3]	837
Mpumalanga	34.1	[28.6-40.1]	65.9	[59.9-71.4]	59
Limpopo	3.5	[2.0-5.9]	96.5	[94.1-98.0]	90
Total	13.0	[10.0-16.7]	87.0	[83.3-90.0]	2321

Table A3.27: Indicate improvement(s) made to the house

Improvement	WC %	EC %	NC %	FS %	KZN %	NW %	GP %	MP %	LP %	RSA %	Total n
Roof	63.4	52.7	9.7	34.6	26.7	33.4	28.3	28.8	38.2	35.4	120
Floor	3.4	10.8	0.0	0.7	1.1	3.2	1.8	13.7	0.0	3.5	17
Walls	6.4	14.8	0.0	7.4	24.4	4.7	6.9	1.3	0.0	9.1	31
Toilet	0.0	0.0	39.4	8.7	9.0	0.7	0.0	0.0	0.0	3.6	16
Doors/windows	0.0	0.0	0.8	0.0	15.5	1.5	19.5	13.7	0.0	10.0	28
Added rooms	5.5	20.0	3.1	39.9	3.8	56.5	28	28.8	61.8	24.4	94
Burglar doors	0.0	0.0	0.0	0.0	16.6	0.0	1.2	0.0	0.0	2.1	5
Other (specify)	21.3	1.7	47.0	8.7	2.9	0.0	14.2	13.7	0.0	11.9	50
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	361

Table A3.28: Average household expenditure (in Rands) on home improvements in the past 12 months by province

Province	n	Minimum	Maximum	Mean	Std. Deviation
Western Cape	29	100	10000	1591.03	2048.843
Eastern Cape	59	150	6000	1577.20	1441.921
Northern Cape	8	100	30000	5837.50	10303.527
Free State	19	120	10000	1582.63	2199.585
KwaZulu-Natal	26	120	22000	3738.46	6380.313
North West	26	100	20000	2867.65	4031.826
Gauteng	96	26	50000	4393.54	9032.147
Mpumalanga	12	80	35000	6631.67	9953.201
Limpopo	7	40	21000	4127.14	7469.504
RSA	282	26	50000	3255.23	6615.106

SECTION 4: ACCESS TO BASIC SERVICES IN INFORMAL SETTLEMENTS TARGETED FOR UPGRADING

No additional data needed inclusion

SECTION 5: PHYSICAL AND ENVIRONMENTAL VULNERABILITIES

Table A5.1: Geology type of each settlement*

Province	Informal Settlement	Municipality	Geology type
Eastern Cape	Amalinda Forest	Buffalo City	Mudstone
Eastern Cape	Dacawa (Mdantsane Zone 18)	Buffalo City	Mudstone
Eastern Cape	Ford & Msimango	Buffalo City	Mudstone
Eastern Cape	Joe Slovo Extention	Nelson Mandela Bay	Mudstone
Eastern Cape	Kyga/Greenbushes	Nelson Mandela Bay	Arenite
Eastern Cape	Loerie	Kouga	Conglomerate
Eastern Cape	Middle/Blikkiesdorp	Nelson Mandela Bay	Mudstone
Eastern Cape	Qaqawuli	Nelson Mandela Bay	Sedimentary
Eastern Cape	Walmer Q	Nelson Mandela Bay	Arenite
Free State	Block A	Moqhaka	Mudstone
Free State	DND	Matjhabeng	Mudstone
Free State	MK Square	Mangaung	Mudstone
Free State	Phokeng & Kgotha	Matjhabeng	Mudstone
Free State	Selossha Ext. 14	Mangaung	Mudstone
Free State	Tshiamo D	Maluti-a-phofung	Mudstone
Free State	Unit 3	Matjhabeng	Mudstone
Gauteng	Chris Hani Ext.4	City of Johannesburg	Quartzite, Dolomite
Gauteng	Dark City	City of Johannesburg	Shale & Quartzite
Gauteng	Dark City	City of Johannesburg	Shale & Quartzite
Gauteng	Diepsloot West Ext.6	City of Johannesburg	Gneiss & Granite
Gauteng	Drieziek Ext.3	City of Johannesburg	Andesite
Gauteng	Dumping Site	Randfontein	Quartzite
Gauteng	Freedom Square	Ekurhuleni	Dolomite & Chert
Gauteng	Ivorypark Zone 1	City of Johannesburg	Gneiss & Granite
Gauteng	Kopanong Ext 1	City of Tshwane	Granite
Gauteng	Kudube Zone 5	City of Tshwane	Shale & Syenite
Gauteng	Madelakufa 2 (Isekelo)	Ekurhuleni	Quartzite & Migmatite
Gauteng	Mafelandawonye 3	City of Johannesburg	Migmatite
Gauteng	Mayfield Ext 1 (Mangosotho/Zenzele)	Ekurhuleni	Tillite & Sandstone
Gauteng	New Eersterus Proper	City of Tshwane	Granite
Gauteng	New Eersterus X2	City of Tshwane	Granite
Gauteng	Orlando Park (Not Coalyard)	City of Johannesburg	Quartzite
Gauteng	Plot 45 Pienaarspoort	City of Tshwane	Shale
Gauteng	Rethabiseng	City of Tshwane	Sandstone & Tillite
Gauteng	Soshanguve KK 2	City of Tshwane	Granite
Gauteng	Stinkwater X4	City of Tshwane	Granite
Gauteng	Thintwa /Emalahleni	Ekurhuleni	Quartzite
Gauteng	Tokyo Sexwale (Reiger Park Ext 9)	Ekurhuleni	Quartzite & Alluvial
Gauteng	Tsakane Ext 19 overflow	Ekurhuleni	Sandstone & Feldspar
Gauteng	Tswaing Village	City of Tshwane	Granite
Gauteng	Wierda Caravan Park	Ekurhuleni	Quartzite & Basalti
KwaZulu-Natal	Mazakhele Phase 2	UMuziwabantu	Shale
KwaZulu-Natal	Babanango Phase 3	Ulundi	Shale
KwaZulu-Natal	Cato Crest <i>In situ</i> Upgrade	eThekweni	Tillite & Shale
KwaZulu-Natal	Fairleigh Siyahlala	Newcastle	Arenite & Dolerite
KwaZulu-Natal	Poortjie	Mkhambathini	Tillite
KwaZulu-Natal	Sibongile Buffer strip	Endumeni	Arenite
KwaZulu-Natal	Umlazi infill phase 1 Part 4	eThekweni	Tillite
KwaZulu-Natal	Zamani 2A	eThekweni	Arenite

Limpopo	Mohlakaneng Ext 106	Polokwane	Gneiss
Limpopo	Roosenekal B	Elias Motsoaledi	Gabbro
Limpopo	Vaalwater Ext 3	Modimolle	Arenite
Mpumalanga	Khayelisha/ Kwazanele	Msukaligwa	Arenite
Mpumalanga	Matsulu B	Mbombela	Gneiss
North West	Bokamoso 4	Rustenburg	Gabbro
North West	Glaudina New	Mamusa	Andesite
North West	Kanana ext 11	City of Matlosana	Andesite
North West	Kanana Ext 13	Matlosana	Andesite
North West	Mafikeng PHP	Mafikeng	Sand
North West	Migdol	Mamusa	Andesite & Sediment
North West	Oukasi Ext 5	Madibeng	Gabbro
Northern Cape	7de Laan	Dikgatlong	Tillite & Sedimentary
Northern Cape	Augrabies	Kai !Garib	Tillite & Gneiss
Northern Cape	Campbell	Siyancuma	Sand, Tillite & Gneiss
Northern Cape	Louisvale	//KharaHais	Granite, Basin, Ora
Northern Cape	Rainbow Valley	Siyancuma	Sand, Dolomite & Tillite
Northern Cape	Skerpdraai	Gamagara	Sand & Tillite
Northern Cape	Transit Camp	Sol Plaatje	Tillite & Sediment
Western Cape	Asazani	Overstrand	Arenite
Western Cape	Atlantis Witsand	City of Cape Town	Sedimentary
Western Cape	Chester Williams	Drakenstein	Sedimentary
Western Cape	Kingston Town	Drakenstein	Sedimentary
Western Cape	Kudu Street	Drakenstein	Sedimentary
Western Cape	Nyanga Upgrade	City of Cape Town	Sedimentary
Western Cape	Overhills	Overstrand	Arenite

*(Source: Council for Geosciences, 2013)

SECTION 6: HEALTH, FOOD AND NUTRITION SECURITY IN INFORMAL SETTLEMENTS TARGETED FOR UPGRADING

Table A6.1: Household food and nutrition situation in the last 12 months by province

Question	Response	WC %	EC %	NC %	FS %	KZN %	NW %	GP %	MP %	LP %
The family was worried that it would run out of food?	Never	26.2	15.7	29.3	14.9	19.0	18.5	22.0	22.8	16.5
	Sometimes	66.5	63.1	53.3	78.6	47.5	63.7	54.7	72.9	54.1
	Always	7.4	21.2	17.4	6.6	33.5	17.8	23.2	4.3	29.4
The family was unable to eat healthy and nutritious* food?	Never	24.0	16.3	17.3	14.8	17.6	19.7	22.9	32.5	15.2
	Sometimes	67.9	68.5	55.9	78.3	56.6	64.1	55.0	63.4	54.7
	Always	8.1	15.2	26.9	7.0	25.8	16.2	22.1	4.1	30.1
The family ate only a few kinds of foods?	Never	39.0	17.2	22.0	16.6	19.3	18.6	20.8	39.0	15.3
	Sometimes	51.7	67.0	63.3	77.9	58.5	62.6	55.6	57.0	57.1
	Always	9.4	15.8	14.7	5.5	22.1	18.7	23.6	4.0	27.6
Some family members had to skip a meal?	Never	46.4	24.4	33.7	27.0	39.6	27.3	32.1	50.6	33.7
	Sometimes	50.0	64.0	60.4	68.7	44.4	63.4	49.1	45.6	41.1
	Always	3.6	11.6	5.8	4.3	16.0	9.3	18.8	3.7	25.2
The family ate less than it thought it should?	Never	42.2	22.5	32.9	21.5	25.0	26.4	29.0	43.6	16.5
	Sometimes	54.3	66.6	58.5	73.9	52.1	64.9	52.6	55.8	60.6
	Always	3.5	10.9	8.6	4.6	22.9	8.8	18.4	0.6	22.9
Your household ran out of food?	Never	39.4	22.7	35.6	19.9	26.7	33.0	33.4	45.5	28.6
	Sometimes	58.8	64.5	58.1	75.5	51.3	56.7	49.2	47.6	48.3
	Always	1.8	12.8	6.3	4.7	21.9	10.3	17.5	6.9	23.1
Someone in the family was hungry but did not eat?	Never	62.2	30.3	47.8	29.4	38.5	37.1	42.1	59.8	42.0
	Sometimes	35.0	60.0	45.2	66.1	45.3	52.9	43.9	36.4	37.9
	Always	2.8	9.7	7.1	4.5	16.3	10.1	14.0	3.7	20.1
Someone in the family went without eating for a whole day?	Never	68.6	40.1	55.2	33.8	44.0	45.5	46.2	60.5	41.4
	Sometimes	29.2	51.4	35.2	63.4	40.4	46.9	41.7	38.8	44.3
	Always	2.1	8.6	9.6	2.7	15.6	7.7	12.1	0.7	14.3

Table A6.2: Causes of illness, injury, disability or ailment in informal settlements

Illness/Injury	Number (n)	Percentage (%)
Flu	540	47.0
Other*	143	9.9
High Blood Pressure	77	6.4
HIV Infection	41	5.5
Tuberculosis	53	4.5
Injury	59	4.2
Fever	55	4.2
Stomach pain	28	3.3
Allergies	22	2.6
Asthma	44	2.4
Physical disability	19	1.9
Diarrhoea	20	1.6
Illness related to pregnancy	7	1.5
Skin irritation/itching	19	1.3
Diabetes	23	1.2
Malaria	3	0.6
Mental disability	9	0.5
Cold	10	0.4
Hepatitis B	3	0.5
Violence related injury	6	0.3
Cancer	6	0.3
Measles	4	0.2
Worms	3	0.1
Total	1194	100.0

*Other = included strokes, ulcers, headaches, STI/STDs, chest pains, and eye and ear problems

Table A6.3: Top ten causes of illness, injury, disability or ailment in informal settlements, by province

Rank	Province								
	WC	EC	NC	FS	KZN	NW	GP	MP	LP
1	Flu	Flu	Flu	Flu	Flu	Flu	Flu	Flu	Flu
2	Other	High Blood Pressure	Fever	Other	Other	Tuberculosis	Other	Other	Allergies
3	Fever	Fever	Other	Injury	High blood pressure	High blood pressure	Injury	Tuberculosis	Other
4	Allergies	Asthma	High blood pressure	HIV Infection	HIV Infection	Other	HIV Infection	High blood pressure	HIV infection
5	Skin irritation	HIV Infection	Tuberculosis	Cold	Stomach pain	Diarrhoea	Stomach pain	Asthma	High blood pressure
6	Tuberculosis	Tuberculosis	Physical disability	High blood pressure	Fever	Illness related to pregnancy	High blood pressure	Cancer	Tuberculosis
7	Asthma	Injury	Stomach pain	Fever	Tuberculosis	Malaria	Fever	Physical disability	Physical disability
8	Malaria	Other	Diabetes	Stomach pain	Physical disability	Asthma	Illness related to pregnancy	Skin irritation	Mental disability
9	HIV infection	Diabetes	Mental disability	Diarrhoea	Skin irritation	Hepatitis	Tuberculosis	Fever	Injury
10	Diarrhoea	Physical disability	HIV infection	Asthma	Diarrhoea	Cold	Asthma	Diarrhoea	

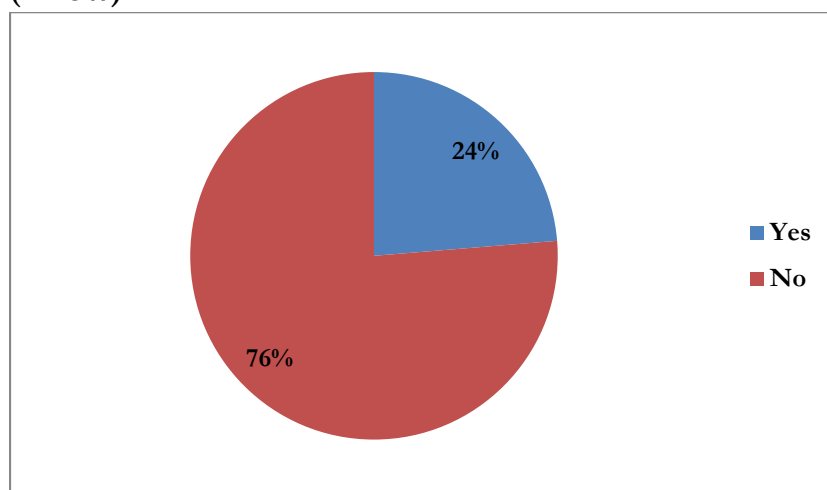
Table A6.4: Reported experience with breathing problems and or chest infections in the last month for all household members by age and province

Age	Yes		No		Total
	%	95% CI	%	95% CI	n
0 to 4	5.1	[1.9-12.9]	94.9	[87.1-98.1]	717
5 to 9	3.8	[1.8-7.8]	96.2	[92.2-98.2]	786
10 to 14	3.3	[1.4-7.6]	96.7	[92.4-98.6]	649
15 to 19	3.0	[1.3-6.7]	97.0	[93.3-98.7]	672
20 to 24	3.4	[0.9-11.8]	96.6	[88.2-99.1]	657
25 to 34	3.0	[1.5-6.0]	97.0	[94.0-98.5]	1298
35 to 44	5.1	[3.9-6.8]	94.9	[93.2-96.1]	993
45 to 54	7.2	[4.9-10.5]	92.8	[89.5-95.1]	699
55 to 64	14.7	[7.8-26.0]	85.3	[74.0-92.2]	375
65+	7.6	[4.6-12.1]	92.3	[87.7-95.3]	195
Total	4.8	[3.4-6.8]	95.2	[93.2-96.6]	7041
Province					
Western Cape	4.7	[2.7-8.1]	95.3	[91.9-97.3]	541
Eastern Cape	5.0	[3.5-7.1]	95.0	[92.9-96.5]	1046
Northern Cape	3.5	[2.0-5.9]	96.5	[94.1-98.0]	532
Free State	2.6	[0.9-6.9]	97.4	[93.1-99.1]	791
KwaZulu-Natal	4.1	[1.9-8.5]	95.9	[91.5-98.1]	860
North West	13.3	[5.8-27.7]	86.7	[72.3-94.2]	690
Gauteng	3.5	[2.7-4.4]	96.5	[95.6-97.3]	2856
Mpumalanga	4.4	[3.1-6.3]	95.6	[93.7-96.9]	164
Limpopo	2.6	[1.4-4.6]	97.4	[95.4-98.6]	336
Total	4.5	[3.2-6.3]	95.5	[93.7-96.8]	7816

SECTION 7: CRIME AND SAFETY

Table A7.1: Feeling of household respondents about safety for women and children to walk around by themselves during the day by sex

Sex	Not safe		Fairly safe		Safe		Very safe		Total n
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Male	38.8	[32.8-45.2]	26.5	[19.8-34.6]	31.6	[24.5-39.6]	3.0	[1.8-5.2]	1154
Female	40.7	[34.8-46.8]	28.1	[20.3-37.6]	26.2	[21.9-31.1]	5.0	[2.8-8.6]	1061
Total	39.7	[34.1-45.5]	27.3	[20.3-35.6]	29.2	[23.4-35.6]	3.9	[2.4-6.4]	2215

Figure A7.1: Is there any form of gender based violence where women are specifically targeted? (n=2347)

SECTION 8: ECONOMIC ACTIVITIES

No additional data needed inclusion

SECTION 9: SOCIAL CAPITAL AND COMMUNITY EMPOWERMENT

Table A9.1: Importance of helping others (n = 2 335)

Importance of helping others	Number (n)	Percentage (%)
An important part of my life	1928	80.3
Not an important part of my life	219	10.8
Neither important nor unimportant	147	7.7
Does not know	41	1.2

Table A9.2: Proportion of households that received help from others (n = 2 342)

Proportion of households that received help from others	Number (n)	Percentage (%)
Yes	1211	51.7
No	1104	47.6
Does not know	27	0.8

Table A9.3: Type of help received (n = 1 010)

Type of help	Number (n)	Percentage (%)
Money	609	66.7
Groceries/food	268	22.3
Clothes	15	0.9
Child minding	34	4.1
Other	57	4.1
Refused to answer	11	1.0
Does not know	16	1.0

Table A9.4: Sources of help for informal residents (n = 1109)

Source of help	Number (n)	Percentage (%)
Neighbours	795	75.3
Family	251	20.1
Non-governmental organisation	6	0.2
Government	5	0.2
Church/religious group	7	0.8
Other	26	1.8
Refused to answer	9	0.8
Does not know	10	0.9

Table A9.5: Proportion of households that receive help (n = 1 207)

Proportion of households that receive help	Number (n)	Percentage (%)
Yes	1031	84.7
No	168	14.6
Refused to answer	2	0.4
Does not know	6	0.3

Table A9.6: Do you or any of your household members give help or money or goods to anyone? (n = 2 337)

Percentage giving help	Number (n)	Percentage (%)
Yes	1386	56.8
No	936	42.6
Does not know	15	0.6

Table A9.7: Type of help that households give (n = 1159)

Type of help	Number (n)	Percentage (%)
Money	663	60.4
Groceries/food	351	27.3
Clothes	42	3.1
Child minding	30	3.4
Other	49	4.0
Refused to answer	2	0.0
Does not know	22	1.8

Table A9.8: Recipients of help (n = 1 250)

Recipients of help	Number (n)	Percentage (%)
Family	407	29.9
Neighbours	777	62.8
Relatives	27	2.3
Non-governmental organisation	4	0.4
Church/religious group	9	0.8
Other	26	2.0

Table A9.9: Multiple response for active community groups in the settlement

Active group	Responses		Percent of Cases (%)
	Number (n)	Percentage (%)	
Religious organisations	904	17.0	67.5
Local national political party	829	15.4	61.1
Burial Society	770	14.1	56.1
Stokvel group	628	11.8	46.9
Health volunteers	570	10.1	40.1
A sports club	461	9.0	35.5
Resident association	390	7.2	28.4
A neighbourhood security watch organisation	310	5.9	23.4
Parent-teacher associations	283	4.4	17.6
A neighbourhood improvement group	268	5.0	19.9

Table A9.10: Multiple response for household participation in community groups in the last 12 months in the settlement

Household participation	Percentage of	
	Number (n)	Cases (%)
Religious organisations	591	56.9
Burial Society	509	44.1
Local national political party	383	33.1
Stokvel group	256	24.9
Resident association	211	15.9
A sports club	177	12.7
Parent-teacher associations	141	10.4
Health volunteers	121	9.1
A neighbourhood improvement group	113	7.3
A neighbourhood security watch organisation	100	8.1

Table A9.11: Multiple response for meeting attendance in community groups in the last 12 months in the settlement

Meeting attendance	Responses		Percent of Cases (%)
	Number (n)	Percentage (%)	
Religious organisations	585	22.9	55.0
Burial Society	477	17.7	42.5
Local national political party	426	16.9	40.6
Stokvel group	274	10.7	25.6
Resident association	244	8.8	21.2
A sports club	182	5.7	13.7
Parent-teacher associations	172	5.1	12.3
Health volunteers	153	4.5	10.8
A neighbourhood improvement group	141	3.7	8.8
A neighbourhood security watch organisation	141	3.9	9.5

Table A9.12: Knowledge of group members (n = 1 491)

Knowledge of group members	Number (n)	Percentage (%)
I know most of the people in the group(s) I am involved in	882	64.3
I know a few people in my group, but most are strangers in the group(s) I am involved in	609	35.7

Table A9.13: Perceptions of the spirit of togetherness (n = 2 029)

Spirit of togetherness	Number (n)	Percentage (%)
Very good	344	15.4
Good	771	40.6
Average	616	32.5
Poor	221	9.2
Very poor	77	2.2

Table A9.14: Reasons for not voting (n = 44)

Reasons for not voting	Number (n)	Percentage (%)
Whether I vote or not makes no difference	13	8.8
I did not register	7	7.0
I am not a citizen	10	60.1
Fear of political intimidation	6	4.3
Other	8	19.9

Table A9.15: Multiple responses for grounds of discrimination among those who reported being discriminated against

Grounds for group discrimination	Responses		Percent of Cases (%)
	Number (n)	Percentage (%)	
Unemployment	48	20.0	31.9
Language	31	15.4	23.9
Tribe/ethnicity	30	21.3	33.2
Colour/race	20	7.1	11.0
Nationality	15	10.2	15.8
Age	14	4.5	7.1
Gender	12	6.4	10.0
Religion	11	5.9	9.2
Education	6	4.8	7.4
Disability	5	0.8	1.2
Region/province	5	2.8	4.3
Sexual orientation	3	0.4	0.6

Table A9.16: Household respondents to community conflict resolution

Resolving needs	Responses		Percent of Cases (%)
	Number (n)	Percentage (%)	
Attend ward meetings/ward committee	1820	38.7	87.5
Speak to my ward councillor	829	17.3	39.1
Service delivery protest	583	13.7	30.9
Raise the issue during the mayoral road show, the imbizo	377	7.1	16.0
Residents association	288	6.0	13.6
Contact the regional offices	232	4.7	10.6
Make a written submission during the IDP consultation process	169	2.9	6.6
Petition the city	164	2.9	6.6
Not interested	126	3.7	8.4
Speak out in the media	110	3.0	6.7

Table A9.17: Reasons for having no interest to participate in resolving community needs (n = 472)

Reason	Number (n)	Percentage (%)
Does not have time	91	22.3
Venues not suitable	136	22.5
Time is not suitable	24	4.3
Authorities don't take participation seriously	87	20.5
There are community organisations that do these things	18	3.6
I don't care	61	17.0
Other	55	9.9

Table A9.18: Structures that represent the interests and demands of residents in informal settlements (n = 1 920)

	Number (n)	Percentage (%)
SA National Civic Organisation (SANCO)	186	9.0
Homeless people's federation	11	0.8
Church groups	108	3.8
Trade unions	7	0.4
Political parties	332	18.7
Ward committee	918	47.7
Residents association	107	6.8
Community Development Forum	22	0.7
Other	229	12.1

Table A9.19: Multiple responses for community involvement in the upgrading processes

	Responses		Percent of
	Number (n)	Percentage (%)	Cases (%)
Level of water services	153	15.5	85.6
Level/type of toilets	154	15.3	84.3
Provision of electricity	153	15.4	84.8
Type of roads (e.g. gravel, tarmac)	124	13.4	73.7
Size of dwellings	100	10.7	59.1
Type of building materials	74	9.2	50.4
Level of basic social services (schools, clinics, police station)	106	11.7	64.7
Multipurpose hall	79	8.7	48.1

Table A9.20: Experience of violence as a result of service delivery protests (n = 1 230)

Violence as a result of service delivery protests	Number (n)	Percentage (%)
Yes	543	48.2
No	595	47.1
Don't know	92	4.7

Table A9.21: Organisations in informal settlements

Types of grassroots organisations	Role	Examples
Community-based organisations	Provide palliative care to the sick in informal settlements, support the sick and their caregivers, educate communities on HIV, AIDS and TB, provide training to the youth, raise consciousness of women, help residents to save, deal with the security and safety of the settlements	Examples included home-based care agencies, youth groups, women groups, men groups, stokvels, Community Policing Forums (CPFs)
Faith-based organisations	Provide spiritual nourishment to communities and attend to their physical needs in line with their mission, assist informal dwellers with meals and visit the sick	Churches
Non-governmental organisations	Provide services not readily extended by local government	SADAG, SANCA
State departments	Support informal settlements in line with their mandate. The DHS has community health workers in informal settlements educating residents on health care Department of Social Development helps the poor with food parcels and accessing social grants	Department of Human Settlements Department of Social Development Department of Home Affairs Department of Health
Resident committees	Deal with the housing issues in the community	Resident committees are found in most informal settlements
Ward committees	Act as gatekeepers of the community, deal with general concerns of residents of the informal settlements	Known as ward committees and found in most informal settlements
Municipality	Provide support in line with the Integrated Development Planning (IDP) of the local municipality	All informal settlements are located within the jurisdiction of specific municipalities.
Private sector	Support informal settlement residents, in line with their mission, install basic services	Trusts or foundations operating in specific informal settlements

SECTION 10: ATTITUDES TOWARDS FOREIGNERS

Table A10.1: Friendships between South Africans and foreigners (n = 2 347)

Friendships	Number (n)	Percentage (%)
Yes	750	37.3
No	1520	60.1
Refused to answer	77	2.6

Table A10.2: Perceived attitudes of people towards foreigners (n = 2 309)

Perceived attitudes towards foreigners	Number (n)	Percentage (%)
Very friendly	298	14.3
Friendly	1129	48.0
Neither hostile nor friendly	628	28.2
Hostile	204	7.3
Very hostile	50	2.3

Table A10.3: Perceptions of foreign benefits of South African resources

Perceptions	Neither agree nor disagree						Total n
	Strongly disagree %	Disagree %	Neither agree nor disagree %	Agree %	Strongly agree %	Do not know %	
Foreigners benefit from RDP houses	12.9	29.5	7.8	21.1	9.8	18.8	2340
They do not contribute to the economy	9.1	22.8	12.2	21.0	8.7	26.0	2349
Foreigners steal our jobs	10.9	25.6	10.4	22.5	16.5	14.1	2354
Foreigners in my settlement do not have legal documentation	5.0	13.9	14.6	23.8	16.1	26.5	2353
Foreigners in my settlement are involved in illegal activities	6.8	21.4	11.9	18.3	15.6	25.7	2352

Table A10.4: Manifestations of attitudes towards foreigners

Manifestations	Yes %	No %	Total n
Use of derogatory terms	31.4	68.6	2326
Propaganda against foreigners	17.8	82.2	2284
Hate speech against foreigners	20.2	79.8	2291
Violence against foreigners	17.4	82.6	2288
Looting and destruction of shops & businesses	21.0	79.0	2284

ANNEXURE 4

THE HOUSEHOLD QUESTIONNAIRE

ANNEXURE 5

REFERENCES

- Abbott, J. 2002. A method-based planning framework for informal settlement upgrading. *Habitat International* 26: 317-333.
- Acioly Jr, C. 2001. Reviewing urban revitalisation strategies in Rio de Janeiro: From urban project to urban management approaches. *Geoforum*, Vol 32: 509-520.
- ADB. 2011. *A Review of Recent Developments in Impact Evaluation*. Mandaluyong City: Asian Development Bank.
- Amao, F. 2012. Housing quality in informal settlements and urban upgrading in Ibadan, Nigeria. *Developing Country Studies*, Vol 2 (10): 68-80.
- Amnesty International. 2010. *Insecurity and indignity: Women's experiences in the slums of Nairobi, Kenya*. London: Amnesty International.
- Annez, P., Bhatt, B. & Patel, B. 2014. What getting land title really means: An 'anti-commons' in Ahmedabad India? *Marron Institute of Urban Management, Working Paper #9*: 1-24.
- Aragon, A. 2005. Mass media fragmentation and narratives of violent action in Sulawesi Poso conflict. *ProQuest Research Library*: 1-56.
- Archambault, C. S., de Laat, J., & Zulu, E. M. 2012. Urban Services and Child Migration to the Slums of Nairobi. *World Development*, Vol 40(9): 1854-1869.
- Arimah, B. 2010. *Slums as an expression of social exclusion: Explaining the prevalence of slums in African countries*. Nairobi: UN Habitat.
- Ayuku, D., Kaplan, D., Baars, H. & De Vries, M. 2004. Characteristics and personal social networks of the on-the-street shelter, and school children in Eldoret, Kenya. *International Journal of Social Work*, Vol 47(3): 293-311.
- Baharoglu, D. 2002. *World Bank Experience in Land Management*. Washington D.C.: The World Bank.
- Barret, A. & Beard, R. 2002. *Poverty reduction in India: Towards building successful slum-upgrading strategies*. Washington D.C: Encyclopaedia of Life Support Systems (EOLSS).
- Barry, M., Dewar, D., Whittal, J. & Muzondo, I. 2007. Land conflicts in informal settlements: Wallacedene in Cape Town. *Urban Forum*, Vol 18(3): 171-189.
- BenYishay, A. & Tunstall, R. 2011. Impact evaluation of infrastructure investments: the experience of the Millennium Challenge Corporation. *Journal of Development Effectiveness*, Vol 3(1): 103-130.
- Blattman, C., Fiala, N., & Martinez, S. 2013. *Credit constraints, occupational choice, and the process of development: Long run evidence from cash transfers in Uganda*. Washinton D.C: World Bank.
- Blum, D. & Feachem, R. G. 1983. Measuring the impact of water supply and sanitation investments on diarrhoeal diseases: problems of methodology. *International journal of epidemiology*, Vol 12(3): 357-365.
- Bocquier, P., Beguy, D., Zulu, E., Muindi, K. & Yé, Y. 2010. Do migrant children face greater health hazards in slum settlements? Evidence from Nairobi, Kenya *Journal of Urban Health*, Vol 88(2): 266-281.
- Cattaneo, Matthias D., Galiani, S., Gertler, P.J., Martinez, S. & Rocio, T. 2007. Housing, health and happiness. *World Bank Policy Research Working Paper 4214*, World Bank.
- Chambers, R. 1994. The origins and practice of participatory rural appraisal. *World Development*: 953-969.
- City of Cape Town. 2005. *Study on the social profile of residents in three selected informal settlements in Cape Town*. Cape Town: City of Cape Town.
- Corburn, J. & Hildebrand, C. 2015. Slum sanitation and the social determinants of women's health in Kenya. *Journal of Environmental and Public Health*, Vol 2015: 1-6.
- Cornwall, A. 2003. Whose voice? Whose choices? Reflections on gender and participatory development. *World Development*, Vol 31(8): 1325-1342.
- Del Mistro, R. & Hensher, D. 2009. Upgrading informal settlements in South Africa: Policy, rhetoric and what residents really value. *Housing Studies*, Vol 24(3): 333-354.
- Devers, K.J. & Frankel, R.M. 2000. Study design in qualitative research – 2: Sampling and data collection strategies. *education for health*, Vol 13(2): 263-271.
- DHS. 2009. *The National Housing Code*. Pretoria: Department of Human Settlements.
- DHS. 2011. Measuring Success in Human Settlements Development: An Impact Evaluation Study of the Upgrading of Informal Settlements Programme in selected projects in South Africa. *Report*.
- DOH. 2004. *Breaking New Ground: Comprehensive plan for housing delivery*. Department of Housing.
- Dreyer, L. n.d. *Disappointments of participation: Finding the correct role for community participation*. Pretoria: Lynette Dreyer & Associates.

- Durrand-Lasserve, A. 2006. Informal settlements and the Millenium Development Goals: Global policy debates on property ownership and security of tenure. *Global Urban Developmen, Vol 2(1)*: 1-15.
- El-Batran, M. & Arandel, C. 1998. A shelter of their own: informal settlement expansion in Greater Cairo and government responses. *Environment and Urbanization, Vol(10)*: 217-232.
- Eversole, R. 2003. Managing the pitfalls of participatory development: Some insights from Australia. *World Development, Vol 31(5)*: 781-795.
- Febade, W. 2000. Deficits of formal urban land management and informal responses under rapid urban growth, an international perspective. *Habitat International, Vol 24*: 127-150.
- Field, E. 2005. Property rights and investment in Urban Slums. *Journal of the European Economic Association, Vol 2(2-3)*: 279-290.
- Field, E. & Kremer, M. 2006. Impact evaluation for slum upgrading interventions. *Doing Impact Evaluation Series #3*, World Bank, July 2006.
- Foster, J. & Hope, T. 1993. *Housing, community and crime: the impact of the Priority Estates Project*. HM Stationery Office
- Foxton, F & Jones, R. 2011. *Social Capital Indicators Review*. UK Office for National Statistics.
- Gessler, M., Brighu, U. & Franceys, R. 2008. The challenge of economic regulation of water and sanitation in urban India. *Habitat International, Vol 32*: 49-57.
- Golding, P. & Murdock, G. 1996. *Culture, Communications and Political Economy. The political economy of media and society*. Cheltenham, Edward Elgar Publishing.
- Gonsalves, G.S., Kaplan, E.H. & Paltiel, A.D. 2015. Reducing Sexual Violence by Increasing the Supply of toilets in Khayelitsha, South Africa: A Mathematical Model. *PLoS ONE, Vol 10(4)*: e0122244. doi:10.1371/journal.pone.0122244.
- Gonzalez-Navarro, M. & Quintana-Domeque, C. 2010. *Slum upgrading: Short term results from an urban road pavement experiemet in Mexico*. Berkeley: University of California.
- Graves, E. 2015. *Room for improvement: A qualitative meta-analysis of the housing choice voucher program*. Boston: Federal Reserve Bank of Boston.
- Gulyani, S. & Basset, E. 2007. Retrieving the baby from the bathwater: slum upgrading in Sub-Saharan Africa. *Environment and Planning: Government and Policy, Vol 25*: 486-515.
- Habicht, J., Victoria, C. & Vaughan, J. 1999. Evaluation designs for adequacy, plausibility and probability of public health programme performance and impact. *International Journal of Epidemiology, Vol 28*: 10-18.
- Hansen, H.F. 2005. Evaluation in and of public-sector reform: The case of Denmark in a Nordic perspective. *Scandinavian Political Studies, Vol 28(4)*: 323-347.
- Hansen, H., Andersen, O. W. & White, H. 2011. Impact evaluation of infrastructure interventions. *Journal of Development Effectiveness, Vol 3(1)*: 1-8.
- HDA. 2012. *South Africa: Informal settlements status*. Johannesburg: The Housing Development Agency.
- HDA. 2013. *South Africa: Informal settlements status (2013)*. Johannesburg: The Housing Development Agency.
- Huchzermeyer, M. 2008. Slum upgrading in Nairobi within the housing and basic services market: A housing rights concern. *Journal of Asian and African Studies, Vol 43(1)*: 19-39.
- Keystone. 2009. Developing a theory of change: A guide to developing a theory of change as a framework for inclusive dialogue, learning and accountability for social impact. Available at: www.KeystoneAccountability.org. Accessed December 2015
- Khandker, S. R., Koolwal, G. B. & Samad, H. A. 2010. *Handbook on impact evaluation: quantitative methods and practices*. World Bank Publications.
- Kigochie, P. W. 2001. Squatter rehabilitation projects that support home-based enterprises create jobs and housing. *Cities, Vol 18(4)*: 223-233.
- Kish, L. 1965. *Survey sampling*. New York: Wiley.
- Kling, J. R., Liebman, J. B., Katz L. F. & Sanbonmatsu, L. 2004. Moving to opportunity and tranquility: Neighborhood effects on adult economic self-sufficiency and health from a randomized housing voucher experiment, *Working paper April*, Princeton University.
- Kombe, W. & Kreibich, V. 2000. Reconciling informal and formal land management: an agenda for improving tenure security and urban governance in poor countries. *Habitat International, Vol 24*: 231-240.
- Larsen, C.A. n.d. *Social cohesion: Definition, measurement and developments*. Denmark: Aalborg University.
- Leach, M., Mearns, R. & Scoones, I. 1997. Environmental entitlements: A framework for understanding institutional dynamics of environmental change. Sussex: Institute for Development Studies. *IDS Discussion Paper 359*.
- MacPherson, L. n.d. Participatory Approaches to Slum Upgrading and Poverty Reduction in African Cities. *Hydra - Interdisciplinary Journal of Social Science, Vol 1(1)*: 85-95.
- Majale, M. 2008. Employment creation through participatory urban planning and slum upgrading: The case for Kitale, Kenya. *Habitat International, Vol 32*: 270-282.

- Marcano, L. & Ruprah, I. J. 2008. *An impact Evaluation of Chile's progressive housing program*. Inter-American Development Bank.
- McGaffin, R., Napier, M., & Karuri-Sebina, G. 2015. *South African township economics and commercial property markets*. Johannesburg: South African Cities Network
- McIntosh, C., Alegria, T., Ordonez, G. & Zentao, R. 2013. *Slum infrastructure upgrading and budgeting spillovers: The case of Mexico's Habitat program*. California: UCLA, Santiago.
- Mears, R. 2007. *Historical development of informal township settlements in Johannesburg since 1886*. Johannesburg, Indaba Hotel: Economic History Society of Southern Africa, Conference, 10-12 September.
- Meth, P. 2013. I don't like my children to grow up in this bad area: Parental Anxieties about Living in Informal Settlements. *International Journal of Urban and Regional Research* 37:10.1111/ijur.2013.37.issue-2: 537-555.
- Mpe, R. & Ogra, A. 2014. *Making great places in slums/informal settlements*. Durban: International Convention Centre: Planning Africa Conference.
- Mukhija, V. 2001. Upgrading housing settlements in developing countries: The impact of existing physical conditions. *Cities, Vol 18(4)*: 213-222.
- Naing L., Winn T. & Rusli, B.N. 2006. Practical issues in calculating the sample size for prevalence studies. *Archives of Orofacial Sciences, Vol 1*: 9-14.
- National Planning Commission (NPC). 2011. National Development Plan 2030. Pretoria: National Planning Commission.
- Ndinda C. 2006. Large and small houses in Luganda. *Development Southern Africa, Vol 23(3)*: 401-416
- Ndinda C. 2007. Women's participation in housing delivery in South Africa: The case of Ezilweleni. *Development Southern Africa, Vol 24(5)*: 665-680.
- Ndinda, C. 2009. But now I dream about my house: Women's empowerment in housing delivery in urban KwaZulu-Natal, South Africa. *Development Southern Africa, Vol 26(2)*: 317-333.
- Ndinda, C. 2011. *Women and subsidised housing in KwaZulu-Natal. The extent of empowerment*. Germany: Lambert Publishing.
- Nijman, J. 2008. Against the odds: Slum rehabilitation in neoliberal Mumbai. *Cities, Vol 25*: 73-85.
- NUSP. 2014. *Newsletter*. Pretoria: Department of Human Settlements, National Upgrading Support Programme and Housing Development Agency.
- Obeng-Odoom. 2012. Land reforms in Africa: Theory, practice and outcome. *Habitat International, Vol 36*: 161-170.
- O'Hare, G. & Abbot, D. 1998. A review of slum housing policies in Mumbai. *Cities, Vol 15 (4)*: 269-283.
- Onyebueke, V. 2001. Denied reality, retarded perception or inaction. *Cities, Vol 18(6)*: 419-423.
- Paul, S. 1987. *Community participation in development projects: The World Bank experience*. Washington D.C: The World Bank.
- Peters, P. 2009. Challenges in land tenure and land reform in Africa: Anthropological contributions. *World Development, Vol 37(8)*: 1317-1325.
- Peltzer, K., Davids, A. & Njuho, P. 2011. Alcohol use and problem drinking in South Africa: findings from a national population-based survey. *Africa Journal of Psychiatry, Vol 14*: 30-37.
- Rahnema, M. 1993. "Participation". In Sachs, W. (ed). *The Development Dictionary*. London: Zed Books.
- Ravallion, M. 2001. The mystery of the vanishing benefits: An introduction to impact evaluation. *The World Bank Economic Review, Vol 15(1)*: 115-140.
- Riley, E., Fiori, J. & Ramirez, R. 2001. Favela Bairro and a new generation of housing programmes for the urban poor. *Geoforum Vol 32*: 521-531.
- Ross, F. C. 2005. Model communities and respectable residents? Home and housing in a low-income residential estate in the Western Cape, South Africa. *JSAS, Vol 31(3)*: 631-648.
- SERI. 2013. *Targeting the poor? An analysis of free basic services and municipal indigent policies in South Africa*. Johannesburg: Socio-Economic Rights Institute of South Africa.
- Shaffer, P. 2012. Beneath the 'methods debate' in impact assessment: baring assumptions of a mixed methods impact assessment in Vietnam. *Journal of Development Effectiveness, Vol 4(1)*: 134-150
- Shisana, O., Labadarios, D., Rehle, T., Simbayi, L., Zuma, K., Dhansay, A., Reddy, P., Parker, W., Hoosain, E., Naidoo, P., Hongoro, C., Mchiza, Z., Steyn, N.P., Dwane, P., Makoae, M., Maluleke, T., Ramlagan, S., Evans, M.G., Jacobs, L., Faber, M. & SANHANES-1 Team. 2014. South African National Health and Nutrition Examination Survey (SANHANES 1) 2014 Edition. Cape Town. HSRC Press. Available at: <http://www.hsrcpress.ac.za/product.php?productid=2314&cat=0&page=1&featured&freedownload=1> Accessed December 2015.
- Skuse, A. & Thomas Cousins, T. 2007. Spaces of Resistance: Informal Settlement, Communication and Community Organisation in a Cape Town Township. *Urban Studies, Vol 44(5-6)*: 979-995.
- Smit, D. & Abrahams, G. 2010. *Incrementally securing tenure: An approach for informal settlement upgrading in South Africa*. Pretoria: Urban Landmark.

- Stats SA. 2010. *Report-03-09-10 - Levels and trends of morbidity and mortality among children aged under-five years in South Africa, 2006-2010*. Pretoria: Statistics South Africa.
- Stats SA. 2013. *South African Multiple Deprivation Index 2011*. Dataset. Statistics South Africa
- Stats SA. 2014. *Survey of employers and the self-employed*. Pretoria: Statistics South Africa.
- Stats SA. 2015a. *Millennium Development Goals: Country report 2015/Statistics South Africa*. Pretoria: Statistics South Africa.
- Stats SA. 2015b. *Statistical release P0441. Gross Domestic Product*. Second quarter. Pretoria: Statistics South Africa.
- Stellenbosch Municipality. 2011. *Langrug settlement enumeration report*. Stellenbosch: Stellenbosch Municipality & Community Resource Centre.
- Suresh, K.P. & Chandrashekara, S. 2012. Sample size estimation and power analysis for clinical research studies. *Journal of Human Reproductive Sciences*, Vol 5(1): 7-13.
- Syagga, P. 2011. Land tenure in slum upgrading projects. *Les Cahiers d'Afrique d'Iest*: 1-10.
- The World Bank. 2006. *Impact evaluating for slum upgrading intervention*. Washington D.C: The World Bank.
- Thomson, H., Thomas, S., Sellstrom, E. & Petticrew, M. 2009. The health impacts of housing improvement: a systematic review of intervention studies from 1887 to 2007. *Journal Information*, Vol 99(S3).
- Tipple, G. 2004. Settlement upgrading and home-based enterprises: discussion from empirical data. *Cities*, Vol 21(5): 371-379.
- Turley, R., Saith, R., Bhan, N., Rehfuess, E. & Carter, B. 2013. Slum upgrading strategies involving physical environment and infrastructure interventions and their effects on health and socio-economic outcomes. *Cochrane Database of Systematic Reviews*, (1).
- UN Habitat. 1996. *The Habitat Agenda: Chapter IV:B. Adequate Shelter for all*. Nairobi: United Nations Habitat.
- UN Habitat. 2003. *The challenge of slums: global report on human settlements 2003*. London: Earthscan Publications.
- UN Habitat. 2006. *State of world's cities report 2006/7*. Nairobi: United Nations Habitat.
- UN Habitat. 2009. *Urban indicators guidelines: Better information, better cities*. Nairobi: UN Habitat.
- UN Habitat. 2010. *State of African cities*. Nairobi: United Nations Habitat.
- Unger, A. 2013. Children's health in slum settings. *Arch Dis Child*, Vol 0: 1-7.
- WaterAid. 2008. *Turning slums around: The case for water and sanitation*. Durban: WaterAid.
- Weiss, C.H. 1995. Nothing as practical as good Theory: Exploring theory-based evaluation for comprehensive community initiatives for children and families. In Connel J. (ed). *New Approaches to Evaluating Community Initiatives: Concepts, Methods, & Contexts*. Washington D.C: Aspen Institute.
- White, H. 2009. *Theory-based impact evaluation: Principles and practice*. New Delhi: International Initiative for Impact Evaluation. Working paper No 3.
- White, H. 2011. Achieving high-quality impact evaluation design through mixed methods: The case of infrastructure. *Journal of Development Effectiveness*, Vol 3(1): 131-144.
- World Bank. 2015. *Social Capital Implementation Framework*. Available at: <http://webcache.googleusercontent.com/search?q=cache:4m8KdZDQOywJ:web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTTSOCIALCAPITAL/0,,print:Y~isCUR L:Y~contentMDK:20461319~menuPK:418218~pagePK:148956~piPK:216618~theSitePK:401015,00.html+&cd=1&hl=en&ct=clnk&gl=za> Accessed December 2015.
- XDS. 2012. *The realities of unsecured lending*. Xpert Decision Systems. Available at: <http://www.eighty20.co.za/credit-markets-south-africa/> Accessed December 2015.
- Yin, K. 1981. The case study crisis: Some answers. *Administrative Science Quarterly*, Vol 26(1): 58-65.