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AFFORDABLE HOUSING PUBLIC PRIVATE PARTNERSHIPS:

A Case Study of International Housing Solutions



UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG

A Research Report submitted to the Faculty of Engineering and the Built Environment, University of Witwatersrand, Johannesburg, in partial fulfillment of the requirements for the degree of Master of Science in Building.

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Date : 13th October 2017



DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the degree of Master's Degree in the School of Construction Economics at the University of the Witwatersrand. It has not been submitted before for any degree or examination in any other University.

Neo Kutama

_____Day of_____ (year) _____

ABSTRACT

In the context of declining government funding for affordable housing in South Africa, relying solely on government subsidies to deliver housing for low income households is un-sustainable. Public private partnerships (PPPs) have to therefore be considered as one of the possible alternative solutions to address the shortage that exists within this sector.

The objective of the study was to determine the suitability of PPP to improve the delivery of affordable housing within the South African context. This was answered in a case study approach by exploring a private equity investing organisation which contributes significantly within affordable housing space, International Housing Solutions (IHS). The case study also provides some insights into their successful business model.

The findings of the study revealed that PPP is a suitable model to improve the quality of affordable housing in South Africa. The study also highlighted conditions that must be met to achieve quality affordable housing in South Africa through PPPs.

The research concludes by making recommendations to both the government and the public sector in light of the findings of this research. Limitations for the study were highlighted and other variables to be researched that are important to further understanding of PPP as a model to improve the delivery of affordable housing in South Africa were suggested.

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1 Chapter One: Introduction

1.1 Background to the Study

Affordable housing is fast taking centre stage internationally as well as in the national agenda (Gopalan & Venkataraman, 2015; Witbooi, 2015 and Dube, 2013). With housing recognised as a basic need, governments at every level are discussing ways and means to provide access to housing for their citizens (Gopalan & Venkataraman, 2015). Internationally housing affordability is defined in various ways, so there is no clear-cut definition of the term 'affordable', as it is a relative concept and could have several implied meanings in different contexts (Jones Lang LaSalle Research, 2012). Affordability can be measured based on various indicators (Witbooi, 2015). According to (Litman, 2016), affordability is primarily concerned with cost burdens to lower-income households. On the other hand, Khakhi (2009) refers to housing affordability as a measure of expenditure on housing relative to the income of the household. Litman (2016), goes beyond to define affordability as households spending less than 30% of their budgets on direct housing costs but since households often make trade-offs between housing and transportation costs, it is recommended that affordability be evaluated based on lower-income households' ability to spend less than 45% of their budgets on housing and transport combined.

The concept of affordable housing came about as a means to alleviate the plight of the poor and is concerned with households without enough income to provide adequate housing for themselves and/or their families (Kung'u, 2009). These households are usually unable to purchase a home because they fail to qualify for a bond (*ibid*). It is important to realise that the problem of affordable housing does not only affect the poorest of the poor but working class people who are perceived to have 'good jobs' as well (Iglesias cited in Dube, 2013). As it currently stands, affordable housing is out of reach for many low-income earners who then find it challenging to commute to work (Moskalyk, 2008). Literature differentiates between social housing, and affordable housing (Gopalan, 2015). Social housing is provided by government while affordable housing is typically built by not-for profit or private players with government subsidies (*ibid*).

Since 1994, affordable housing delivery in South Africa has been a major priority for government because of the inherited problem of lack of access to affordable housing and high

levels of informality in its cities (Witbooi, 2015). The South African housing policy framework towards affordable housing is grounded in the legacy of apartheid that has resulted in backlogs in housing delivery, and unequal and racially stratified settlement patterns (Stats SA, 2006). This legacy has resulted in the marginalisation of the majority of non-white South Africans in urban areas, to certain areas, usually located on the periphery of urban centres, excluded from service delivery, infrastructure, and economic opportunities (Sobuza, 2010). The post-apartheid South African government has attempted, with various degrees of success, to provide basic housing for low income groups through various policies. For example; the Reconstruction and Development Programme (RDP) policy is one which had its focus on commitment to increasing the quantity of housing stock available to the poor as quickly as possible (Barry, *et al*., cited in Sobuza, 2010). The Breaking New Ground (BNG) policy was also subsequently introduced to address the rising housing backlog (DoHS, 2004). This policy contained practical guidelines to implement sustainable human settlements and move beyond simply increasing the housing stock.

Under Section 26 of the Bill of Rights of The South African Constitution, the right to housing is a constitutional right (Constitutional Assembly, cited in Dube, 2013 and Khakhi, 2009) that government should progressively achieve subject to available resources. However the South African housing sector remains characterised by an inadequacy in the supply of affordable and decent housing. This shortfall is more acute among low income households (Dube, 2013). It is estimated that whilst more than 2.5 million affordable houses have been delivered since 1994, the need for formal housing has grown faster than the rate of delivery due to the growth in population and urban migration (South African Institute of Race Relations, 2015/6). Urbanisation and the growing (and increasingly youthful) population have, in turn, resulted in societal problems such as shortage of housing in urban centres, homelessness, illegal occupation of existing structures in urban centres, high levels of rapid expansion of unplanned urban settlements and slums, characterised by a lack of basic infrastructure and services, overcrowding and substandard housing conditions (Diamond, cited in Dube, 2013).

As much as it is imperative for government to fulfil and uphold the Constitution of the country, it should be recognised that government faces numerous challenges in delivering affordable housing (Khakhi, 2009). The two main issues which have been identified include access to land and government funding (*ibid*.). There is limited direct and indirect

government funding of affordable housing, and government is failing to leverage assets such as land towards the provision of affordable housing (Sheko, et al., 2015). On the one side, public funds cannot indefinitely supply sufficient quantities of economic- and low-rent homes (Brown, et al., 2006) whilst on the other side, there is limited availability of well-located land for residential development (Khakhi, 2009). According to (Gopalan & Venkataraman, 2015), the practice of making land available on the outskirts of the city (as has often been the case in RDP housing) is unsuitable and does not promote the policy of sustainable integrated human settlements.

Researchers have therefore explored the possibility of increasing the supply of low income housing by stimulating private sector involvement in affordable and low income housing projects (Susilawati & Armitage, 2004; Brown, Orr & Luo, 2006 and Whitehead, 2007). These private sector initiatives have taken many forms but it has been generally recognised that public private partnerships (PPPs) have the potential to offer a long-term, sustainable approach to making better use of tax payers' money (Brown, Orr & Luo 2006; Kung'u, 2009). Furthermore, it is believed that PPPs offer the opportunity to pool expertise, resources and skills in a collaborative fashion rather than a purely competitive one (Moskalyk, 2008). This in turn improves the levels of service offered (UN HABITAT, 2011).

Given the above, the use of PPPs, may present a practical solution to the provision of affordable housing in the South African context despite the fact that there is no agreement amongst researchers on the definition of PPPs. This is because amongst other things, the provision of housing requires significant capacity to implement and funding, which many government authorities lack (Berry, 2002; UN HABITAT, 2011). Although not so commonly adopted, PPP's in affordable housing have been used around the world in countries such as Nigeria, Australia, Malaysia, China, UK, Singapore, US, Mexico, Egypt, India, Pakistan and Canada to name a few (Khaled Mohammed AL shareem*, 2014) (Abdul-Azis, 2011). In the low income countries, PPPs in housing are still emerging and the extent of their use has depended, amongst other things, on the economic strength, prevalent political environment and housing tradition of a particular city (Sengupta, 2006).

While some success has been documented in India and Nigeria, for the most part, housing PPPs in the developing world are relatively sparse, with little empirical data made available to show any real trend to successful PPP housing policy. The level of success of PPPs varies sharply, particularly in the low-income countries, whilst their potential in consistently

generating efficiency gains in first world countries like Canada, the Netherlands and the United Kingdom cannot be overlooked (UN HABITAT, 2011).

It should be noted that PPPs are not new to South Africa. These have been used in infrastructure projects such as highways and hospitals (National Treasury, 2007) however, the use of PPPs in housing has to the best of my knowledge not been investigated.

1.2 Problem Statement

Housing is a basic human need and a right as stipulated in the South African Constitution. However, the combination of the legacy of apartheid spatial planning and rapid urbanisation has led to the shortage of housing in urban centres in South Africa, especially within the affordable sector. The South African government has used a number of initiatives to try and deal with this, for example Breaking New Ground (BNG) and RDP, but this is still hampered by availability of funds and access to land.

Internationally, PPPs have been seen as one possible solution for the provision of affordable housing and there are some isolated examples of such PPP arrangements being trialled in South Africa. However the appropriateness and suitability of this model for housing delivery has not been evaluated systematically.

1.3 Importance of the study

The findings of this research will add to the relevant body of knowledge regarding the use of PPP's in affordable housing to assist in addressing the backlog in affordable housing. The study can be used as an input by the South African government and private entities to create a sustainable PPP model capable of delivering affordable housing. It can also be used by various stakeholders as a useful tool to shed light on issues related to delivery of affordable housing within the South African context.

1.4 Aim of the Study

The aim of this research is to evaluate whether public-private partnership (PPP) is a suitable model to improve the delivery of affordable housing in a South African context.

1.5 Research Questions

Primary Research Question:

Are PPP's a suitable model to be used in providing affordable urban housing in South Africa?

- What makes IHS funding model to be suitable /appropriate, and;
- Can the model be replicated to other projects elsewhere in the country?

Secondary Research Questions:

- How do key stakeholders collaborate in partnerships for provision of affordable housing?
- How do the partnerships work to overcome barriers to better affordable housing?

1.6 Scope

The scope of this research is limited to the South African affordable housing sector market. While PPPs have been extensively researched globally, the literature has mainly focused on the implementation of PPP in infrastructure projects and there has been insufficient attention given to the social infrastructure projects (Onyemaechi P., Samy M. and Pollard D., 2015).

1.7 Limitations

There were several limitations to the research:

- Information about the funding model for developments was not shared with the researcher as it was deemed confidential.
- Documents and records about the Fleurhof housing project could not be sourced despite the interviewee agreeing to share such with the researcher. This hampered the research in a big way because the research was based on a case study of this project. Some of the information was however sourced from the IHS website but it was not sufficient.

Furthermore, only one organisation was selected for a case study and, in addition, an investigation was done on one PPP project which was completed by the selected organisation.

1.8 Research Methodology

The case study approach is adopted in this research. This approach is a research strategy involving in-depth empirical investigation of a particular phenomenon. In immersing

themselves with the activities of people to obtain an intimate familiarity with their worlds, qualitative researchers often use some form of case study. As is the case with qualitative research generally, case studies are typically used where little or nothing is known about the phenomenon of interest (Gaya, 2016).

1.9 Ethical Concerns

According to (Piccolo &Thomas 2009), there are a number of key ethical issues that protect the rights of research participants. These are protection from harm, informed consent, the right to privacy and honesty with professional colleagues. The principle of informed consent requires that respondents not be forced to participate in research. In this research paper, the participant was well informed about the nature of the study and the fact that participation takes place on voluntary basis (Annexure B).

1.10 Structure of the Research Report

The following structure is anticipated for this research report:

Chapter one gives an overview of the background of the study, followed by objectives of the study, the statement of problem, scope and limitation of the study and lastly the importance of the study.

Chapter two, which contains the literature review provides a brief description of the key concepts of PPPs in general and subsequently sets the scene for PPPs in the affordable housing context both locally and internationally.

In **Chapter three**, the research methodology used for this research report is explained in sufficient detail. It explains the research design, data collection, measuring instruments and data analysis techniques used in the research report.

Chapter four analyses a case study on International Housing Solutions' Fleurhof housing project

The analysis of research questions and recommendations are presented in **Chapter five**.

The final chapter, **Chapter six**, concludes the study.

2 Chapter Two: Literature Review

To create housing that is truly affordable, a lot of money is needed. The federal and provincial governments have essentially declared that they are out of affordable housing provision. Basically, the cost of creating social housing is enormous. We have been investigating ways to create affordable housing'

By: Mitch Cohen, the Daniels Group (Whitzman, 2015)

2.1 Provision of Housing in South Africa

2.1.1 Introduction

Despite the constitutional right to housing for all, as outlined in section 26 of the Bill of Rights, South Africa still has a housing crisis even after years of democracy (Tissington, 2010). It is generally recognised that the state cannot deliver housing on the scale required in South Africa at a sustainable rate or within the means of lower-income households (*ibid.*) 'There is growing evidence that it will be impossible for South Africa's current settlement policy to meet its Millennium Development Goals (MDGs) targets to "eradicate informal settlements" as it is currently implemented (Emerging Market Private Equity Association, 2012). The housing delivery processes aimed at the needs of the urban poor suffer from severe capacity problems and cannot draw on the resources located in the traditional housing and property markets'. Further, the right to adequate housing is intrinsically bound up with a number of other cross-cutting rights – including the rights to, equality, human dignity, just administrative action, access to information and access to justice – as well as a range of socio-economic goods and amenities. These include access to land, water, sanitation, electricity, livelihoods, transport, clinics and hospitals, schools, universities and other cultural and recreational amenities such as libraries, public spaces, swimming pools, sports fields and churches.

Taken together, these rights and socio-economic goods are meant to alleviate poverty, reduce inequality and improve the quality of people's lives. The same view is also expressed in (Kung'u, 2009) where it is cited that, although shelter is a basic human need, it is also more than that: "housing is about everything other than houses. It is about the availability of land, about access to credit, about affordability, about economic growth, about social development, about environment". In (Burgoyne, 2008) it was further stated that housing is considered as a

"lead actor" as it acts as a catalyst in the growth of the economy (i.e. employment and income generating opportunities). It should be noted though that, although housing is considered as a catalyst in the growth of the economy it also carries with it some negative impacts along with it. Table 1 below gives an overview of both the positive and negative impacts brought about by affordable housing.

	Users	**Development**
Positive Effects	• Improvement in health • Proximity to transport • Better access to employment opportunities • Better access to educational institutions • Increased safety • Social inclusion	• Direct employment • Indirect employment • Skills transfer • Foster sustainable human settlements • Increased demand for new infrastructure
Negative Effects	• Noise • Distance from work & social networks • Social exclusion	• Pollution • Congestion • Crime • Community disruption • Environmental issues • Strain on current infrastructure • Increased demand for new infrastructure

Table 1: Positive and negative effects of affordable housing provision (source:www.gpf.co.za)

The continued lack of adequate housing and basic services (water, sanitation, electricity, etc.), growing unemployment and a largely unresponsive state, particularly at the local level, have resulted in an increasing number of so-called 'service delivery protests' in townships and informal settlements across South Africa (Tissington, 2010). The protests occur when the government does initiate development projects and they do so with limited or non-existent consultation with and participation by, affected communities; instead, external bodies undertake these projects and consultants often drive them.

Whilst, it can be said that the Constitution obliges the state to 'respect, protect, promote and fulfil' the rights contained in the Bill of Rights, the Housing Act 107 of 1997 sets out the roles and responsibilities of the three tiers of government with respect to housing. Housing policy is formulated and funded mainly by the national government, but is implemented primarily by provincial and local government (DoHS, 2004). Affordable housing development in South Africa is also well regulated as well as the role of the various spheres of government (Witbooi, 2015). National government must establish and facilitate a sustainable national housing development process by formulating housing policy. It must also

monitor implementation by promulgating the National Housing Code and establishing and maintaining a national housing data bank and information system. Provincial government must create an enabling environment by doing everything in its power to promote and facilitate the provision of adequate housing in its province, including allocating housing subsidies to municipalities. Provincial government must act within the framework of national housing policy. Local government, i.e. municipal government, must implement policy, settlement planning and the delivery of housing (Tissington, 2010).

Every municipality must take all reasonable and necessary steps within the framework of national and provincial housing legislation and policy to ensure that the constitutional housing right is realised. Municipalities should do this by actively pursuing the development of housing, addressing issues of land, services and infrastructure provision, and by creating an enabling environment for housing development in its area of jurisdiction. In 2002, local authorities received the power to become developers of low-income housing projects themselves. Thus, accredited municipalities will be responsible for all housing functions in their area, while the province assumes responsibility for monitoring and evaluation.

2.1.2 Housing Policy in South Africa

In the past years there have been many shifts in housing policy. This section provides an overview of housing policy development in respect of the realisation of the right of access to adequate housing for all.

The South African housing policy framework and the housing challenges can be traced back to the past political systems, which have left a legacy of backlogs in housing delivery, unequal and racially stratified settlement patterns (Sobuza, 2010). This legacy has caused the confinement of the majority of non-white South Africans, to certain areas, usually located on the periphery of urban centres, excluded from service delivery, infrastructure, and economic opportunities (*ibid*). Furthermore, countries like South Africa, experience rapid urbanisation and as a result, huge competition for housing exists (South African Minister of Housing, cited in Burgoyne, 2008). The consequences of urbanisation also bring about amongst other things, backlog and inefficiencies in public infrastructure provision like housing, and other basic infrastructure (IRR, 2015). Large increases in the urban population of developing countries have dramatically increased the demand for housing. Urban problems in developing countries have become more acute as people migrate to the cities in search of a ‘better life’,

which in turn, places more pressure on urban infrastructure and the physical environment (Aldrich & Sandhu, 2003: 23). In South Africa, backlog in housing alone, is estimated to have increased from 1.5 million since 1994 to 2.1 million units, while the number of informal settlements has gone up from 300 to 2 225, an increase of 650% (IRR, 2015).

2.1.2.1 Policy focus pre-1994

The formulation of South Africa's housing policy commenced prior to the democratic elections in 1994, with the creation of the National Housing Forum (NHF) (Burgoyne, 2008). This forum was a multi-party, non-governmental negotiating body, comprising of nineteen members from business, the community, government and development organizations. At these negotiations, a number of elaborate legal and institutional interventions were researched and developed. The Government of National Unity in 1994 made use of these negotiations and investigations when it formulated South Africa's housing policy.

The National Housing Forum (NHF) process preceded the development of national housing policies, the White Paper on Housing (1994) and Breaking New Ground (2004) and these are discussed below.

2.1.2.2 Policy focus in 1994: RDP

The South African Reconstruction and Development Programme (RDP) housing delivery began after the 1994 elections with a narrowly focussed commitment to increasing the quantity of housing stock available to the poor as quickly as administratively possible (Sobuza, 2010). Over the past decade, low income housing has been strongly focussed on delivery of subsidised housing units; (i.e. the emphasis was on the construction and transfer of units to individual owners, where long-term maintenance was the responsibility of the owners). Attempts by the government to provide affordable housing resulted in the development of more problems as government's attempts to address this problem resulted in the creation of a housing finance gap as their solutions excluded groups viewed as being better off in the low income band. People earning more than R3 500 were left out of projects and at the same time could not gain access to finance in the form of subsidies (Diamond, 2009 cited in Dube, 2013).

2.1.2.3 Policy focus post 1994: BNG

In 2004, there was a major shift in housing policy with the introduction of the breaking new ground (BNG) plan, marking a turnaround in housing delivery. The strategy focussed policy gave attention to the development of sustainable human settlements, as opposed to the delivery of subsidised housing units. The new human settlements plan reinforces the vision of the department of human settlements, to promote the achievement of a non-racial, integrated society through the development of sustainable settlements and quality housing (DoHS, 2004). The BNG plan introduced new options for delivery and a range of delivery options, with an emphasis on rental housing as a form of tenure, recognising it as a significant contributor to meeting the housing challenges in South Africa (Sobuza, 2010). International best practice shows that a layering of different forms of tenure is required to fast track affordable housing delivery, and that a balanced approach which uses both rental and ownership tenures, where appropriate, to meet the specific needs of low income households is more appropriate than narrowly focusing on one mode (*ibid).*

Despite these aims, BNG has been criticised for not fully addressing the key weaknesses with the previous policy, as identified in the department's research process, or offering clear direction on the difficult political issues of land ownership, the land market and rights around property values (Tissington, 2010). The counter argument continues to say, 'Although the programme strives for broader outcomes, key indicators of performance appear to remain largely quantitative, focused around numbers of houses produced and budgets spent'. Further, some of the weaknesses of housing policy to date exist outside the ambit of the government organs responsible for housing, and there is a worrying lack of alignment between the current focus in government on the contribution of housing to poverty alleviation and the ability of housing policy to achieve these aims (Sobuza, 2010).

2.1.3 Affordable housing

The promotion and development of affordable housing has a number of fundamental goals. The most basic and important being: "the provision of shelter and the potential creation of wealth (Dube, 2013). The provision of shelter and creation of wealth are contradicting concepts and do not go hand in hand. This is because it is difficult to create wealth from affordable housing as the cost has to be low in order for the required income group to be able to afford the cost of housing. This makes it extremely difficult to convince the private sector to invest in these projects. Property owners, developers and investors' main aim is to create

wealth from their investment and they are not necessarily concerned and do not prioritise the provision of shelter.

2.1.3.1 What is meant by "affordable /and or affordability"?

As previoulsly discussed under chapter 1, there is no clear cut definition for the term affordable. "Affordability" as a concept is very generic and could have different meanings for different people based on differences on income levels. According to Tonkin (2008:74), in the housing context, affordability refers to the ability to purchase a housing unit without restricting demands on other financial resources. Affordability of housing can be determined either in terms of housing costs and/or household incomes (Kung'u, 2009). For an example, according to (CAHF, 2012), affordable housing is described in terms of housing cost. It is stated that affordable housing is that with prices or values below R500 000 or less (but can be higher or lower depending on intent). On the other hand, (Sheko, 2015) defines affordable in terms of income as follows: "*affordable housing is that which costs no more than 30% of gross household income for low income households*".

Affordable housing is that which can be rented or purchased within certain constraints (i.e. borrower's income and house prices), (CAHF, 2012). According to Sigodi cited in (Sobuza, 2010), affordable housing requires a balanced approach which incorporates both rental and ownership tenures, to meet the specific needs of low income households rather than narrowly focusing on one mode. In this manner, affordable housing identifies the need to address inequalities and accepts that our cities must be more integrated across income and racial groups. Affordable housing is a term that is often applied to dwelling units that is within the financial means of those in the lower income ranges of a geographical area (Sheko, 2015). Low-income individuals are those without enough income to provide adequate housing for themselves and/or their families and hence these families are usually unable to purchase a home because they fail to qualify for a mortgage (Sobuza, 2010). According to (Gopalan, 2015), the provision of affordable housing is therefore dependant on three main sources of financing, these sources can be summarised as:

- Government subsidies in the form of capital contributions towards the cost of developing a house;
- An array of commercially available credit products available to both the developer and end user, and;

- Monetary contributions from households.

The affordability of housing can also be affected by increased house prices and interest rates (Sheko, 2015).

2.1.3.2 The difference between social and affordable housing

Affordable and social housing are often interchangeably used but are quite different from each other (Sheko, 2015). Literature differentiates between social housing, which is provided by governments to the economically weaker sections of society, and affordable housing, which is typically built by not-for-profit or private players with government subsidies (Gopalan, 2015). Affordable housing is that which is catered for beneficiaries with a low monthly income which can be for rental or bonded units for individual ownership (Ngcuka, 2010). According to (Khakhi, 2009), a far more accurate and realistic term of affordable housing could also be known as 'below-market price housing'. In absolute terms affordability is relative to all housing, while social housing is specific to housing accessible to those least able to fund themselves. Affordable Housing is applied to either or both with little discrimination (Khakhi, 2009).

Social housing on the other hand is an option for low-to-medium income persons that is provided by housing institutions, and that excludes immediate individual ownership (Ngcuka, 2010). Social housing is considered to be a key model, which provides medium density, affordable, rental housing to low and middle income households as it contributes to transforming urban spatial patterns through promotion of integration and densification in close proximity to economic and social amenities (DoHS, 2004). (CAHF, 2012), defines social housing as "A rental or co-operative housing option for low income persons at a level of scale and built form which requires institutionalised management and which is provided by accredited social housing institutions or in accredited social housing projects in designated restructuring zones". A significant aspect of social housing is the substantial financial support it has received from government. In a variety of combinations, governments have generally provided substantial capital subsidies to cover the costs of developing acceptable quality units; additional funds to cover running costs on an annual basis to ensure that rents are affordable to the target population; land at reduced costs; and tax incentives to registered Social Housing Institutions. In some cases, guarantees have also been provided to encourage the entry of private financial institutions into the social housing market. (CAHF, 2012).

2.1.4 Challenges in the provision of affordable housing

The main challenges to the delivery of housing can be categorised as financial, social and institutional framework (Kung'u, 2009). Financial factors include poor economy in the country's high cost of infrastructure, low levels of investments, difficulty in accessing finance and escalating cost of building materials. Social factors include population explosion, rapid-rural to urban migration and high poverty levels. Institutional frameworks such as the housing policies in place have failed to facilitate a conducive environment for investment in affordable housing. The prices of land in urban areas have been soaring in recent years. The rapid influx of people to the urban areas has created great demand for land causing prices in residential areas to increase rapidly. All these factors make it difficult to provide housing to the poor.

2.1.4.1 Land

Land is a scarce and valuable resource. Low cost housing developments are often poorly located on the margins of cities. The availability of appropriate land is a main concern, as the majority of South African citizens live in inadequate housing that is badly located and often without land tenure. Land on the periphery is cheaper and therefore more 'affordable' for low income development (Burgoyne, 2008). In urban areas land is highly valued and is mostly in the hands of government and the local authorities (Kung'u, 2009). The high demand for land by competing interest groups i.e. government, private sector, residential groups and individuals has pushed prices up. This makes land inaccessible to the majority who need it most but cannot afford its premium price. Public land is almost exhausted in urban areas while most of the available land is unplanned and has no basic infrastructure (*ibid*).

The cost of land acquisition is one of the most important components of the cost of housing (Khakhi, 2009). Public owned land provides an important opportunity to reduce the direct cost of housing to low income households, as the land can be made available to the end user at a subsidised rate (*ibid*). This implies that publicly owned land is an important resource for restructuring the city. It is also an irreplaceable resource, so the highest and best use of the land should be carefully considered before embarking on a development program for the land.

It should be noted however that, governments are not explicitly prevented from disposing of land assets for less than market value, they are obliged to consider the land valuation based

on highest and best use and justify any discount below this on the basis of community benefit (Sheko, 2015). Discussions with local and state government stakeholders have suggested that they would consider providing such a discount, but not providing land for free. Another issue is that of how to provide land for affordable housing purposes and ensuring that community benefit is retained in perpetuity. Assuming that land is able to be provided at less than full market value, the resultant reduction in cost creates an opportunity to assemble a more attractive investment

2.1.4.2 Financial constraints

Limited access to finance is a major limiting factor in housing development and the sources of funds for shelter are few (Kung'u, 2009). Insufficient state resources are being made available for housing and urban development (Burgoyne, 2008). Furthermore, the subsidy amount remains insufficient for the provision of an adequate housing unit on an adequately serviced and well-located piece of land (*ibid*). The following form part of the financial constraints:

- *High cost of infrastructure:* Housing development or upgrading of informal settlements requires installation of infrastructure such as water, sewerage, roads, electricity, social services and security. (Smith 2006, cited in Kung'u, 2009). Infrastructural facilities therefore form a major and vital component of shelter provision.
- *Low levels of investment and difficulty in accessing finance:* Limited access to finance is a major limiting factor in housing development. The sources of funds for shelter are few. Qualifying terms for mortgages are still too stringent despite the fact that housing is still in short supply. Low affordability due to poverty and high interest rates on mortgages, have hindered the development of the housing sector.
- *Escalating cost of building materials:* Some of the materials which are produced in some large-scale industries end up being costly due to high costs of production

2.1.5 Why affordable housing matters

The importance of affordable housing is neatly captured in the following statement by the Affordable Housing Institute quoting Rakesh Mohan, Deputy Governor of the RBI, as cited in (Gopalan, 2015): "*future national competitiveness and economic success will depend on the comparative efficiency of cities. Because housing is where jobs go to sleep at night, the*

quantity, quality, availability and affordability of housing become key components in national economic competitiveness".

A number of direct costs, economic and social, are imposed on a household when it cannot afford to rent a dwelling appropriate to its multiple needs (Berry, 2002):

a) *Housing related financial hardship or poverty*: Households whose incomes were in the bottom two income quintiles and paid housing costs in excess of 30 per cent of income were deemed to have insufficient income left to purchase the other necessities of life like clothing, food, transport, domestic power and health services. Insufficient purchasing power to support a basic acceptable lifestyle, in the context of socially and historically established norms.

b) *Overcrowding and homelessness*: Homelessness is a complex and multidimensional problem but, clearly, one major factor in its growth in the recent decade is a lack of affordable housing appropriate to the needs of the diverse group of low income tenants.

c) *Health problems*: Overcrowding and poor housing conditions have been associated with a range of health problems (National Health Strategy, 1992, cited in Berry 2002). Homelessness, in particular is implicated in respiratory illnesses and poor nutrition, especially among children and a high prevalence of substance abuse (Clough, 1991; Cass, 1991, cited in Berry 2002).

d) *Family instability and breakdown:* Inadequate housing, financial stress and forced mobility can contribute towards growing conflicts and pressures within households, culminating in domestic violence and family break-up.

e) *Reduced employment opportunities:* An absence of affordable housing in areas accessible to jobs reduces the opportunities for people to secure and keep paid employment. Unemployment and low and unstable income prospects, in turn, narrow the long term housing opportunities of people living in these areas, reinforcing patterns of marginalisation and social exclusion (Stubbs, 1998, cited in Berry, 2002).

f) *Poor educational attainment*: Financial stress within the family and frequent housing moves disrupts the schooling of children, while living in overcrowded and unhealthy

accommodation also undermines the capacity of children to perform well at school. These outcomes are critical for the life-long economic prospects of children.

g) *Increasing crime*: The links between poor housing and crime are complex and often indirect. Anecdotal evidence suggests that large public housing estates are sometimes associated with drug dealing and associated criminal acts. Poor housing and high mobility are probably implicated as one among several reinforcing factors in the lifestyles of people perpetrating crimes and suffering as its victims.

2.2 Setting the scene for PPPs

2.2.1 Introduction

The market cannot effectively deliver housing for all and, in order to provide adequate and affordable housing for the lowest income group, some form of public support is necessary (Moskalyk, 2008). However, in the context of declining government funding for affordable housing, relying solely on government programs and subsidies to deliver and manage housing for low-income households is unsustainable. Governments worldwide have therefore sought to increase the involvement of the private sector in the delivery of public services (UN HABITAT, 2011). These initiatives have taken many forms, such as the outright privatisation of previously state-owned industries, contracting out of certain services and the use of private finance in the provision of social infrastructure (Kung'u, 2009). Such partnerships between the public and private sector are now accepted as an alternative to the traditional state provision of public facilities and services (Mathonsi, 2012). Arguably, this joint approach allows the public sector client and the private sector supplier to blend their special skills and to achieve an outcome that neither party could achieve alone (*ibid*).

2.2.2 The Concept and Origins of PPPs

The use of PPPs has a long tradition in developed countries (Sengupta, 2004) and according to Dube (2013), it has been in operation since 18th century with toll roads and railways. These PPP arrangements have been used for decades in various countries including South Africa (Chisa, Ayode, Ikeni and Gambo, 2015). They are increasingly being adopted by governments in other countries as a way of increasing access to infrastructure services for their citizens and economies. Initially, PPPs involved urban construction projects to facilitate joint development but over time, the concept of PPPs expanded to include joint technology or

ecological projects, as well as partnerships in the area of education, health services, and prison incarceration (Jomo, Chowdhury, Sharma and Platz, 2016). Globally, Public-Private Partnership arrangements are often entered into to accelerate the implementation of high-priority projects through advanced technologies that are usually not available through standard public procurement processes (Mathonsi, 2012).

The concept of PPP is underpinned by a governments desire to resolve capacity constraints in the provision of public facilities and services by calling upon private management skills to increase the efficiency, effectiveness and quality of facilities and services delivery (Mathonsi, 2012). The level of private sector involvement might range from simple service provision without recourse to public facilities, through service provision based on public facilities usage, up to and including full private ownership of public facilities and operation of their associated services (*ibid*). These partnerships come in all sizes and types, which make it difficult to group them in a consistent fashion.

2.2.3 Definition of PPPs

Literature about Public-Private Partnership (PPP) indicates that PPPs are notoriously difficult to define to the point that PPP has been defined differently by academics, public agencies and international organisations, with the result that a universal definition to which all would agree is elusive (Evans & Bowman, 2005; Hodge, 2005 and Jefferies & McGeorge, 2008 cited in Mathonsi, 2012). The following are three examples of definitions by various researchers as cited in (Mathonsi, 2012) to describe PPPs:

i. Hodge and Greve (2005) defined PPP as institutional cooperation between the public and private sectors designed to increase the efficiency and effectiveness of public service delivery.
ii. Hayllar (2010) defines PPP as a contractual arrangement involving the private sector in the delivery of public services based on a partnership approach where the responsibility for the delivery of services is shared between the public and private sectors, both of which bring their complimentary skills to the enterprise.
iii. Van Ham and Koppenjan (2001) defined PPP as a cooperation of some sort of the durability between public and private actors in which they jointly develop products and services and share risks, costs and resources that are connected with these products.

Therefore, there is no clear agreement on what does and what does not constitute a PPP (Jomo, *et. al*, 2016). Most research concludes that an authoritative definition of PPP, one that encompasses all the different variations of the concept currently in use, is still not logically possible (Mathonsi, 2012). Another misconception of the term is that it is a synonym for privatisation (Moskalyk, 2008). Nevertheless, the goal of PPPs is to exploit synergies in the joint innovative use of resources and in the application of management knowledge, with optimal attainment of the goals of all parties involved, where these goals could not be attained to the same extent without the other parties (Jomo, et. al, 2016).

2.2.3.1 Suitability of PPPs

The main objective of this study is to evaluate whether public-private partnership (PPP) is an appropriate instrument to improve the delivery of affordable housing in South Africa. Suitability in this case refers to whether PPPs can be applied within the South African context to resolve the challenges faced by the affordable housing system. In section 2.2.2 above, it was established that PPPs have been in existence since the 18th century and have been used for infrastructure projects in various countries but this has not been established for South Africa, especially in the affordable housing.

2.2.4 Critical success factors for PPPs to thrive

Critical success elements are significantly important to help firms or organizations to identify key factors that firms should focus on in order to be successful in a project (Ismail, 2013).

For PPPs to work there should be favourable political, legal, economic and commercial environments for private sector participation (Mathonsi, 2012). The government is in a better position than any party in creating such environments, which largely eliminate fears of the private sector concerning various risks, especially political risks such as expropriation and nationalisation (*ibid*). According to Li (2003) and Cheng (2007) as cited in (Ismail, 2013), there are 18 critical success factors that they have identified. The eighteen factors have been widely used and are recognised by the industry. Below is a table of the critical success factors as identified;

No.	**Critical Success Factors**
1	Stable macro-economic condition
2	Favourable legal framework

3	Sound economic policy
4	Available financial market
5	Multi-benefit objectives
6	Appropriate risk allocation and risk sharing
7	Commitment and responsibility of public and private sectors
8	Strong and good private consortium
9	Good governance
10	Project technical feasibility
11	Shared authority between public and private sectors
12	Political support
13	Social support
14	Well organised and committed public agency
15	Competitive procurement process
16	Government involvement by providing guarantee
17	Thorough and realistic assessment of the cost and benefits
18	Transparency procurement process

Table 2: 18 factors that contribute to success of PPP's (source: Ismail, S., 2013)

The identification of critical success factors will enable efficient allocation of limited resources. The critical success factors can be identified based either on quantitative measures or on expert opinions (Mathonsi, 2012).

2.3 PPP in South Africa

Since 1999, Public-Private Partnerships in South Africa have been regulated under the Public Finance Management Act (1999) (PFMA) and Treasury Regulation 16, which governs municipal PPP's under the Municipal Finance Management Act (2003) (MFMA), providing a clear and transparent framework for government and its private sector partners to enter into mutually beneficial commercial transactions for public good (National Treasury, 2007).

PPP is very much a buzzword in South Africa today, and the South African government has progressively increased the number of PPP transactions covering a wide range of sectors including transport, office accommodation, healthcare, eco-tourism, social development and correctional services (Mathonsi, 2012). Examples of PPP projects undertaken in South Africa are as follows (National Treasury, 2007):

i. Trans African Concessions:

In 1996, the governments of South Africa and Mozambique signed a 30-year concession for a private consortium, Trans African Concessions (TRAC), to build and operate the N4 toll road from Witbank, South Africa to Maputo, Mozambique. After the 30-year period, control and management of the road reverts to the governments. The contract was worth three billion rands (at 1996 estimates) (Department of National Treasury, 2007). TRAC financed the project while the governments of South Africa and Mozambique jointly provided a guarantee of the debt and, under certain conditions, guaranteed the equity as well.

ii. South African National Parks

In 2001, South African National Parks (SANParks) signed a BOT concession with Nature's Group, a consortium formed to outsource management of 11 restaurants, two shops and three picnic sites in the Kruger National Park Game Reserve for just under 10 years (Department of National Treasury, 2007). The consortium has the right to operate the facilities (including the right to use, design and construct) according to parameters provided by SANParks. In return, Nature's Group pays a monthly concession fee equivalent to approximately 13% of its turnover to the SANParks.

iii. Gautrain Rapid Links

The Gautrain Rapid Rail Link (Gautrain) was another large infrastructure project delivered through a PPP. In 2006, the Gauteng Provincial Government signed a 20-year PPP contract with the Bombela Concession Company to design, build, part-finance and operate the Gautrain Rapid Rail Link. After the 20-year period, control and management of the Gautrain will revert to the Gauteng Provincial Government. This was the biggest PPP in Africa and the largest rapid rail link infrastructure project in the African continent with a value of 25 billion rands.

iv. Correctional Services

Lastly, facing a significant shortage of prison space, the South African government through the departments of Correctional Services and Public Works implemented a BOT model by signing two 25-year concessions for maximum-security prisons in Bloemfontein and Louis Trichardt as part of its Department of Public Works Asset Procurement and Operating Partnership Systems (APOPS) in 2000 (Department of National Treasury, 2007). The two winning consortia were responsible for designing, building, financing, operating and transferring the prisons. The facilities hold approximately 3,000 inmates each and were fully operational less than two years after contract signature at a cost of 1.7 billion Rands/ 245

million US dollars (Bloemfontein) and 1.8 billion Rands/ 259 million US dollars (Louis Trichardt) respectively.

2.4 Why PPPs?

Generally, PPPs can provide a wide variety of net benefits for a government (UN HABITAT, 2011). The key drivers for involving the private sector in the provisioning of public services were (and are still) to address public sector budget deficits and to search for greater efficiency, creativity, satisfying growing demands, and the expectation of new and upgrading of existing ageing infrastructure (Mathonsi, 2012). Below is a diagram outlining the key drivers of PPPs.

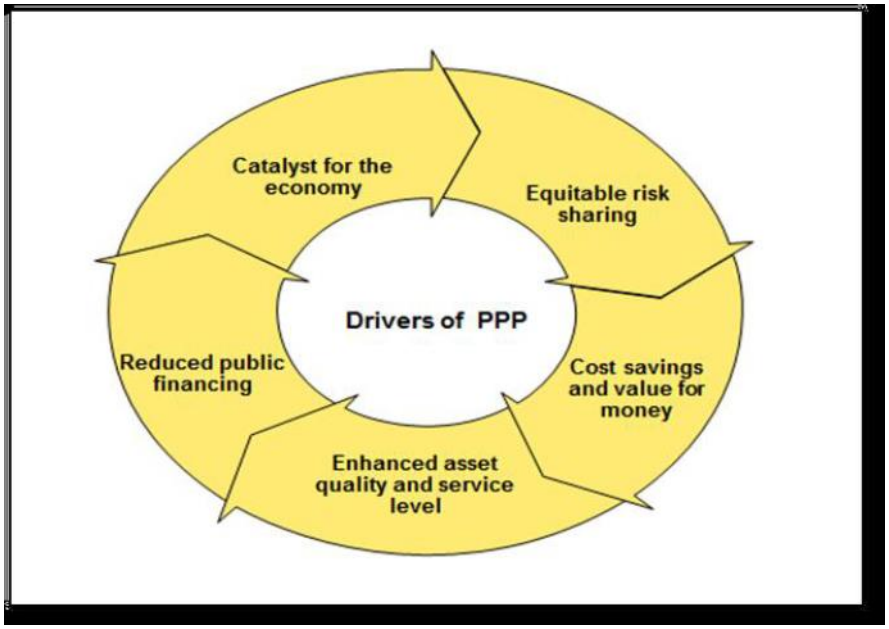


Figure 1.Key Drivers of PPP's: Source: Chan et al. 2012 (cited in Mathonsi, 2012)

2.5 PPP in Affordable Housing

The emergence of PPP is rooted in the enabling approach, where focus shifted the direct provision of housing by governments, to a focus on governments providing an enabling environment for low income housing provision by other parties. The primary objective of the enabling approach has been to improve the efficiency of the housing sector by the public sector concentrating on eliminating constraints on both the supply and demand sides (Kung'u, 2009).

With increasing concerns about housing affordability, for low-income and moderate income households, we need to think outside our current primary models of housing assistance, that is central government provision of state houses and the accommodation supplement. Partnerships between organisations from the public, private and non-profit sectors provide new models for delivering affordable housing (Mathonsi, 2012). International experience in this area is highlighted, and the lessons and implications, and key components of these successful partnerships are identified. Partnerships may result in the achievement of complementary goals by using innovative funding and tenure mechanisms, maximizing the effectiveness of limited resources, learning from partner organizations, leveraging investment, and minimizing risks by sharing (Kung'u, 2009). Whilst contributions to partnership ventures may be greater than in normal business transactions, the benefits may be greater and more diverse.

2.6 Summary of Literature Findings

South Africa's historical situation of apartheid together with migration, urbanisation and lack of suitable land were discussed as challenges affecting housing delivery. Furthermore, the potential role of affordable housing PPPs was discussed. With the growing deficit of affordable housing in South Africa, the government is not able to address the problem alone. The delivery of affordable housing could be done through a partnership between the public and private sectors. It was also clear that while PPPs were researched at various levels and in countries such as Nigeria and Malaysia, there is a need for more research of PPPs in affordable housing, particularly in South Africa.

3 Chapter Three: Research Design and Methodology

3.1 Introduction

While there are currently two broad research approaches, namely quantitative and qualitative research, methodologies employed on other housing PPP studies are mostly qualitative. To mention a few, researchers who have followed the quantitative method include (Dube, 2013, Khakhi, 2009; Brown, 2006; AL shareem, *et,al.*,2014; Kung'u, 2009 and Moskalyk, 2008). It is on this basis that the same method will be followed for this particular paper.

According to (Rule & John 2011), qualitative research involves the use and collection of a variety of empirical tools. These include case studies, personal experiences, introspections, life stories, interviews, artefacts, cultural texts and productions, observational, historical, interactional and visual texts. It follows that qualitative researchers always strive to better understand the subject matter at hand. A combined qualitative and single case study research design and methodology offer several advantages to strategic management researchers (Gaya, 2016).

3.2 Case Study Approach

The case study approach is adopted in this research. This approach is a research strategy involving in-depth empirical investigation of a particular phenomenon. A major strength of case studies is that they are able to probe a small number of cases in detail and provide in-depth insight of the phenomena under investigation. Such insights are often lost in other types of research designs where there is a tendency to look at the broad picture rather than through the "microscope" (Yin, 2009). Case studies observe all respects and facets and reveal both the internal connection and external influence. Thus, they are useful for understanding complex, contextualized problems. Merits of the case study approach make it widely adopted in research (*ibid*). In immersing themselves with the activities of people to obtain an intimate familiarity with their worlds, qualitative researchers often use some form of case study. As is the case with qualitative research generally, case studies are typically used where little or nothing is known about the phenomenon of interest (Gaya, 2016).

3.2.1 Justifying the use of a single case

According to (Siggelkow 2007), quoted in Gaya, (2016) single case studies do provide extremely convincing data to test theories, as long as the single firm possesses unique features or attributes needed to meet the study objectives. (Yin, 2009), also supports the case study strategy as being appropriate to focus on understanding the dynamics present in single settings.

3.3 Study area

For the purposes of this paper, one case study is used to evaluate whether public-private partnership is a suitable model to improve the delivery of affordable housing within South Africa. An organisation called International Housing Solutions (IHS) is chosen for the case study purpose and the research will also examine one of the PPP projects successfully implemented by IHS, namely, Fleurhof housing development.

3.3.1 The Choice of IHS

Although IHS is one of the few firms to embrace a robust affordable housing agenda, it is not alone. Across the country, there are a number of other for-profit affordable housing developers with strong reputations. While any one of these companies would have been appropriate to study, one of the main factors made IHS a particularly good choice. The fact that IHS continues to invest private equity into the affordable housing market despite the fact that affordable housing is deemed to be risky is the main reason it was chosen.

3.4 Data collection techniques

There are two types of data used in this study—primary data and secondary data. The primary data is mainly from the literature review and interviews. The secondary data is from the website, documents and records.

3.4.1 Literature Review

A literature review of scholarly journals, public reports, government reports, and PPP on affordable housing research reports was conducted to learn more about the subject from the perspective of other countries.

3.4.2 Interviews

The interview process consisted of conducting one-on-one interview with one individual within IHS who is instrumental and has potential to add to the understanding of the processes and procedures used to collect data for the topic at hand. The selection of participant for this study was based on a strategy referred to as, "purposeful selection'. The selected individual is purposively selected by reviewing the history of the organisation. This interview is intended as a semi-guided interview that will provide an in-depth analysis of the origins and effectiveness of the public-private partnership model in the organisation.

The purpose of the research is to identify an innovative PPP that have resulted in, or is in the process of, meeting the needs of lower income households. The interview schedule (Annexure A), comprised of 15 questions in total. The participant responded to all the questions, which provided a wide data set for analysis. The interview was conducted face to face and was meticulously recorded to ensure the highest level of accuracy.

The questions the case study set out to answer are as follows:

- Did the partnership meet its goals?
- Is the project sustainable for the long term?
- Is the case study applicable to other parts of the country?
- What elements of the partnership made it successful?
- What are we learning about PPPs from the case study?

3.4.3 Website, Documents and Records

The website www.ihsinvestments.co.za was used to learn about some background information such as what the company is about, company structure and composition, location of business, projects done or still in progress and future plans.

The documents and records to be sourced from the organisation are to be used to obtain more information which is not readily available on the website or public platform. Permission would be sought to use these for the purpose of the research.

3.5 Data Analysis

Regarding data analysis, the qualitative single case study research followed the recommendations of (Yin, 2009) who also recommended that the data be systematically recorded and managed. Data analysis included data presentation, discussion and interpretation. The data analysis in this qualitative single case study research relied on the theoretical propositions through a conceptual framework. The theoretical proposition is that based on the research question, literature and new insights (*ibid)*. In this case, the analysis is based on the description of the characteristics and relations of PPPs in the provision of affordable housing. An explanation technique was therefore used to analyse the collected data. This was done by building an explanation about the case study and then identifying links between the literature and the collected data.

3.6 Ethics

Researchers must be people of integrity who will not undertake a research that will have negative effects on others (Kung'u, 2009). The researcher/respondent in this regard will the keep the information given by the participant confidential and will make certain that the the name of the respondent is not disclosed where expressly required. Participation in this study was voluntary in that, the participant was not forced to participate in any way. Furthermore, the participant was well informed of the purpose of the research and consent was also sought to utilise their responses to the questionnaire.

4 Chapter Four: Case Study

4.1 Introduction

This chapter reflects the data collected from the semi-structured interview and information collected. A description of the background on IHS and context is provided to better understand the framework of the study case. This is followed by a brief description of the partnership and the financing to provide the key features and characteristics of the project. Finally, outcomes and key observations are highlighted to provide lessons learned. These lessons will then be used to outline recommendations that encourage the production of affordable housing through PPPs. The case study is project-based partnership that represents a mixture of tenures which incorporate rental units and home ownership.

4.1.1 About International Housing Solutions (IHS)

International Housing Solutions (IHS) is a global private equity firm formed in 2007 with a focus on the development of residential projects affordable to the Sub-Saharan region's fast growing middle income market. They recognise the need to not only create viable housing projects, but also to provide broader community infrastructure with easy access to schools, shops and work opportunities, thereby improving residents' quality of life. So far they have provided about 27 000 homes to the lower middle class (www.ihsinvestments.co.za). IHS partners with respected developers to increase access for individuals and families to high quality affordable homes, creating a significant and positive social, environmental and economic impact through integration with neighbourhood schools, parks and businesses.

4.1.2 The fund set up by IHS to address affordable housing

A Housing Fund was set up by IHS to invest in housing for rent and sale to low and moderate-income families to meet the growing demand for homes in South Africa. IHS manages the fully committed 10-year private equity fund, The SA Workforce Housing Fund (SAWHF) with investments valued at more than $230. The organisation works directly with owners and property developers and concentrates on funding the development of homes and apartments for SA households in the income bracket often described as the "missing middle". Families in this income range earn too much to qualify for government-funded housing, but also find that adequate housing is too expensive, either to buy or rent.

4.1.3 Why the Fleurhof housing development?

The case study was chosen based on specific selection criteria. A primary goal was to select a PPP project that was pursued with little dependence on government expenditure for the construction of the project and required little or no subsidies to operate. This was important because it is anticipated that the case study may be most useful in the context of declining and limited government funding for low cost housing. Furthermore, the City of Johannesburg is a high-growth municipality and in recent years, a real estate boom in Johannesburg has driven up the prices of homes in the area and hence the need for more affordable housing (Emerging Market Private Equity Association, 2012). Another important factor considered was income levels. As outlined in earlier, the main focus of this research is to seek out partnerships that provide housing for low-income households. Lastly, the accessibility of information on the PPP as well as the availability and willingness of key informants to disclose information about the partnership was considered.

4.1.4 Fleurhof Housing Development

FLEURHOF MIXED-INCOME HOUSING DEVELOPMENT:	
Organisation	: ***International Housing Solutions***
Number of units	: ***over 9 000***
Proportion of affordable housing: estimated at 66% (other units included are fully subsidised and RDP units)	
Land type	: ***Government owned land***
Total Development cost	: ***R2.8 billion***

Table 3: Fleurhof Housing Development Facts & Figures

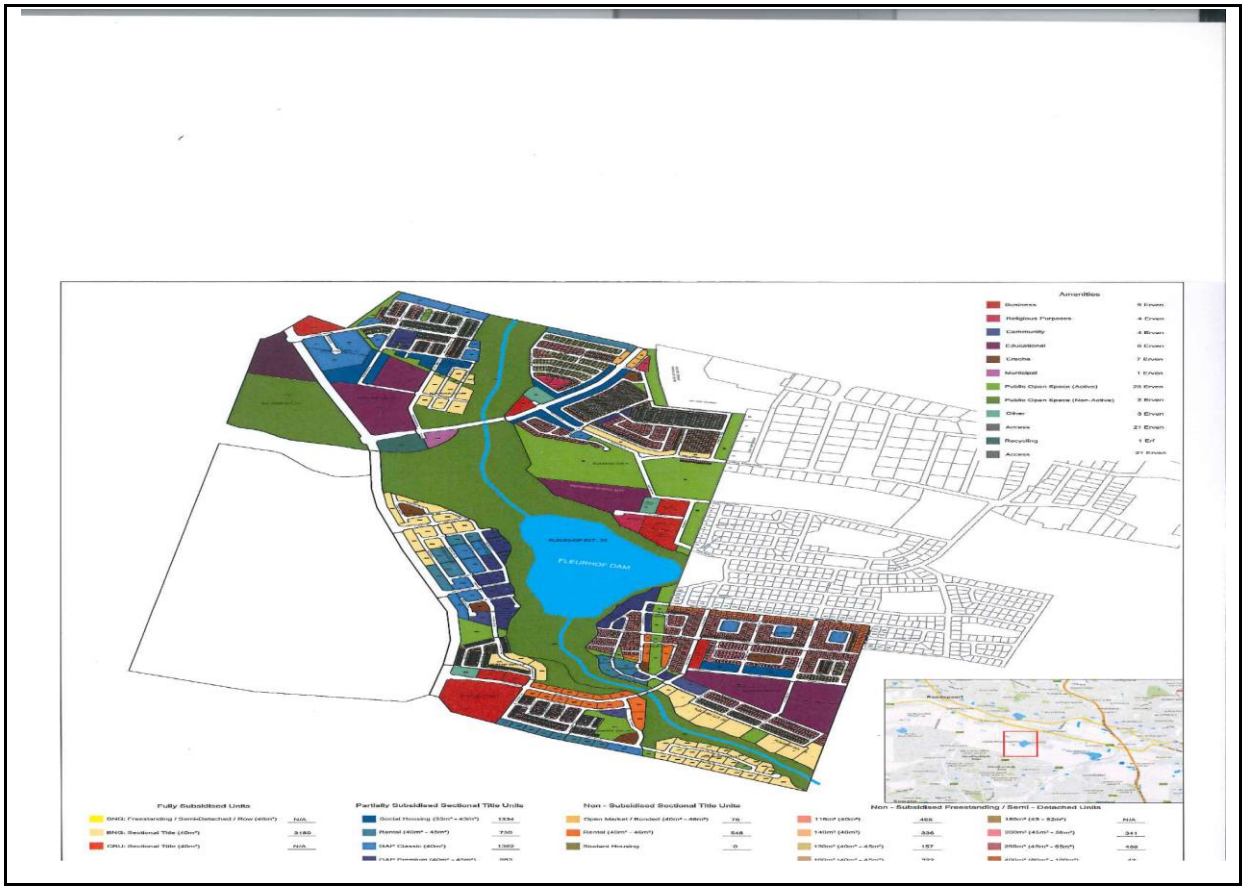


Figure 2: Township layout of Fleurhof Housing Project (Source: www.calgrom3.com)

Fleurhof Housing Development consists of more than 9 000 units in Fleurhof Ext. 2 which is situated 13 km west of the Johannesburg C.B.D next to the existing Fleurhof Ext 1 residential township along Main Reef Road. The development also forms a link between Soweto, (which is the largest city of mainly black residents in South Africa) and the Johannesburg CBD. It is considered to be one of the largest integrated mixed income housing developments in Gauteng. The 440ha land area of Fleurhof Ext. 2 comprises various types of residential units and forms of tenure that have specific economic target markets; fully subsidised RDP/BNG housing, gap housing, social rental, open market rental and affordable housing. It further contains mixed-use business centre sites, industrial sites, crèche sites, religious sites, community facilities, school sites and public open spaces.



Figure 3: Aerial View of Fleurhof Housing Development (Source: www.fleurhof.co.za)

Even though the Fleurhof Development was outside the urban edge, it was believed that the site was best suited for the housing development because of the good access to roads (i.e. Main Reef Road & N1) and secondly proximity to the Johannesburg CBD. Government is encouraging developments that fall within the urban edge because it wants avoid urban sprawl and therefore protect the environment and resources (Burgoyne, 2008). Furthermore, with more than 3.5 million residents, the Soweto remains one of the poorest in South Africa—lacking basic infrastructure and quality housing and much of the city's population continues to live in the cramped "matchbox" houses built by the government during apartheid (Emerging Market Private Equity Association, 2012). The Fleurhof development therefore seeks to address Soweto's housing needs with an integrated residential and business community, while reversing its apartheid-era spatial planning by integrating Soweto with the neighbouring town of Roodepoort, historically populated by white residents.

Planning of the project started pre-2009 whilst construction began in 2009 with Calgro M3 Holdings, a listed development company, being the main developer.

4.1.4.1 The role played by Equity

IHS's South African Workforce Housing Fund targets this "missing middle" by helping to bridge the gap between supply and demand for affordable housing. In addition to providing the majority of the equity financing in the Fleurhof Project, which gave local banks confidence to provide debt for its development, the SAWHF also purchased 162 units of the development for rental, which it will hold in its portfolio through the life of the project (Emerging Market Private Equity Association, 2012).

4.1.4.2 Collaborations with Public Sector

IHS is well aware of the importance of developing and maintaining a strong relationship with city officials and government where their development projects are taking place. IHS has described its working relations with government to be amicable but, just like any relationship, it was not without its own challenges.

Other public sector stakeholders which were involved in the project are Gauteng Partnership Fund (GPF) and Madulammoho Housing Association (MHA). GPF is a public entity whose mandate is derived from the Trust Deed, 2002 to support The Department of Local Government and Housing (DLGH) by ensuring the provision of housing across the Gauteng Province. MHA on the other hand was formed in 2004 to provide affordable housing solutions to Johannesburg's inner city community.

4.1.4.3 Financing and partnership

The total cost of the project was estimated at about R2.8 billion (US$350 million) residential real estate. Fleurhof is capitalized with an initial equity investment of ZAR125 million (US$16 million) and initial debt financing of ZAR190 million (US$24 million).

The housing development was a PPP developed between the private sector and the public sector. The development was in partnership with various public entities including the City of Johannesburg. It was also joint venture between International Housing Solutions (IHS), a private equity manager focused on affordable housing projects, and Calgro M3, a listed development company specialising in mixed-income residential construction. Under the partnership, IHS has provided the majority of the equity financing and performs the financial structuring, while Calgro M3 manages and oversees the project.

Additional funding came from other sources, including the City of Johannesburg. For its part, the City of Johannesburg funded some of the bulk and link infrastructure; Fleurhof Drive & Fleurhof Drive bridge, reservoir & bulk water pipeline and a sub-station. In total, the City of Johannesburg contribution for the project was in excess of R260 million. Beyond this, however, their role in the project was limited. They did not engage in the design and construction of the building and made no further commitments to funding the operations of the project in the long term.

4.2 Data Analysis

4.2.1 Introduction

Chapter one outlines the research questions that are tested in this study. The main research question focuses on determining the suitability of PPP as a model to improve the provision of affordable housing in South Africa. The review of literature on affordable housing PPP provides insight into how this approach could be applied in South Africa. The research questions were addressed from information and the interview carried out with Managing Director at IHS.

4.2.2 Description of sample

A sample of one interviewee was identified. The interview was conducted at the interviewees' place of work and lasted approximately an hour.

4.2.3 Reflections of the interview

The researcher noted a number of interesting points as well as observations in preparation for the interview:

- The keenness of the interviewee to partake in the interview.
- Interviewee appreciative when the researcher revealed knowledge about them. Thus, it proved critical to be prepared for the interviews, including having background knowledge about the interviewees.
- The conversation style of the researcher allowed for interviewees to express their views freely.
- The researcher tried to relax and enjoy the process, given the fact that the interviewee occupy top position and is highly respected in their organisations.

4.2.4 Responses to Research Questions

The below research questions are addressed using an exploratory qualitative research approach to gain an in-depth understanding of the topic at hand. Narrative, content and comparative analyses were conducted in analysing data, as is common in qualitative studies (Blumberg *et al*., 2008 cited in Mathonsi, 2012). This entailed analysing the content to identify specific categories of information and themes. The raw data was then decoded. The researcher then identified relationships between the categories of data and the patterns within the data in order to develop conclusions.

Research Questions:

Research Question 1

Are PPPs a suitable model to be used in providing affordable urban housing in South Africa?

This question had two sub-questions and aims to assess the suitability of PPP in the delivery of affordable housing in the South African context by identifying the benefits and challenges of implementing these partnerships. The Interviewee was asked to explain whether they believe that PPP is an appropriate mechanism for provision of affordable housing in South Africa; to explain whether the private sector is involved or interested in provision of affordable housing and to list the benefits of implementing affordable PPP in housing in South Africa. The following are quotations that contain themes that are in alignment with those that make up the responses to research question 1.

Can PPP improve the provision of affordable housing in South Africa?
The response to the above question was a definite "Yes".

What makes IHS funding model to be suitable / appropriate?
Although the interviewee could not share the details of the funding model by IHS due to confidentiality issues, in his response he indicated that the objective of the funding model was two-fold: to make money for its investors and secondly to make a social impact. The interviewee also confirmed that this particular PPP model could be replicated in other parts of the country.

"PPP can help to improve the provision of affordable housing in South Africa if they were managed properly".

"What makes our funding model to be suitable is that we make money whilst making an impact in what is considered to be an 'un-sexy sector'. The affordable housing has for a long time been considered risky and hence the private sector doesn't invest into it. Our secret is that we have come up with a model that is a mix of rental and sale to appeal to a diverse market. Moreover, our developments provides for amenities for the community at the same cost".

Can the model be replicated to other projects elsewhere in the country?
In response to replicating the model elsewhere in the country, the interviewee indicated that there are plans underway to replicate the PPP model used in the Fleurhof housing project to another project in Mpumalanga.

The next two questions aims to understand the specific challenges that are pertinent to the delivery of quality affordable housing, the development and results in the need for the formation of PPP in affordable housing.

Research Question 2:

How do key stakeholders collaborate in partnerships for provision of affordable housing?
First and foremost, it is acknowledged that both private and public sector need each other for the successful delivery of affordable housing. The way this would work is if the private brings the much needed equity and skills to the partnership whilst government provides an enabling environment.

"We can get delivery of affordable housing quickly and on a bigger scale if you have government and private sector work together. Fleurhof housing development is a good example of this because it took about 5 years to get about 8 000 units built"

"How this can be achieved is when private sector brings in the much needed equity and government provides an enabling environment and support to the private sector including funding for infrastructure through infrastructure grants".

***Research Question 3*:**

How do partnerships work to overcome barriers to better affordable housing?

The interviewee mentioned few main issues which, if tackled could assist both private and government to overcome barriers to provision of affordable housing:

- "open channels of communication without interference by politics; transparency and objectivity"
    - Although the Fleurhof project was a success, it is felt that government could have done more by engaging with the private sector and at times there is no transparency from government side
- "making public land available at the right price"
    - the private sector feels that this matter still needs to be addressed by government to make the partnership work better.
    - Secondly, suitable land should be identified for affordable housing and does not necessarily need to be on the outskirts.
- "getting a way around unreasonable infrastructure costs"
    - the interviewee highlighted during the interview that the main concern of the private sector was the exorbitant costs of infrastructure imposed by the government on the developments as these push up the prices

The effect of the high infrastructure costs have negative returns on the developments and consequently don't encourage investors to invest more.

4.3 Summary

The Fleurhof development was completed in 2016, and today the development is meeting the housing needs of low-income earners within the Fleurhof community. The overall success of the project may be attributed, in part, to the significant role that the private sector played. It is clear that specific organisations that were involved in the project participated in the project mainly because they offered the much needed finance that the project needed in order to be viable. Essentially, the partnership's ability to leverage capital from the private community

eliminated the financing risk. Finally, the development is managed by a partner that has expertise in providing housing for the specific target group. Clearly, a cohesive team with diverse skills and experience can enable a PPP project to accomplish more than one partner might on its own.

The partnership with the local government appears to have been the trickiest initially, but the support for the development from government led to it being successful. The interviewee expressed that this could easily be solved through effective communication between government and private sector. With this exception in mind, gratitude was expressed to the public sector for its continuous support throughout the development.

5 Chapter Five: Results and Findings

5.1 Introduction

The previous chapter presented the responses to the research questions stated in the first chapter of the research. The purpose of this chapter is to discuss the responses to research questions from Chapter four. The research has focused on identifying the needs of stakeholders providing investment for affordable housing, and to create innovative ways of forming potential partnerships. It has intended to provide a basis for discussion, rather than a comprehensive answer.

From the theoretical base, 18 critical success factors for PPP projects have been identified, which serve as a discussion point for in-depth interview with a stakeholder involved in the delivery of affordable housing through public-private partnerships. Their perceptions about the suitability and effectiveness of PPP in facilitating increasing delivery of affordable housing in South Africa have been obtained. Based on the findings, the recommendations that support future programme initiatives that encourage affordable PPP projects in South Africa have been formulated.

5.1.1 Research question 1

It has emerged from the study that PPP can be a suitable delivery mechanism to improve the delivery of affordable housing in South Africa if implemented properly. The partnership between government, IHS and other stakeholders should be accepted as an alternative to traditional state provision of affordable housing.

Arguably, this joint approach allows public and private sectors to blend their special skills and achieve an outcome, which neither party could achieve alone. The main benefit that could be obtained from properly structured partnerships between public and private sectors and communities is the synergy that could be achieved from the pooling of resources. This was mentioned during the interview to highlight the fact that the private sector has expertise and capacity to provide assistance in areas such as management skills and financial muscle required to deliver affordable housing. Hence, the involvement of more than one actor in affordable housing increases the potential to bring together resources available within the government, the private sector and society as a whole. Therefore, public and private partners in affordable housing must work very closely with each other.

5.1.2 Research Question 2

Collaboration between the private and the public sectors for affordable housing takes place when there's and enabled environment. If the environment is not conducive, affordable housing PPP will not take place. By "conducive environment" it is meant that adequate resources should be available.

5.1.3 Research Question 3

According to Li *et al* (2005) cited in Mathonsi (2012), politics have a close relationship with the development and implementation of public policies. The Interviewee's believe that political interference serves as a barrier to the formation of PPP in South Africa and discourages private sector involvement in affordable housing PPP. There must be a political will from the government to resolve affordable housing problems through PPPs. Political interference by the public and stakeholders is one of the reasons why PPPs fail (Grimsey, 2005). Therefore, a workable political and regulatory framework should be established to enable the formation of effective vehicles for PPPs that are compatible with a country's political system (*ibid*).

An understanding of the critical success factors that must be in place for PPP in affordable housing in South African has been developed. These success factors were further analysed and classified into three main aspects: (1) open communication; (2) political will and (3) honesty & transparency.

5.2 Findings

The research revealed that PPP is a suitable model to improve provision of affordable housing in South Africa. PPP has the potential to help resolve the challenges faced by the South African affordable housing; however, a full diagnostic of the problem at hand should be conducted.

On the government side, there must also be a political will to resolve affordable housing problems through PPPs. A positive political attitude towards private sector involvement in PPP projects would support the growth of those partnerships. There must be transparency between the private and public sectors when engaging in PPPs. According to Li et al, 2005 (cited in Mathonsi, 2012), three features are important for transparency:

(i) good communication between the public and the private sector including their advisor which is the communities in this case,

(ii) the private sector openly consulting with the public sector and its adviser, and

(iii) the public and private sectors establishing a clear basis for making decisions.

6 Chapter Six: Conclusions

What has been learnt from the Fleurhof development scheme in particular, there may be other lessons which could be learnt for other development schemes but one can only draw conclusions from this.

This paper has highlighted the need of building and strengthening partnerships between the public and private stakeholders involved in the provision of affordable housing. The size and scope of the problems that plague the affordable housing sector in South Africa and the unwillingness of government to address these challenges highlight the urgent need for fundamental change in the way that affordable housing is delivered. The goal of this research was to investigate the role that public-private partnerships can play as one possible financing alternative to the creation and management of affordable housing. In doing so, the main objective was to raise awareness of the partnership approach by identifying successful PPP-based housing projects with the South African experience. It was hoped that the example would highlight lessons learned that might strengthen future efforts to initiate PPPs.

Undoubtedly, the Fleurhof Development reveals that the private sector has a key role to play in the provision of affordable housing. Furthermore, it has the unique ability to raise support for affordable housing projects within the community and leverage needed resources. Fleurhof development is a good example of an affordable housing PPP because it not only shows how the two sectors can work together but also presents a replicable model for affordable housing providers such as IHS. While an overview of the financing structure of the case study reveals that it relied on the private sector to make housing available to the lowest income group, the importance of the public sector should not be understated. In this particular example, developmental assistance from government was critical in the project.

The case study reviewed show that affordable housing can be effectively delivered and managed through partnerships. It represented a new model for responding to the affordable housing needs in South Africa – one where the private and public sectors unite to acknowledge the problems that surround their communities and work together to design and execute innovative solutions. While the scale of the case study reviewed is not extensive, there is enough work done that may be useful for future purposes.

The private sector has a tremendous amount of skill, resources and experience to offer the affordable housing sector. It is also flexible, innovative and better able to absorb and provide necessary skills. Among the key factors identified that enhanced the success of the affordable housing project is the ability of the parties within the partnership to agree to work together. Furthermore, an overview of the case study also reveals that there is a large role for all levels of government to play. Without some form of public financing, it is questionable whether the housing partnership reviewed could have housed the lowest income group.

In conclusion, the report's findings suggests that PPPs have great potential in the provision of affordable housing delivery in South Africa. However, the current policy framework in place does not accurately reflect what is needed to stimulate and broaden PPP approaches to housing development. Therefore, the recommendations presented are intended to inform and provide guidance and changes necessary to inspire more active participation of the private, public and non-profit sectors in this regard.

6.1 Recommendations

Reflecting back on the work carried out, in hindshight given what has been discovered, identification of further stakeholders of the company may have provided additional data and insight on the topic.While the case study shows that PPPs reveal some promises in addressing low-income needs in the short term, long term measurements are required to ascertain whether the models will continue to meet this demand. Additionally, future research is necessary to assess the implications of these and other affordable housing PPP projects. Future research could also provide further detail on demonstrating the cost and potential savings to government of any proposed measures. The case of PPP as a model to provide affordable housing in South African that is constituted by this study has its limitations, as mentioned above. To reduce these limitations and make the case more sound, further research will have to be conducted. This model can be further developed and tested through a quantitative study.

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APPENDIX 1: INTERVIEW PROTOCOL

Selecting Respondent

The respondent was chosen based on the perceived expertise and experience relevant to this research topic.

Setting up the interview

A request for an interview was done telephonically by the researcher. The respondent subsequently requested for interview questions to be sent before the interview. Together with the questionnaire, the researcher sent the respondent an introduction letter explaining what the research is all about and consent forms.

Interview setting

The questionnaire was sent to the respondent prior to the interview taking place. At the request of the respondent, the interview took place at his offices in Bryanston.

Formulating questions

A list of pre-determined questions was chosen in this case to allow the respondent the opportunity to prepare for the interview. Questionnaire with a combination of both open and closed ended questions was administered to the respondent in the identified institution. Close ended questions were meant to give a 'yes' or no answer with a short response while open-ended questions were used for purpose of harnessing, where there is a need for further clarification.

The interview

This was a semi-structured face-to-face interview which was conducted through a questionnaire. The interview was recorded using a cellphone to ensure that every detail was captured and for later reference should there be a need. Over and above the recording, there was also a bit of notes taking.

APPENDIX II:

Letter of introduction to respondents

Dear Sir/Madam

My name is Neo Kutama and I am conducting research for the purposes of obtaining a Master's Degree in Property Development at the University of the Witwatersrand. My research is titled "Affordable housing Public Private Partnerships: A case study of International Housing Solution". My area of focus is to investigate whether PPPs are a suitable model to be used in providing affordable housing in South Africa.

Participation in this research may entail being interviewed by myself, at a time and place that is convenient for the participant.

If you choose to participate in the study please fill in your details on the consent forms attached. I can be contacted telephonically via e-mail at 9702952g@student.wits.ac.za or telephonically on 072 115 5561, should you require more clarification. Alternatively my supervisor Mr David Root, can be contacted via his e-mail address at david.root@wits.ac.za or telephonically on 082 735 3491

Your participation in this study would be greatly appreciated.

Kind Regards

Neo R. Kutama

APPENDICES III(a-d):

APPENDIX III (a)

Consent Form

This consent form confirms that I have read and understood the scope of this study.

I _____ (respondent's name) consent to:

Participation in this study, entitled, "Affordable housing PPPs: A case study of International Housing Solutions".

I understand that:

Participation in this interview is voluntary

I can withdraw from the study at any time

Signature of Respondent: _____

Date: _____

APPENDIX III(b)

Consent Form

TITLE: Affordable housing Public Private Partnerships (PPP's): A case study of International Housing Solutions (IHS).

This consent form confirms that I have read and understood the scope of this study.

I give permission for the interview/s to be recorded. The audio device will be kept in a locked cupboard for safe keeping and will be accessed by the researcher

Signature of Respondent: _____

Date: _____

APPENDIX III(c)

Consent Form

TITLE: Affordable housing Public Private Partnerships (PPP's): A case study of International Housing Solutions (IHS).

This consent form confirms that I have read and understood the scope of this study.

I give permission for the historical information and data provided by myself to be used for the purposes of this study. The data will be used solely for academic purposes.

Signature of Respondent: _____

Date: _____

APPENDIX III (d)

Consent Form

TITLE: Affordable housing Public Private Partnerships (PPP's): A case study of International Housing Solutions (IHS).

This consent form confirms that I have read and understood the scope of this study.

I _____ (respondent's name) am aware that for the purpose of this study anonymity is not guaranteed.

I agree ☐

I do not agree ☐

Signature of Respondent: _____

Date: _____

APPENDIX IIII:

Interview Questions

A. IHS Official Questions:

1. How would you describe "affordable housing"?

2. What is IHS' role in the provision of affordable housing?

3. In your view, what is the private sector impression (in general) of the affordable housing sector?

B. PPP

4. What are the necessary conditions for success of PPP in affordable housing?

5. Why did IHS decide to do developments through the PPP route?

6. In your view, are PPPs an appropriate and suitable delivery mechanism for affordable housing in S.A? Why or why not

7. What are the potential benefits of creating PPPs in the affordable housing sector?

8. What approaches can be utilised to stimulate PPPs in the affordable housing sector?

9. What are the challenges of implementing PPPs in affordable housing in S.A?

10. Do you think bringing the private and the public sector together under a partnership would enhance affordable housing in S.A? How?

D. Fleurhof Project

11. Give the description of the development project (.i.e.no., type, density of units, location and integration with other amenities?

12. What finance model was used by IHS use for this project?

a) Would you say this model is successful? Elaborate

b) If Yes to the question above, can it be replicated to other parts of the country?

13. What specific challenges (if any) did you come across on the project, in terms of the partnership with government or other partnership/s?

14. Would you say the scheme was successful PPP? Why or why not?

15. Any lessons learnt during this project with regards to PPP?