

# **THE PROVISION OF LOW-COST HOUSING IN SOUTH AFRICA: A WICKED PROBLEM WITH A SYSTEMS THEORY SOLUTION**

**Frieda Elizabeth le Roux**



Research report presented in partial fulfilment  
of the requirements for the degree of  
Master of Philosophy (Futures Studies)  
at the University of Stellenbosch

**Supervisor: Prof. André Roux**

## Declaration

By submitting this research report electronically, I, Frieda Elizabeth le Roux, declare that the entirety of the work contained therein is my own, original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

A handwritten signature in black ink on a light yellow background. The signature is stylized and appears to read 'FE le Roux'.

FE le Roux

January 2011

## **Acknowledgements**

- The Kafka Group – Irene Ackerman, Rafeeq Bosch and Henry Jeffreys – for inspiration and support.
- Ms. Lynette Ferreira, for keeping everything together.
- Prof. André Roux, for advice and direction.

## **Abstract**

One of the serious problems facing South Africa is that of the provision of adequate low-cost housing for its people. According to Statistics South Africa (2009), 56% of South Africans lived in fully-owned formal dwellings in 2009. Not only does it seem impossible to work away the backlogs, but problems with the standard of construction, location and continuing urbanisation adds to the challenge. International commitments such as the UN's Millennium Goals put further pressure on government to permanently resolve the issue. Adequate housing is recognised globally as a basic human right. This includes access to running water and sanitation and a safe environment.

This study does not aim to investigate, in any way, construction techniques, specific choices of location or other planning-related issues. However, it does try to find a more successful approach to the challenge of the provision of housing given the already stated challenges, combined with, amongst others, the provision of the necessary financing and relevant political processes.

The provision of low-cost housing is a wicked problem. This means that it has certain characteristics, including being unique in character and can never be fully resolved. However, within futures studies, systems theory is recognised as one of the more successful ways to address wicked problems.

By investigating low-cost housing programmes in Brazil, Argentina and Peru and identifying the elements of systems theory used, it was possible to find pointers to help formulate a set of steps (or actions) to use to address South Africa's low-cost housing challenge. This research report proposes that, while the challenge of housing provision in a country like South Africa will most probably always be present, it can be alleviated by applying systems thinking to the problem.

### **Key words:**

Low-cost housing

Department of Human Settlements

Wicked problem

Systems theory

## Table of contents

<b>Declaration</b>	<b>ii</b>
<b>Acknowledgements</b>	<b>iii</b>
<b>Abstract</b>	<b>iv</b>
<b>Table of contents</b>	<b>v</b>
<b>List of tables</b>	<b>x</b>
<b>List of figures</b>	<b>xi</b>
<b>List of acronyms and abbreviations</b>	<b>xii</b>
<b>CHAPTER 1 INTRODUCTION</b>	<b>1</b>
1.1 INTRODUCTION	1
1.2 PROBLEM STATEMENT	1
1.2.1 Main problem	1
1.2.2 Subordinate problems	1
1.3 HYPOTHESES	2
1.4 RESEARCH OBJECTIVES	2
1.4.1 Scope of this study	3
1.5 CLARIFICATION OF KEY CONCEPTS	3
1.7 CHAPTER OUTLINE	4
<b>CHAPTER 2 WHAT IS LOW COST HOUSING</b>	<b>5</b>
2.1 INTRODUCTION	5
2.2 DEFINITION	5
2.3 HOUSING AS A HUMAN RIGHT	5
2.3.1 The Universal Declaration of Human Rights	5
2.3.2 The Habitat Agenda Goals and Principles, Commitments and the Global Plan of Action	6
2.3.3 The Millennium Development Goals	6
2.3.4 Habitat International Coalition	7
2.4 HOUSING AS PART OF THE URBAN ENVIRONMENT	7
2.5 THE VOICE OF THE PEOPLE	8
2.5.1 International	8
2.5.1.1 The Centre on Housing Rights and Evictions (COHRE)	9
2.5.1.2 Slum/Shack Dwellers International (SDI)	9

2.5.1.3	Asian Coalition for Housing Rights (ACHR)	9
2.5.1.4	The Society for the Promotion of Area Resource Centres (SPARC)	9
2.5.2	South Africa	9
2.5.2.1	People's Housing Process (PHP)	10
2.5.2.2	Anti-Eviction Campaign (AEC)	10
2.5.2.3	Abahlali baseMjondolo (AbM)	10
2.5.2.4	Development Action Group (DAG)	11
2.5.2.5	Federation of the Urban Poor (FEDUP)	11
2.5.2.6	Community Organisation Resource Centre (CORC)	11
2.6	CONCLUSION	12
<b>CHAPTER 3 LOW COST HOUSING IN SOUTH AFRICA</b>		<b>13</b>
3.1	INTRODUCTION	13
3.2	ACCESS TO HOUSING	13
3.2.1	Legislation	13
3.2.1.1	South African Constitution	13
3.2.1.2	Housing White Paper, 1994	13
3.2.1.3	Housing Act, 1997 (No. 107 of 1997) and subsequent amendments	14
3.2.1.4	The Urban Development Framework, 1997	14
3.2.1.5	Breaking New Ground (BNG), 2004	15
3.2.1.6	Housing Development Agency Bill	15
3.3	LOW-COST HOUSING: TARGET GROUP	15
3.4	GOVERNMENT INTERVENTIONS	17
3.5	CONCLUSION	18
<b>CHAPTER 4 LOW COST HOUSING AS AN EXAMPLE OF A WICKED PROBLEM</b>		<b>19</b>
4.1	INTRODUCTION	19
4.2	WICKED PROBLEMS	19
4.2.1	Definition	19
4.2.2	Characteristics	20
4.3	LOW-COST HOUSING IN SOUTH AFRICA: A WICKED PROBLEM	20
4.4	AN OVERVIEW OF CURRENT HOUSING CHALLENGES	22

4.4.1	Housing and the macro-economy	23
4.4.2	Housing finance	24
4.4.3	Land and services	25
4.4.4	Housing and human settlement development	26
4.5	CONCLUSION	28
<b>CHAPTER 5 INTERNATIONAL CASE STUDIES IN THE PROVISION OF LOW COST HOUSING</b>		<b>29</b>
5.1	INTRODUCTION	29
5.2	THE BEST PRACTICES AND LOCAL LEADERSHIP PROGRAMME	29
5.2.1	National policy of urban development in Brazil	29
5.2.1.1	The Statute of the City	30
5.2.1.2	National Policy on Urban Development (NPUD)	31
5.2.1.3	Participants	32
5.2.1.4	Impact	32
5.3	TWO CASE STUDIES: BUENOS AIRES, ARGENTINA	33
5.3.1	Movimiento Territorial de Liberación	34
5.3.2	Madres de la Plaza de Mayo	34
5.4	THE 'BARRIADAS' OF LIMA, PERU	35
5.4.1	The 'barriadas'	35
5.4.2	John Turner, urban planner	36
5.4.3	Hernando de Soto, economist	37
5.4.4	Lima today	39
5.5	CONCLUSION	40
<b>CHAPTER 6 SYSTEMS THINKING AS FUTURES METHODOLOGY</b>		<b>41</b>
6.1	INTRODUCTION	41
6.2	SYSTEMS THINKING	41
6.2.1	Definition	41
6.2.1.1	Social Systems	41
6.2.1.2	Synthetic Thinking	42
6.3	SYSTEMS THINKING AND WICKED PROBLEMS	42
6.3.1	Principles of interactive planning	42
6.3.2	Phases of interactive planning	43
6.4	APPLYING SYSTEMS THINKING	44

6.4.1	The national policy of urban development in Brazil	44
6.4.1.1	Principles	44
6.4.1.2	Phases	45
6.4.1.3	Findings	46
6.4.2	Movimiento Territorial de Liberación	46
6.4.2.1	Principles	46
6.4.2.2	Phases	46
6.4.2.3	Findings	47
6.4.3	Madres de la Plaza de Mayo	47
6.4.3.1	Principles	47
6.4.3.2	Phases	48
6.4.3.3	Findings	48
6.4.4	Barriadas of Lima	48
6.4.4.1	Principles	48
6.4.4.2	Phases	49
6.4.4.3	Findings	50
6.5	CONCLUSION	51
<b>CHAPTER 7 SYSTEMS THINKING AND LOW COST HOUSING IN SOUTH AFRICA</b>		<b>52</b>
7.1	INTRODUCTION	52
7.2	PARTICIPATIVE PRINCIPLE	53
7.2.1	Participants	53
7.2.1.1	Potential partners	54
7.2.2	Government as participant	54
7.3	FORMULATION OF THE MESS	54
7.3.1	Mission and vision of the DHS	55
7.3.1.1	Brazil as an example	56
7.4	MEANS PLANNING	57
7.5	CONCLUSION	58
<b>CHAPTER 8 CONCLUSION</b>		<b>60</b>
8.1	INTRODUCTION	60
8.1.1	Low-cost housing as a wicked problem	60



8.2	FINDINGS AND ITS IMPLICATIONS	61
8.3	LIMITATIONS OF THE STUDY	62
8.4	RECOMMENDATIONS FOR FURTHER WORK	62
8.5	CONCLUSION	62
	<b>REFERENCES</b>	<b>64</b>

## List of tables

Table 7.1: Phases and principles of interactive planning and the presence/absence thereof in the case studies	51
---	----

## List of figures

Figure 2.1: Housing and Land Rights Violation Database (VDB) Mapping Eviction, Dispossession, Destruction and Privatization-related Cases	6
Figure 3.1 Percentage distribution of household by type of main dwelling	16
Figure 6.1: The interactive planning cycle	432

## List of acronyms and abbreviations

AbM	Abahlali baseMjondolo
ACHR	Asian Coalition for Housing Rights
AEC	Anti-Eviction Campaign
ARC	Alliance of Rural Communities
BLP	Best Practices and Local Leadership Programme
BNG	Breaking New Ground
COHRE	Centre on Housing Rights and Evictions
CORC	Community Organisation Resource Centre
CRO	Community Resource Organisations
CUP	Coalition of the Urban Poor
DAG	Development Action Group
DHS	Department of Human Settlements
DoH	Department of Housing
FEDUP	Federation of the Urban Poor
HDA	Housing Development Agency
HIC	Habitat International Coalition
IBRD	International Bank for Reconstruction and Development
ILO	International Labour Organisation
ISOCARP	International Society of City and Regional Planners
Madres	Madres de Plaza de Mayo Association
MTL	Movimiento Territorial de Liberación
NGO	Non-governmental Organisation
NHBRC	National Home Builders Registration Council
NHFC	National Housing Finance Corporation
NPUD	National Policy on Urban Development
NSDF	National Slum Dwellers Federation
NURCHA	National Urban and Reconstruction Agency
PHP	People's Housing Process
RDP	Reconstruction and Development Plan
RHLF	Rural Housing Loan Fund
SDI	Slum/Shack Dwellers International
SHF	Social Housing Foundation
SPARC	Society for the Promotion of Area Resource Centres

# CHAPTER 1

## INTRODUCTION

### 1.1 INTRODUCTION

This research report focuses on the provision of low-cost housing in South Africa: a Wicked Problem with a Systems Theory answer.

### 1.2 PROBLEM STATEMENT

In recent reports, South Africa's minister of human settlements, Mr. Tokyo Sexwale, said "around 40 000 RDP houses would have to come down because of poor workmanship, and that he would lose roughly ten percent of his budget to rebuilding the houses" (South Africa Info, 2010). The minister estimates the cost of this "poor workmanship" at R1,3bn – the money needed to "rebuild badly constructed houses provided under the government's housing programme" (Fin24, 2009).

#### 1.2.1 Main problem

Sixteen years into its democratic existence, South Africa is facing "a massive housing backlog with at least 2,1-million housing units still to be built" (Business Day, 2010). But it is not only the huge amount of houses that must still be provided. According to Charlton and Kihato, government is faced with a double-edged sword as the public housing policy dictates that the poor "are entitled to a free house, with legal title and internal services" (2006, as cited in Pieterse, 2009). However, the "programme has had profoundly negative consequences: intensifying urban sprawl and increasing the daily reproductive costs for the poor, instead of providing them with an appreciating asset that can bolster their livelihoods".

In turn, urban sprawl, together with low-density housing and a lack of affordable housing opportunities, again relegates the poor to the urban periphery, excluding them from economic opportunity (Tonkin, 2008).

This short description should be the first clue to the reader of this research report as to the wicked nature of low-cost housing in South Africa (Ritchey, 2005).

#### 1.2.2 Subordinate problems

The problem statement does not refer to nor aims to address a single situation. It is surrounded by various other problems whose existence, in some instances, not only resulted in the main problem, but also stem from it.

Since housing is aimed at people and the way they experience the built environment, many of the questions raised are not as tangible as one might think at first. While the materials used to build a house can be a very important factor in its stability, so too can the land where it is located. The way

in which inhabitants relate to a dwelling – does it mean ‘home’ for them or is it a mere protection against the elements? – is an example of the less tangible experience.

Some of the other contributing factors include:

- i) insufficient or undeserving design practices;
- ii) geographical location;
- iii) social issues;
- iv) poor construction;
- v) funding;
- vi) waiting lists;
- vii) urban planning; and,
- viii) service delivery.

### **1.3 HYPOTHESES**

As already touched upon, this study aims to describe the wicked nature of the provision of low-cost housing. Since wicked problems are “ill-defined, ambiguous and associated with strong moral, political and professional issues”, there is no simple solution (Ritchey, 2005). This research report will furthermore investigate systems theory as viable long-term solution to addressing the challenges surrounding low-cost housing provision.

In keeping with this hypothesis, it is therefore assumed that futures methodology can be used to describe and define: the provision of low-cost housing in South Africa as well as related problems; the possible – and, in fact, preferable – means to address these problems in order to have a positive and ongoing impact in the solution thereof.

### **1.4 RESEARCH OBJECTIVES**

This research report aims to prove that the current crisis with low-cost housing in South Africa can be solved in a positive and sustainable manner. By using futures methodology in the form of systems theory to address the wicked problem of low-cost housing, it is possible to manage and lighten South Africa’s housing backlog and the related social, environmental and financial problems.

Through the identification and inclusion of role-players from all the different levels involved in the provision of low-cost housing, valuable insights can be gathered for further use. Awareness of similar problems in other developing countries, might not only strengthen the formulation of a viable solution, but also, in turn, help these countries to further address their low-cost housing challenges.

### **1.4.1 Scope of this study**

This research report will investigate the nature of low-cost housing provision in South Africa. Since it will be proved as a wicked problem, the complexity of the interconnected elements will be described.

By using the systems theory approach, successful international projects will also be investigated to find a complementary bouquet of ways in which to start addressing this very pressing challenge within the South African social, urban and economic landscape.

## **1.5 CLARIFICATION OF KEY CONCEPTS**

The Universal Declaration of Human Rights states in Article 17 that “[e]veryone has the right to own property alone as well as in association with others”, as well as (Article 25) “[e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control” (United Nations, 1948).

It is within these constraints that the provision of low-cost housing in South Africa will be investigated.

According to Tonkin (2008), housing can be described as: “A broad term that includes houses, flats and other housing typologies, as well as infrastructure and can include the whole residential neighbourhood, including public spaces”.

The same source defines low income housing as “[h]ousing for people whose combined monthly household incomes are below R3 500 per month”.

Social housing, in turn, is “A rental or co-operative housing option for low to medium households (earning no less than R3 500 per month in income) at a level of scale and built form which requires institutionalised management (provided by social housing institutions or other delivery agents) in approved projects in designated restructuring zones with the benefit of public funding”.

In Chapters Two and Four, the term low cost housing will be used in this research report to include both low income and social housing.

This report will also only deal with the provision of low cost housing within the urban context. Urban being described as: “There is no standard definition of urban. The South African population censuses prior to 1996 define populations as urban if they fall under the jurisdiction of a local authority or municipality that was declared as urban. Typically this excluded peri-urban settlements outside of the municipal boundary and settlements within the old homelands. A more common definition used by the United Nations is of a settlement of 20 000 people” (Tonkin, 2008).

## 1.6 CHAPTER OUTLINE

In order to best address the research problem as outlined above, this research report will be divided into the following chapters, each focusing on different aspects of the whole.

Chapter One introduces the reader to this research report and gives an overview of what this study aims to achieve.

Chapter Two looks at low-cost housing: what goes by this definition?

Chapter Three gives an overview of South Africa's approach to low-cost housing, past and present.

Chapter Four discusses wicked problems, a futures concept. It also explains why low-cost housing can be defined as such.

Chapter Five investigates international case studies in the low-cost housing field. Specific emphasis is placed on successes in the field.

Chapter Six introduces the futures methodology of systems thinking. The question is then asked whether systems thinking was used in any of the successes mentioned in Chapter Five.

Chapter Seven aims to apply lessons learnt in the previous two chapters on low-cost housing in South Africa.

In the last chapter the findings of this research report are revisited and a suitable conclusion drawn.



## CHAPTER 2

### WHAT IS LOW COST HOUSING

#### 2.1 INTRODUCTION

Having a place to live is not as general an occurrence as one might think. According to the United Nations, more than a billion people do not have access to adequate housing (see section 2.3 below).

However, finding a definition for 'adequate housing' seems to be just as challenging as it is to provide for the need. This chapter looks at housing as regarded by international bodies such as the United Nations as well as at the way several national and international advocacy groups.

#### 2.2 DEFINITION

Tonkin (2008), also quoted in Chapter One of this report, describes housing as: "A broad term that includes houses, flats and other housing typologies, as well as infrastructure and can include the whole residential neighbourhood, including public spaces".

Low-income housing (in the South African context) is defined as "Housing for people whose combined monthly household incomes are below R3 500 per month".

In turn, social housing (again within the South African context) is described as "A rental or co-operative housing option for low to medium households (earning no less than R3 500 per month in income) at a level of scale and built form which requires institutionalised management (provided by social housing institutions or other delivery agents) in approved projects in designated restructuring zones with the benefit of public funding".

In this research report, the use of low-cost housing includes both 'low income housing' as well as 'social housing'.

#### 2.3 HOUSING AS A HUMAN RIGHT

According to the United Nations Habitat, an estimated 1,1 billion people live in "inadequate housing conditions in urban areas alone. In many cities of developing countries, more than half of the population live in informal settlements, without security of tenure and in conditions that can be described as life and health threatening" (2010).

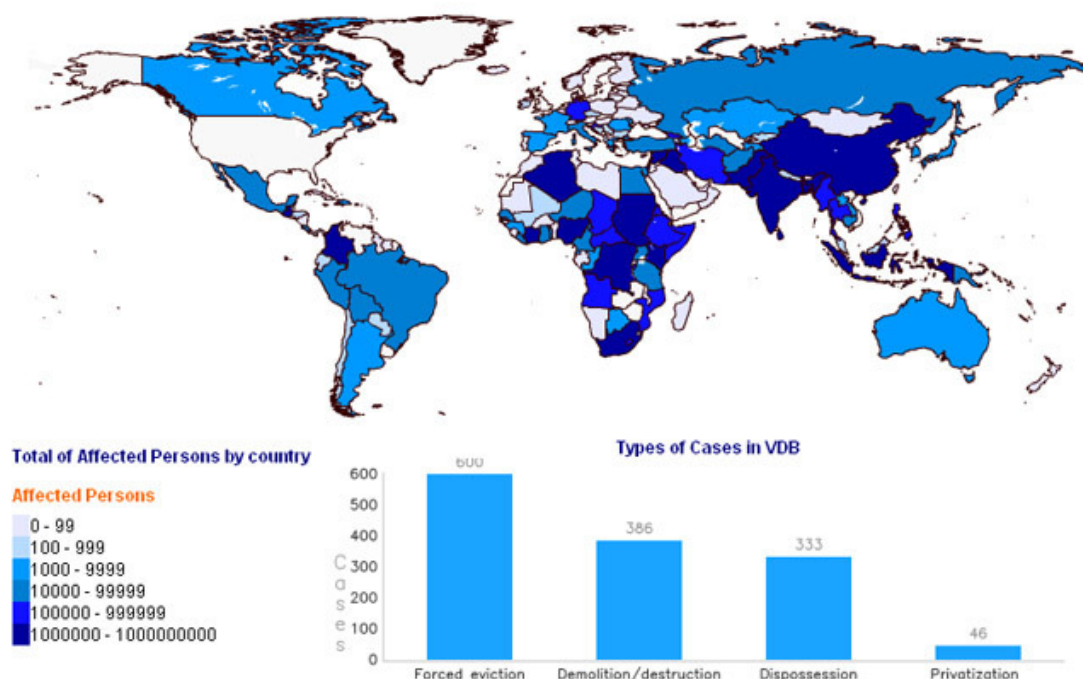
##### 2.3.1 The Universal Declaration of Human Rights

Article 17 of this document states: "Everyone has the right to own property alone as well as in association with others".

As well as (Article 25): “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control” (United Nations, 1948).

### 2.3.2 The Habitat Agenda Goals and Principles, Commitments and the Global Plan of Action

“We recognize that access to safe and healthy shelter and basic services is essential to a person's physical, psychological, social and economic well-being and should be a fundamental part of our urgent actions for the more than one billion people without decent living conditions” (UN Habitat, 1996).



**Figure 2.1: Housing and Land Rights Violation Database (VDB) Mapping Eviction, Dispossession, Destruction and Privatization-related Cases**

Source: Habitat International Coalition, 2010.

Figure 2.1 is the Habitat International Coalition’s Housing and Land Rights Violation Database (VDB) Mapping Eviction, Dispossession, Destruction and Privatization-related Cases. (According to this map, produced in 2010, South Africa has 1 724 155 persons who are displaced due to eviction, dispossession, destruction or privatisation.)

### 2.3.3 The Millennium Development Goals

The Millennium Development Goals, agreed upon in 2000, entails eight focus points which, according to the 189 role players partaking in the initial event, will lead to “a world in which

developed and developing countries worked in partnership for the betterment of all” (The World Bank, 2009).

The eight goals are:

- i) eradicating poverty and hunger;
- ii) achieving universal primary education;
- iii) promoting gender equality;
- iv) reducing child mortality;
- v) improving maternal health;
- vi) combating disease;
- vii) ensuring environmental sustainability; and,
- viii) developing a global partnership.

It is clear that, for the above to succeed, a permanent form of residence for all people is necessary. For as long as, even low-cost housing stay unattainable to more than one billion of the world’s inhabitants, the eight Millennium Development Goals will stay an ideal.

#### **2.3.4 Habitat International Coalition**

Habitat International Coalition (HIC) was founded in 1976 and is an “independent alliance of international nongovernmental and community based organizations from over 60 countries” (HIC, 1992).

The HIC sees “housing as an instrument; for the promotion of justice, equality and peace; of the expression of diverse cultures of self-determination of individuals and communities; of fighting against discrimination, alienation and disorganization; and, of regeneration of ravaged environment and societies all over the world, within the perspective of the living earth as a home for all of us”.

In keeping with the hypothesis of this research report – that the provision of low-cost housing is a wicked problem – the HIC is of the opinion that “issues of human settlements, environment and development are interrelated, and shares the concern of those who advocate worldwide measures to protect life on earth and to ensure sustainable use of its resources”.

## **2.4 HOUSING AS PART OF THE URBAN ENVIRONMENT**

Housing (low-cost or other) forms part of the bigger urban fabric. That is why it is not ideal to treat housing provision as independent of urban and infrastructure planning processes. For instance, Baumann (2003) is of the opinion that, should “RDP projects ... be pushed to the urban periphery” it will potentially lead to increased “overall poverty” (this point will be discussed in more detail in Chapter Four of this report).

While this research report focuses on the provision of low-cost housing, it is necessary to indicate the importance of adequate housing as part of the bigger urban landscape.

Tonkin (2008) defines 'integrated development' as: "A form of development which is holistic in addressing needs and where different actions support each other and set up positive relationships with each other. In an integrated development approach the development objectives and process is responsive to the needs of – and shape through the direct participation of those who the development is intended to benefit,"

Burkhalter and Castells (2009) list a number of basic "needs and desires" a city should provide. This is over and above the fact that "people also need jobs, and income, and a sound local economic development policy". The list includes:

- a decent, affordable shelter;
- a healthy environment;
- adequate urban infrastructure;
- a communication/transportation system that ensures mobility and connectivity;
- personal safety and psychological peace of mind;
- access to health and education;
- a spatial form that facilitates sociability, anchored in public spaces throughout the metropolitan area;
- the capacity to satisfy a share of the basic needs without depending on commercial consumption, for instance, growing their own food within the territory of the metropolitan area (urban farming);
- the ability to express peoples' culture at large, placing art and culture at the heart of social practice; and,
- the integration between the built environment and the natural environment.

## **2.5 THE VOICE OF THE PEOPLE**

One of the reasons why the provision of low-cost housing is so challenging is the involvement (or lack of) of many different role players – usually operating from very different points of departure. While it is expected of government to supply the housing, it is often said that no adequate consultative process is involved. This results in the target groups often rejecting the final product. In return, government might feel their attempts at helping the poor and homeless were not appreciated and, should they engage in similar future projects, might consult even less than before.

In order to address this communication breakdown, various bodies have been created the world over to facilitate the process of low-cost housing delivery.

### **2.5.1 International**

The following four examples are by no means indicative of the different organisations worldwide aimed at helping the poor and homeless in different ways and on various levels. The organisations

mentioned below only serves as examples of the size of these bodies and of the various roles they take on.

### **2.5.1.1 The Centre on Housing Rights and Evictions (COHRE)**

The Centre on Housing Rights and Evictions (COHRE) describe themselves as “an independent, international, non-governmental, not-for-profit human rights organisation whose mission is to ensure the full enjoyment of the human right to adequate housing for everyone, everywhere” (2010). COHRE was created in 1994 in the Netherlands but has since moved to Geneva, Switzerland.

### **2.5.1.2 Slum/Shack Dwellers International (SDI)**

Slum/Shack Dwellers International (SDI) is “a confederation of country-level organisations (called ‘federations’) of the urban poor from 28 countries of the Global South” (Slum/Shack Dwellers International, 2009).

The organisation does not focus on housing-issues only, but also has programmes addressing savings plans, skills and knowledge transfers, addressing land-tenure issues, infrastructure development, empowering women and more.

### **2.5.1.3 Asian Coalition for Housing Rights (ACHR)**

Since its inception in 1988, the ACHR has evolved from focussing mainly on housing rights and problems of evictions to training and community savings and credit activities (2001). ACHR is active in at least fourteen Asian cities, with their headquarters in Thailand.

### **2.5.1.4 The Society for the Promotion of Area Resource Centres (SPARC)**

This Indian based network is “one of the largest Indian NGOs working on housing and infrastructure issues for the urban poor” (SPARC, 2010). SPARC in turn provides support for the “National Slum Dwellers Federation (NSDF), a broad-based organization of the urban poor” as well as for “a network of women’s collectives called Mahila Milan”.

## **2.5.2 South Africa**

Locally, housing provision for the poor has long been a very contentious issue. Chapter Three will investigate this matter further, but suffice to say that there has seldom been any communication between those providing the housing and those on the receiving end.

Over the years, various bodies were created to address this situation – mostly giving a voice to the poor and homeless in order for them to consult with government and other providers.

Anti-eviction has a very important place in these movements as more often than not the inhabitants of slums or squatter camps are evicted and moved to different premises, often on the urban periphery, without them having any say in the process. As will be discussed in Chapter Three, having a house that is poorly situated for economic activity is often viewed by the poor and

homeless as being worse than living in a shack closer to an area where economic activity is taking place.

### **2.5.2.1 People's Housing Process (PHP)**

According to Tonkin (2008), the PHP is a “housing delivery approach in which people build or manage the building of their own houses. The term is also used in a narrow sense to refer to projects which gain access to the grants available under the People's Housing Process delivery approach, but where people have not been involved in building or managing the building of their houses”.

Carey (2009) argues that the PHP was developed over nearly 20 years. “South African NGOs began working with communities in the late 1980s to develop community based and people centred approaches to access land and deliver services and housing.”

The main aim of the PHP programme, according to a document prepared by the (then) Department of Housing, “is to deliver better human settlement outcomes (at household and at the community level) based on community contribution, partnerships and the leveraging of additional resources through partnerships. This is achieved by developing livelihood interventions that lead to outcomes such as job creation, developing a culture of savings, skills transfer, and community empowerment, building of community assets and social security and cohesion. The PHP enables/encourages communities to actively contribute and participate in the housing development process so that communities take ownership of the process and not just act as passive recipients of housing” (2008).

### **2.5.2.2 Anti-Eviction Campaign (AEC)**

According to their website, the Anti-Eviction Campaign (AEC) was formed in 2000 as the Western Cape Anti-Eviction Campaign (2010). Their aims include “fighting evictions, water cut-offs and poor health services, obtaining free electricity, securing decent housing, and opposing police brutality”.

Furthermore, the AEC acts as an umbrella body for “over 15 community organizations, crisis committees, and concerned residents movements who have come together to organise and demand their rights to basic services”.

They are mostly active in the Western Cape.

### **2.5.2.3 Abahlali baseMjondolo (AbM)**

One of the South African movements coming out for the rights of the homeless of those living in shacks is Abahlali baseMjondolo (Kienast, 2010). Abahlali baseMjondolo (AbM) is mainly based in Durban and was formed in 2005 by the Kennedy Road shack dwellers. This group of people has repeatedly been at the receiving end of (local) government attempts to remove the shacks and relocate the inhabitants. The inhabitants of Kennedy Road have been steadfastly refusing these

efforts and their position has been noted in several overseas publications and by bodies such as the Freedom of Expression Institute and the Open Democracy Advice Centre.

In an article published in November 2005, AbM's chairman S'bu Zikode describes the inhabitants of Kennedy Road and those in keeping with their sentiments as the "Third Force". "Well, I am Third Force myself. The Third Force is all the pain and the suffering that the poor are subjected to every second in our lives. The shack dwellers have many things to say about the Third Force. It is time for us to speak out and to say this is who we are, this is where we are and this how we live. The life that we are living makes our communities the Third Force" (Zikode, 2005).

"The Third Force is all the pain and the suffering that the poor are subjected to every second in our lives . . . Those in power are blind to our suffering . . . My appeal is that leaders . . . must come and stay at least one week in the jondolos. They must feel the mud. They must share 6 toilets with 6 000 people. They must dispose of their own refuse while living next to the dump . . . They must chase away the rats and keep the children from knocking the candles. They must care for the sick when there are long queues for the tap . . . They must be there when we bury our children who have passed on in the fires, from diarrhoea or AIDS."

According to Kienast (2010) AbM has always demanded "land or housing close to working opportunities, schools and clinics". As already indicated, the relocation of the poor to the urban periphery entrenches poverty and lacking opportunities.

#### **2.5.2.4 Development Action Group (DAG)**

The Development Action Group (DAG) is another Western Cape-based organisation. According to their 2008/2009 Annual Report, they focus on five key areas: citizenship and participation; value capture; informal settlement upgrading; medium-density housing, and; municipal-wide planning.

#### **2.5.2.5 Federation of the Urban Poor (FEDUP)**

According to Carey (2009), a "social movement consisting of an estimated 700 housing savings schemes linked with a loan fund called the uTshani Fund, which is affiliated to Shack/Slum Dwellers International" (SDI, see section 2.5.1.2 above).

#### **2.5.2.6 Community Organisation Resource Centre (CORC)**

At first CORC was known as the Coalition of the Urban Poor (CUP) or the the Alliance of Rural Communities (ARC) (CORC, 2010). The organisation provides support through various programmes, including micro-finance and savings; alternative housing technology; water, sanitation, energy, waste management and sustainable urban development; support specifically for rural communities in ecotourism, sustainable land use, land claims and sustainable rural development; grassroots information gathering and application for resource allocation and people-centred development; tenure and land use management; video, photography, documentation, and;

health, HIV/AIDS and the creation of safe social and physical space for women, children and concerned men.

## **2.6 CONCLUSION**

It is clear that many voices take part in the debate surrounding the provision of low-cost housing. International bodies such as the United Nations, on the one hand, and local movements such as Abahlali baseMjondolo, all try to give valuable directions in this ongoing debate.

The significance of the issue is underlined by the wide group of concerned players. The answer to what is 'adequate housing', and whether this is similar to 'low-cost housing', as defined in this section, is not for this report to uncover.

It is worthwhile to have a clear understanding of the intricacies involved with housing, housing provision, and the many related fields.



## **CHAPTER 3**

### **LOW COST HOUSING IN SOUTH AFRICA**

#### **3.1 INTRODUCTION**

Most – if not all – of the issues listed as Millennium Development Goals (see previous chapter) also rank highly on South Africa's agenda of problems.

One might want to ask whether the provision of adequate housing – a means to ensure environmental sustainability – will not play a major role in reducing child mortality (goal four)? Or combat disease (goal six) or promote gender equality (goal three)?

While it is not in the scope of this research report to rank these goals within the South African – or international – context, the importance of ensuring environmental sustainability (the seventh of the eight goals), can not be underplayed.

This chapter gives an overview of the South African government's approach to low cost housing.

#### **3.2 ACCESS TO HOUSING**

According to Statistics South Africa (2009), 56% of South Africans lived in fully-owned formal dwellings in 2009.

##### **3.2.1 Legislation**

Tonkin (2008) points out that, despite the critical importance of legal recognition of the right to adequate housing, it is far more than merely a legal issue. "The way that rights are defined and realised is largely a political process that depends on the mobilisation of citizens and civil society organisations, and the engagement of civil society with government about basic needs. The right to housing and, indeed, all economic, social and cultural rights confer a much lengthier and more complex series of obligations and governments. The broad duty to promote the right to adequate housing requires government to educate the public and to strive to create a culture in which the right can become a reality. The key to this lies in the concept of 'citizenship'."

##### **3.2.1.1 South African Constitution**

The South African Constitution, 1996, acknowledges and protects the right of "everyone to have access to adequate housing and makes it incumbent upon the State to take reasonable legislative and other measures within its available resources to achieve the progressive realization of this right" (DHS, 2009 A).

##### **3.2.1.2 Housing White Paper, 1994**

The White Paper is built around seven strategies, namely:

- i) Stabilising the housing environment

According to Rust (2006), this “strategy has emerged from the history of bond boycotts in South Africa, in which many mortgage lenders found themselves exposed as borrowers defaulted on their loans”. By creating the opportunity for safe investments, this strategy aims at mobilising private sector investment.

ii) Mobilising housing credit

Again aimed at stimulating private sector investment.

iii) Subsidies

“Probably the most well known of the seven strategies, the introduction of once-off capital grants is an acknowledgement of the income disparities that exist and the negative impact this has on a low income family's ability to access the housing it needs. Subsidies provide a lump sum of money, available only once in the beneficiary's lifetime, as a financial leg-up into the market process.” (Rust).

iv) Supporting the Peoples Housing Process

This strategy allows for people earning less than R1 500 per month to “build and organise the building of their houses themselves” (Rust).

v) Rationalising institutional capacities

This strategy was based on the assumptions “that a single institutional framework for housing is necessary” (Rust). In turn, the state must seek “to reduce levels of dependency and increase levels of independence from State financial assistance”.

vi) Facilitating the speedy release and servicing of land

Pre-1994 urban planning in South Africa was aimed at dividing and fragmenting the population, relegating certain parts to areas with no or very little infrastructure (Harrison, Huchzermeyer & Mayekiso, 2003).

vii) Co-ordinating state investment in development:

“Under the ambit of this strategy, the Urban and Rural Development Frameworks were developed” (Rust, 2006).

### **3.2.1.3 Housing Act, 1997 (No. 107 of 1997) and subsequent amendments**

According to Du Plessis, this act “defines the housing development functions of national, provincial and local governments, repeals all racially based housing legislation, expands on the provisions of the Constitution and prescribes general principles for housing development” (2002). Tonkin (2008) explains the importance behind the allocation of roles as defined in the act by saying “government functions should be performed at the lowest possible sphere, closest to the people, that is, at local government level”.

### **3.2.1.4 The Urban Development Framework, 1997**

Du Plessis (2002) highlights four programmes within this framework:

- i) integrating the city;
- ii) improving housing and infrastructure;

- iii) promoting urban economic development; and,
- iv) creating institutions for delivery.

### **3.2.1.5 *Breaking New Ground (BNG), 2004***

Tonkin is of the opinion that the approval of the BNG plan marked a “turnaround in housing delivery countrywide” (2008). The Habitat Agenda and Global Plan of Action as well as the Millennium Development Goals inform this document. “The sustainable human settlement discourse, as articulated in the BNG, is couched within the emerging international language for addressing global urbanisation.”

Tonkin then highlights the following five objectives put forward by the BNG:

- i) promoting densification and integration;
- ii) enhancing the location of new housing projects;
- iii) supporting urban renewal and inner city regeneration;
- iv) developing social and economic infrastructure; and,
- v) enhancing the housing product.

### **3.2.1.6 *Housing Development Agency Bill***

This act allows for the Department of Human Settlements to create the “Housing Development Agency (HDA) as a statutory body responsible for the acquisition and rapid release of well-located land for integrated settlements. The agency’s facilitation of the rapid release of land is key to the implementation of the BNG policy and will improve the efficient location of human settlements” (Tonkin, 2008).

## **3.3 LOW-COST HOUSING: TARGET GROUP**

According to the Department of Human Settlements (DHS), about 70% of South African-households do not have access to housing credit through the formal banking sector (DHS, 2008 B).

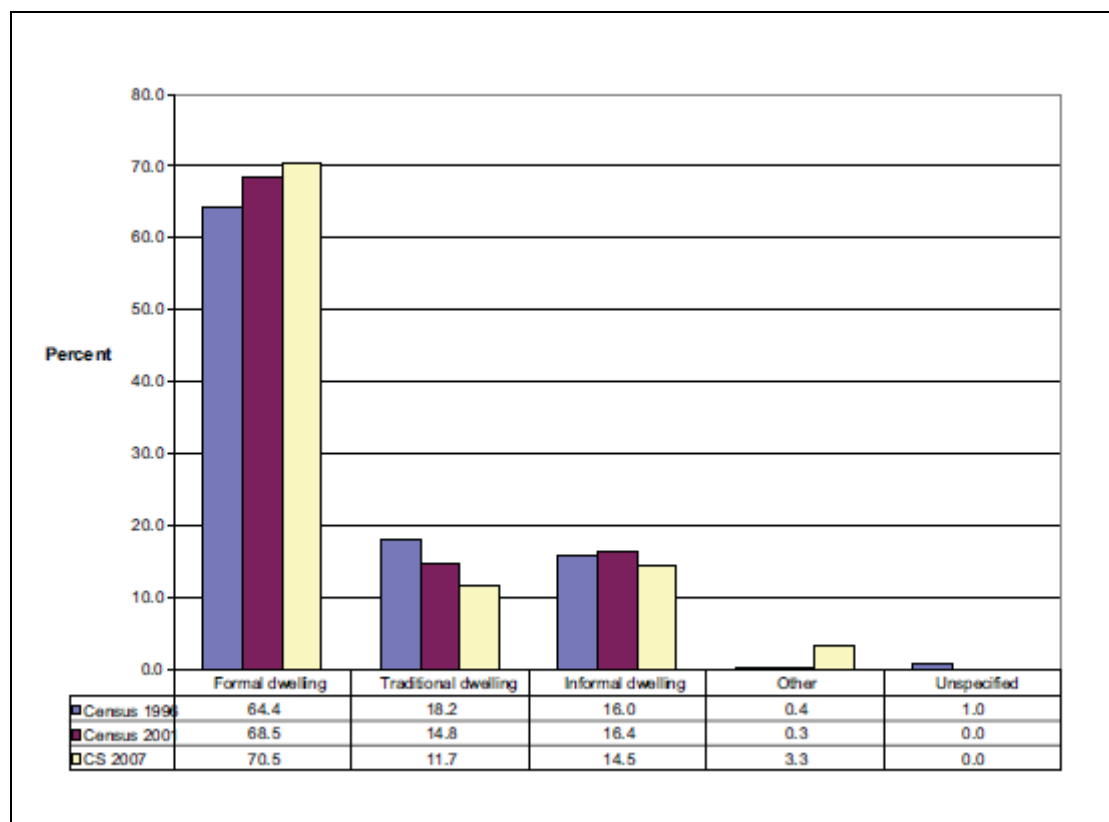
In order for government to assist the above mentioned 70% of the population, several programmes have been developed to address the housing need. In general, there are two main areas of focus:

- i) households with a combined income of less than R3 500 per month (approximately 40% of the affected group), and;
- ii) the remaining 30% of the affected group, who has a combined household-income of more than R3 500 per month but who still do not qualify for housing credit through the formal banking sector.

Households with an income of less than R3 500 (the aforementioned 40%, point i) for whom housing finance is not an option, are provided with a housing unit through the housing subsidy scheme.

For the remaining 30% (point ii) “end-user finance”, in addition to the housing subsidy scheme, is needed. According to the DHS this group is un- or under-served because:

- i) The conventional banking sector being unable to service them due to structural incompatibilities;
- ii) Insufficient capacity in the emerging, increasingly successful but inadequately funded specialised lending sector; and
- iii) Insufficient focus by Government and the private sector on alternative tenure forms.



**Figure 3.1 Percentage distribution of household by type of main dwelling**

Source: Community Survey 2007. The RDP commitment: What South Africans say. Statistics South Africa.

According to the above table, 70,5% of South Africans resided in formal dwellings in 2007. Furthermore, as reported in the DHS’s Annual Report (2009 B), 56% of South Africans who lived in formal dwellings in 2009, also fully owned these dwellings. The report also mentions a “growth in partial ownership and other kinds of tenure status, such as occupying the dwelling rent-free”.

The report also finds that a recent survey conducted by the department, found that 12,8% of South African households were living in a RDP or state-subsidised dwellings. Female-headed households were “significantly more likely (11,5%) than their male counterparts (8,2%) to receive a Government housing subsidy”.

### 3.4 GOVERNMENT INTERVENTIONS

On its website the DHS states four “mutually comprehensive and supportive approaches” in order for government to be more successful in the provision of housing for the “under- and un-served portion of the population” (2008 C). These are:

- i) “Government initiative aimed at facilitating and encouraging the formal banking sector to increase lending to the lower end of the housing market;
- ii) Proactive steps to foster growth and development of the emerging alternative lending sector;
- iii) A major initiative to stimulate the provision of housing under a variety of tenure options; and,
- iv) Mechanisms to substantially promote and expand the amount of personal savings mobilized in the housing process.”

To attain these goals, a number of bodies (already in existence or recently created) are tasked to assist government. These include:

- i) National Home Builders Registration Council (NHBRC)  
The NHBRC (2010) was established to regulate the building industry and protect the interest of housing consumers.
- ii) National Housing Finance Corporation (NHFC)  
According to their website, The National Housing Finance Corporation was set up in 1996 by the then Department of Housing (2003). It assists with the facilitation and funding of the development of sustainable human settlements and works towards the eradication of informal settlements.  
The corporation is one of eight development finance institutions in SA. It acts as a “wholesale funder and risk-manager, facilitating access to housing finance for low and moderate income communities”.
- iii) National Urban and Reconstruction Agency (NURCHA)  
NURCHA is a section 21-company (not for gain) and regards itself as the “partner of choice for construction companies seeking innovative construction financing solutions. We are specifically geared to provide construction finance and support for contractors and developers who cannot easily access finance from conventional financial institutions” (2007).
- iv) Rural Housing Loan Fund (RHLF)  
The RHLF was created in 1996 with a mandate to help low-income earners access small loans (2010). It facilitates housing microloans through intermediary or retail housing finance lenders.
- v) SERVCON  
According to the DHS-website (2008 A), Servcon was first created in 1995, following a record of understanding. Since then, however, the mandate has changed and Servcon now works towards the “normalization/regularization of provincial housing department low income

housing portfolio's" as well as to "acquire and hold suitably located state owned land and/or landed property for integrated human settlement development".

vi) Social Housing Foundation (SHF)

The SHF (2008) develops "a vibrant and sustainable social housing sector for South Africa". This is done through the creation of credible social housing institutions (SHIs).

vii) Thubelisha Homes

Another section 21-company, Thubelisha Homes was "established in June 1998 as a special purpose financial vehicle to create housing stock for clients of Servcon Housing Solutions. As a result of the agreement between government and the banks to subsidise the transfer of properties to all of the remaining Servcon clients, the relocation programme has been effectively discontinued. Accordingly, Thubelisha's mandate has been reviewed in line with the objectives of the department's comprehensive housing plan. Thubelisha has been repositioned to provide provinces and municipalities with technical assistance to unblock stalled housing projects and prepare fast-tracked housing projects to respond to emergency housing circumstances" (DHS, 2008 B).

viii) Housing Development Agency (HDA)

The HDA "was established in 2009 as a public development agency whose mission is fast-tracking the acquisition and release of state, private and communally owned land for human settlement developments. The HDA will also provide project management services for the development of human settlements" (2010).

### 3.5 CONCLUSION

The different means government has created to assist with the provision of low-cost housing indicates an awareness of and commitment to the challenge within this country. The reason why South Africa still has such an enormous backlog might be, in part, due to the nature of housing provision – a wicked problem, as discussed in the following chapter.

## CHAPTER 4

### LOW COST HOUSING AS AN EXAMPLE OF A WICKED PROBLEM

#### 4.1 INTRODUCTION

The needs of individuals are influenced by a near-endless list of factors: geography, health, education, infrastructure and more. Combine with these housing challenges as they manifest in different cities, for different people and different governments. Now add changing economies – local and international – shifts in strategic partnerships, changes in government – the list of factors influencing the provision of adequate housing just seems to grow.

This chapter looks at the concept of a wicked problem, its characteristics and why low cost housing can be viewed as such.

#### 4.2 WICKED PROBLEMS

##### 4.2.1 Definition

In 1973 Horst Rittel and Melvin Webber, while working at the Institute of Urban and Regional Development, University of California, Berkeley, for the first time “observed that there is a whole realm of social planning problems that cannot be successfully treated with traditional linear, analytical approaches” (Ritchey, 2005). These “wicked problems” (in contrast with so-called “tame problems”) are “ill-defined, ambiguous and associated with strong moral, political and professional issues”.

Wicked problems are “perplexing, because of the mutual impact of problems on each other” (Dostal, Cloete & Járos, 2005). What is more, the problem has co-producing factors from within the system as well as co-producing factors that arise from the system’s environment. “In fact, social problems form interacting fields of problems, each comprising many co-factors ... This mutual impacting of problems on each other results in circular causations, whereby a problem co-produces and reinforces itself.”

“Since they are strongly stakeholder dependent, there is often little consensus about what the problem *is*, let alone how to resolve it,” Ritchey states. Worse still, “[t]hey are messy, devious, and *reactive*, i.e. they fight back when you try to ‘resolve’ them”.

In a document prepared by the Australian Public Service Commission (2007) on the topic of wicked problems, Henry (2006) is quoted to say that “[i]ts persistence has not been for want of policy action. Yet it has to be admitted that decades of policy action have failed”.

### 4.2.2 Characteristics

Apart from describing wicked problems for the first time, Rittel and Webber also put forward a set of ten criteria these kinds of problems adhere to, namely (as quoted by Ritchey, 2005):

- i) There is no definite formulation of a wicked problem.
- ii) Wicked problems have no stopping rules.
- iii) Solutions to wicked problems are not true-or-false, but better or worse.
- iv) There is no immediate and no ultimate test of a solution to a wicked problem.
- v) Every solution to a wicked problem is a 'one-shot operation'; because there is no opportunity to learn by trial-and-error, every attempt counts significantly.
- vi) Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan.
- vii) Every wicked problem is essentially unique.
- viii) Every wicked problem can be considered to be a symptom of another [wicked] problem.
- ix) The causes of a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problems resolution.
- x) The planner has no right to be wrong.

### 4.3 LOW-COST HOUSING IN SOUTH AFRICA: A WICKED PROBLEM

Using Rittel and Webber's list of characteristics of a wicked problem, as quoted above, to establish the nature of the problem of low-cost housing in South Africa, one finds:

- i) There is no definite formulation of a wicked problem.  
Khan and Ambert (2003) notes the "conspicuous absence of any substantial dialogue and engagement between government and civil society around the shape and content of housing policy and its practical application".
- ii) Wicked problems have no stopping rules.  
Hassen (2003), speculates that an additional 200 000 housing units is needed annually (this is due to various factors, including population growth and urbanisation). Despite an annual growth in delivery of 10 percent "the impact on the backlog is likely to be minimal, and may even increase".  
Over and above, government's economic model for the delivery of housing is based on economic growth resulting from (foreign) investment. The percentage of growth (or lack thereof) has a direct impact on the annual budget made available to address the housing situation.
- iii) Solutions to wicked problems are not true-or-false, but better or worse.  
Housing needs of people differ. This is not subject to social status or income, but dictated by a combination of reasons, including income, dependents (size and relation), geography (urban vs. rural), technology, employment, financial status etc. The needs and situations of



individuals may differ. Combined with the available budget, specific housing delivery programme and political will from government's side, the delivery of housing to any individual can be better-suited or not.

In the words of De Souza (2003): "The success of an experience is a result of a complex synergy of factors, including some contingent ones, and not just the product of the adoption of the 'right' method or 'recipe'; in truth, there is no such a thing as a 'successful recipe' which just needs to be learned and then applied everywhere."

- iv) There is no immediate and no ultimate test of a solution to a wicked problem.  
Following on statements ii) and iii) above, it stands to reason that the need for housing changes continuously.
- v) Every solution to a wicked problem is a 'one-shot operation'; because there is no opportunity to learn by trial-and-error, every attempt counts significantly.  
Especially in the field of housing, where the availability of resources has an enormous impact on delivery, it is not possible to 're-address' a specific person's needs. Once an individual's situation has been dealt with, someone else comes is focused on. The availability of land as well as other resources (building materials etc.) also limits the capacity to try and supply an individual's needs through a process of trial-and-error. However, this does not mean that an inflexible approach must be followed (see also De Souza in iii).
- vi) Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan.  
Due to the unique character of wicked problems, one can learn from solutions offered, but there is not hard and fast rule to operate by.
- vii) Every wicked problem is essentially unique.  
Despite many countries battling with the problem of housing, every country in the end has their own unique circumstances (be it historical factors, politics, finance, geography etc.) influencing the character of their housing challenge in a singular way. Again it is worthwhile quoting De Souza (2003) when he says: "[T]here is no such a thing as a 'successful recipe' which just needs to be learned and then applied everywhere."
- viii) Every wicked problem can be considered to be a symptom of another [wicked] problem.  
Different role-players may state different factors as causes for South Africa's housing problems. Amongst others, this includes politics (the way in which Apartheid favoured some citizens above others – regarding income as well as land ownership); economics (the inability of some citizens to buy property); unemployment (due to a lack of sustainable job opportunities, not everyone can earn an income allowing them to buy property); education (the lack of education effectively keeps some citizens from doing jobs that might allow them to become property owners); resources (a shortage of building materials, due to various reasons, keeps government from building homes).

Khan and Ambert (2003) claims: “[T]he complex interplay of a range of critical factors ... have come to define, and at times undermine, the realisation of housing policy objectives with respect to democratic human settlement development, in particular, and poverty eradication, more broadly”. “Rethinking the relationship between housing and the macro-economy, and housing and poverty, is not only of paramount importance to enhancing developmental outcomes such as job creation, urban and human productivity; it is also essential to (and for) socio-political stability.”

- ix) The causes of a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem’s resolution.

Since a wicked problem is considered to be the symptom of another wicked problem (as in viii), the choice of problem (eg. politics, economics, unemployment, education, resources etc.) will also determine the route followed to address the problem. For example, should one be of the opinion that it is due to a lack of a good education that some are kept from being home owners it stands to reason that the implementation of an education action-plan will, eventually, bring an end to the housing problem. This line of reasoning clearly does not allow for other factors, such as a shortage of money or resources to allow for proper education for all.

- x) [With wicked problems,] the planner has no right to be wrong. While there is no definite solution, the planner should carry on experimenting, continuously trying to find a ‘better’ solution.

#### **4.4 AN OVERVIEW OF CURRENT HOUSING CHALLENGES**

If the current status quo with regards to housing development policies and programmes are held as “immutable”, the living conditions of the poor will not improve (Khan & Ambert, 2003). Issues that must be re-assessed and, in some instances, challenged, include the format of economic restructuring and the lack of alternative developmental policies underwritten by those in means, albeit power or wealth.

As far as the critical issues regarding housing are concerned, Khan and Ambert (2003) have identified four thematic “clusters”, namely housing and the macro-economy; housing finance; land and services; housing and human settlement development.

The point made is that housing “is not sectorally bounded; cannot be departmentally pigeon-holed; is impacted by and impacts on broader societal processes”.

They also caution against, what they refer to as, “sectorally integrated development” versus “integrated development”, the former meaning “the negotiation of integrated development through a particular sectoral lens”.

#### 4.4.1 Housing and the macro-economy

For the South African government, housing is “a subordinate component of macro-economic policy” (Kahn, 2003). “The role of the state shifts away from direct intervention in social and economic spheres towards enabling markets to become more efficient mechanisms for the distribution of goods and services.” The budget made available to address the South African housing challenges, therefore is dependent on the performance of the markets.

This viewpoint is supported by Baumann (2003) who highlights one of the 1994 White Paper on Housing as a framework that “sees housing mainly in macro-economic terms, as ultimately dependent upon growth of real *per capita* incomes and savings”.

Interpreting the White Paper, Baumann also states that there are two groups of potential beneficiaries as far as housing is concerned. The first “who, by reasons of employment and income status, have the potential to access additional financial resources for housing above the subsidy”. The second are “unable to participate in housing finance markets and are therefore completely dependent on the government subsidy”.

Baumann reasons that “there is much more to households’ ability to secure their livelihoods – and thus to poverty – than income and physical assets. Households’ decision-making and motivations are thus more complex than a simplistic income-based view of poverty would suggest.” This he illustrates by making use of the so-called asset vulnerability framework, an approach that “focuses on the *livelihood* strategies employed by poor households” (Moser, 1999 and Rakodi, 1999 cited by Baumann, 2003). It is explained as:

“The asset vulnerability framework seeks to understand assets and options available to households in their pursuit of a livelihood. It defines these assets in a way that recognises the implicit value of non-marketable and/or intangible resources.” Amongst others, these assets include: labour and human capital (health status, skills, education, experience); productive assets (land, housing); household relations (mechanisms for pooling income, consumption); social capital (reciprocity within communities and between households based on trust, social ties, accumulated inter-household knowledge); other relevant natural assets (food, firewood, water), and; financial assets (savings, access to credit).

Baumann quotes Carney (1998), who defines ‘livelihood’ as: “...[t]he capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is considered to be sustainable when it can cope with and recover from the stresses and shocks and maintain or enhance its capabilities and assets both now and in the future”.

The importance of the asset vulnerability framework, according to Baumann, lies in the implication that “poverty has many more aspects than insufficient monetary income”. “It may be argued ... that by providing free housing with secure tenure, South Africa’s housing policy is *automatically* adding to the capital stock (‘wealth’) of beneficiary households. The asset vulnerability framework,

however, raises the possibility that acceptance of an RDP [Reconstruction and Development Plan] house may in fact *reduce* households' stock of other – and potentially more important – assets, leading to an overall net *loss* to the household.”

Baumann lists the following as possible loss of assets:

- i) impact of changed location;
- ii) economic reconstitution of communities;
- iii) changes to the status of housing assets;
- iv) limitations on freedom of movement;
- v) reduced savings capacity;
- vi) disruption of social networks;
- vii) increased insecurity;
- viii) increased vulnerability to crime;
- ix) inability to absorb or support the extended family;
- x) reduced capacity to invest in social capital; and,
- xi) disruption of solidarity networks and institutions.

Baumann is of the opinion that the micro-economic foundations of a household's livelihood strategies are disregarded in this way, in favour of the “supposed ‘value’ of the housing asset”. Moreover, the more emphasis is placed on the value of the physical housing asset by “imposing uniform – and often inappropriately high – construction and service standards, the more likely it is that the RDP projects will be pushed to the urban periphery, potentially increasing overall poverty”. He then quotes international experience that “*in situ* upgrading is preferable to greenfields development”. (Greenfields developments refer to developments on vacant, unserved sites.)

#### **4.4.2 Housing finance**

Smit (2003) lists the following as problems regarding the housing subsidy scheme:

- an insufficient and uneven flow of funds;
- poorly co-ordinated and inequitable subsidisation;
- the subsidy's value not keeping pace with inflation;
- the complicated mechanisms regarding subsidy approval and payout;
- problems with targeting; and,
- affordability of the ongoing costs of subsidised housing.

Smit identifies several problems as far as housing credit is concerned. This includes:

- the inappropriateness of formal finance;
- lack of a secondary market;
- the so-called ‘grey gap’, referring to households earning between R1 500 and R3 500 per month;

- a lack of options;
- the narrow focus on standardised products;
- lack of community-based delivery; and,
- little consideration given to integrated development.

According to Smit, housing policy and interventions should have two key objectives. Firstly it should “improve the efficiency of the market by removing obstacles that prevent the private sector from increasing the supply of affordable housing or the public from buying or renting housing units produced by the private sector”.

Secondly it must make certain that those who do not have the means to buy or rent housing produced by the private sector are housed satisfactorily.

Therefore, Smit is of the opinion that a subsidy system should:

- primarily aim to provide adequate housing conditions for the poor;
- assist those who cannot secure access to affordable financing;
- be transparent with no undeclared subsidies;
- be progressive in the way it operates, e.g. the poor should receive larger subsidies than those with better financial means;
- treat similar households the same as far as the level of subsidisation is concerned;
- allow for integration between funding options, ensuring the provision of integrated living environments;
- make provision for a range of tenure options;
- stimulate the secondary market;
- be sustainable; and
- maximise choice.

#### **4.4.3 Land and services**

Due to the often poor cost recovery for services, municipalities can often not afford delivering services at a higher level (Khan & Ambert, 2003). Conversely, it is generally stated that “protest politics spawned a ‘culture of non-payment’. The Masakhane Campaign is, in the main, couched in terms of a type of discipline wherein the culture of non-payment and the (supposed post-apartheid) ‘culture of entitlement; combine, thereby worsening the plight of the poor and undermining the authority and delivery capacity of the state. The Campaign maintains that ‘good patriotic citizens’ pay their rates and services fees, thus contributing to reconstruction” (McDonald, 2002 cited in Khan & Ambert, 2003). However, the scant consideration given to the issues of ‘ability to pay’ versus ‘willingness to pay’ is also put forward.

This leads to the often controversial subject of land-reform and restitution in South Africa and the lack of reconstruction and transformation of the urban land market. Berrisford (1999 cited in Khan

& Ambert, 2003) argues that this shortcoming might well be a deliberate oversight from government who is unwilling to “countenance the political backlash not only from historically established interests, but also from the previously excluded (black) middle class who now have significant investments in the urban/suburban property market”. This unwillingness severely hinders the urban restructuring, especially as far as the inclusion of the poor within the urban fabric, is concerned.

Apart from the quality of services delivered, the point is also made that available financial resources are put under even more pressure. This leads to further “squeezing the availability of funds for land acquisition”. However, “the pattern of peripheral (as opposed to integrated) development is likely to remain, despite the increase in subsidy amounts”.

A similarly contentious issue is that of local government – usually the authority responsible for housing delivery. Pottie (2003) notes that local government must deal with political as well as financial pressures – from ‘the sides’ as well as from ‘above’. “As initiatives to improve administration and financial management are implemented at the local level, political demands for improved services continue. Local government has continued to assume growing responsibilities for housing and infrastructure development, even as national budgets for housing have declined.”

Add to this the slow transition made by local government itself: “The local government transition has been the slowest of the three spheres of government.” Through the provision of housing, municipalities often find themselves in a very unenviable position by assuming “considerable political and economic risks associated with all aspects of the development process”. “[J]ust as local government finance is in large part conditioned by macro-economic decisions taken by national government, so too will its development record be judged against a context of national housing policy.”

#### **4.4.4 Housing and human settlement development**

Research puts a lot of emphasis on the so-called ‘one-sided approach’ where government and the formal sector do not sufficiently understand the needs and realities of the very poor (Khan & Ambert, 2003). It is felt that a lot of emphasis is placed on the ‘supply-side’ (push) but not enough on the ‘demand-side’ (pull). This relates to, amongst others, service delivery, financing of housing, the format of the housing delivered and more. The results are often inflexible or irrelevant ‘solutions’ – for instance financing of housing by traditional banking institutions.

On the ‘supply-side’ (or, as referred to elsewhere in their writing: “viewed from above”) Khan and Ambert (2003) are of the opinion that “housing policy and practice are both expression and component of government’s wider development agenda”. This is explained as follows:

“As *expression*, the agenda is conditioned and circumscribed by the nature of socio-institutional regimes regulating intersecting associational economies that define access to land, credit, services, income and welfare. The contours and content of official regulation of the relationship/s

between landowners and landless; moneylenders and borrowers; workers and bosses; employed and unemployed; homeless and landlords; and so forth, not only determines the effectiveness/outcomes of the development intervention, it also defines the identity of our politics (*settlement versus transformative*). The identity in turn is mediated by local and external forces rooted in the dominant logics (and discursive adaptations) pertaining to poverty eradication/alleviation/amelioration, economic development, co-operative governance, and the (supposedly insurmountable) pressures of international market forces. As *component*, interventions condition, interplay with and echo off the outputs of other departmental and sectoral policies and programmes, often unfurling a host of unintended consequences in the everyday experiences of poor communities. Take together, housing policy and practice, as both *expression* and *component*, furnish us with valuable clues about the nature of the reconstruction project and the social architecture or our democracy.”

The point is also made that no sufficient engagement is made with the “livelihood strategies engineered by individuals and households as active agents, not merely ‘beneficiaries’, in negotiating their own survival. Informed by this perspective, the housing needs and choices of the poor are neither homogeneous nor static. The nature, quality and location of the living space is a complex and fluid variable that critically influences how resilient or vulnerable a household may be in its ceaseless geometric bundling, unbundling and re-bundling of assets and capabilities” (Khan & Ambert, 2003).

This is in reference to the so-called ‘demand-side’ or ‘seen from below’. From this point of view, it is often, but not exclusively, the intangible aspects of housing and the living environment that comes to the fore. Unfortunately it is seldom met by sufficient understanding from the formal sector and government’s side. “This includes access to land and secure tenure, appropriate infrastructure and services, the strengthening and reinforcing of (horizontal/positive) social capital; civic empowerment, deepening the access of the poor to the circuits of bureaucratic and political power, a maximisation of choice and opportunities, and active measures to counteract discrimination against vulnerable groups” (Khan & Ambert, 2003).

Another result of government’s so-called one-sided approach is the emphasis laid on output: prominence is given to the number of houses delivered, but not necessarily on the quality (in terms of building as well as living environment). Marx (2003) refers to this as “the ‘projectisation’ of development”. Without denying the value of project management as a tool, he is of the opinion that it is often reduced to an “end in itself”. Marx states that the most important competency needed by practitioners to support informal settlements, is “an ability to recognise, if not be able to respond, to diversity, complexity, informality”. This will allow for the creativity of intervention as dictated by a specific project, instead of falling back on a blanket ‘one size fits all’ approach.

#### **4.5 CONCLUSION**

From the above it is clear that housing is not simply a matter of 'bricks and mortar'. It is a very complex issue informed by many different factors outside the influence of the individual or the government. Can questions like this ever be solved? Should one try to find a solution or simply 'manage' the challenge as best as possible? Chapter Five will look at attempts elsewhere in addressing this issue – as well as to the success experienced.



## **CHAPTER 5**

# **INTERNATIONAL CASE STUDIES IN THE PROVISION OF LOW COST HOUSING**

### **5.1 INTRODUCTION**

Governments the world over are faced daily with issues of good governance. This includes the provision of housing and relevant services.

For some countries, the housing challenge is quite different from what South Africa experiences. Sweden, for instance, “has achieved an enviable standard of living under a mixed system of high-tech capitalism and extensive welfare benefits” (The World Factbook, 2010 B). It has a GDP (per capita) of \$36,600 (2009 est.) and an estimated unemployment rate of 8,3%. The same source describes post-1994 South Africa as struggling “to address apartheid-era imbalances in decent housing, education, and health care” (2010 C). The per capita GDP is \$10,300 (2009 est.) while unemployment stands at 24%.

However, certain technologies or principles can be applied with equal success in completely different circumstances. And while countries may have different incomes, cultures and geographical influences, the basic challenge of providing people with adequate affordable housing, is universal.

This chapter investigates ways in which three South American countries address their housing needs.

### **5.2 THE BEST PRACTICES AND LOCAL LEADERSHIP PROGRAMME**

The Best Practices and Local Leadership Programme (BLP) is a UN-Habitat programme established in 1997 “to make use of information and networking in support of its implementation. It is a global network of government agencies, local authorities and their associations, professional and academic institutions and grassroots organisations dedicated to the identification and exchange of successful solutions for sustainable development” (UN-Habitat, 2010 B).

One of these award-winning projects is discussed in this chapter. The project was chosen for its relevance to the South African situation.

#### **5.2.1 National policy of urban development in Brazil**

The impetus behind this initiative is two-fold: on the one hand, the inequality within the Brazilian nation, with regards to their means of access to housing and land as well as the effect the inequality had on the country as a whole (Ministry of Cities, 2006). On the other hand, the Brazilian people do not have a history of political participation. In effect, this entrenched the inequality and lack of access the poorer part of the population was experiencing.

A summary of some of the Brazilian realities experienced:

- i) Sanitation: water supply; sewerage; management of solid residues and rain water.
- ii) At the time of the project being recognised by the BLP (2006), it was found that approximately 7,2 million people in Brazil had no access to housing.
- iii) The lack of access to suitable land within urban areas.

The wicked nature of the challenge is clear in the following excerpt: “A deep analysis of available data reveals that the poor population of Brazil is impelled to illegality in order to exercise their right to a living. The disorderly occupation of spaces generates serious effects on the population that lives in the precarious establishments in the absence of the urban needs, and deprived of access to them, besides always being exposed to catastrophes caused by landslides, inundations, and other natural phenomena. The illegal settlements also have compromising effects on the city as a whole for recurrently contributing to the largest incidence of floods during each rainy season, and to permanent traffic jams. This situation is often worsened by the absence of public resources to urbanize new fronts of city expansion” (Ministry of Cities, 2006).

Furthermore: “Brazilian common sense tends to hold on to the idea that political rights mean to participate in elections, and that to contribute to or participate of politics is not important, since common people do not have the power to provoke changes in the process of making decisions and implementing policies.”

#### **5.2.1.1 The Statute of the City**

Brazil had no general guidelines for urban development policies. However, the formulation of just such a set of guidelines was assigned to government by the 1988 constitution (Ministry of Cities, 2006). The result, known as The Statute of the City, was only proclaimed in 2001.

“Article 43 of the Statute of the City instituted the Council of Cities and Conferences as an important instrument of popular participation. The same law also institutes Participatory Master Planning for urban development as one of the instruments for an urban reform, and proposes the mobilization of the whole society to discuss and formulate projects for the development and administration of the local spaces, so that all can rationally enjoy the cities’ resources, the urban equipments and the available lands in the Brazilian municipalities.”

In order to achieve this, the Ministry of Cities was created on January 2003. The ministry’s main function was (and still is) to “promote universal access to the fundamental rights through democratic and decentralized actions and with popular participation . . . By concentrating programs and actions on the areas of housing, urban land planning and management, environmental sanitation, transportation and urban mobility, which were scattered through many units of government, the Ministry of Cities tries to overcome the fragmented management of urban policy-making, so far conducted by a plurality of Federal administration stances, to increase the rationality

and effectiveness of the resources applied, and to facilitate the integration between the three governmental spheres and the participation of the society.”

Later that same year the inaugural National Cities Conference was held. Its purpose to design “the overall policies of the Ministry of Cities and deliberating on its own attributions”. From this followed the Council of Cities. At the conference it was decided which participants would sit on the national level board. The Council of Cities’ role was ratified by national government’s decision that Conferences of Cities should take place every three years “nationally and in all of the Brazilian states and municipalities, clearly showing its option for a collective approach to policy planning for the urban development of the country” (Ministry of Cities, 2006).

The lacklustre participation of the Brazilian people was turned on its head at the first Cities Conference, when “people from 3 347 municipalities out of a total of 5 561”, from all 26 states as well as the Federal District, attended. A further 2 510 delegates represented “a variety of class entities and professional associations, social movements, non governmental organizations, universities, businessmen, government officials and parliamentarians from all over the country”.

In the run-up to the first Conference, a series of local and state meetings were held, resulting in 3 850 proposed amendments to the initial proposal from the Ministry of Cities. These proposed amendments were all categorised, analysed and, eventually voted on.

“This Conference was one of the largest citizenship demonstrations and popular participation events in the country’s history . . . The Conference allowed the Brazilians to have a say on the city project they would like have” (Ministry of Cities, 2006).

#### **5.2.1.2 National Policy on Urban Development (NPUD)**

The second National Cities Conference was held in 2005, attended by 2 571 delegates. Before this conference, an astounding 896 local conferences and 243 regional conferences were also held.

This conference was focused on the creation of a National Policy on Urban Development (NPUD). Four main themes were developed:

- i) Participation and social control;
- ii) Federative matters;
- iii) Regional and metropolitan urban policies; and,
- iv) Urban development financing.

According to the Ministry of Cities (2006), the main products of the second National Conference of Cities were the following:

- i) “The joint governance pact among the federated beings for the formulation, execution, follow-up and financing of programs, projects and policies of urban development.
- ii) “Proposition of a National System of Urban Development structured by Conferences, Councils, Fund and Forums, in all spheres of the Federation, with the representation of the

government and of the society in an advisory, deliberative, decentralized and permanent way.”

Since its formation, the Council of Cities took on a very central role in the Brazilian process of the making of urban policy. The council meets on a three-monthly basis where they then oversee studies and proposing guidelines for the formulation and implementation of the National Policy on Urban Development. The council also have the very important function of monitoring the implementation of the NPUD.

Furthermore, “[t]he operational planning of the deliberations made at the Conferences and other activities related to NPUD take place mostly during the Council of Cities meetings every three months and through the work of the Council's Technical Committees”.

### **5.2.1.3 Participants**

The way in which the Council of Cities is structured, guarantees a plurality of views in the development of the NPUD. This includes:

- Popular movements;
- Business sector;
- Non-governmental organizations;
- Professional sphere;
- academic and research organizations;
- Labour unions; and,
- The three spheres of government (local, regional and national).

“The plural origin of these entities and organizations and their record of involvement in urban development questions enable them to act in a purposefully articulated manner during political negotiations which adds technical quality to the debates and significantly contributes to urban policy-making in Brazil” (Ministry of Cities, 2006).

### **5.2.1.4 Impact**

Since its inception, the Council of Cities has already approved 51 resolutions. Some of these had major national repercussions, as “they were addressed to such relevant subjects as the introduction the bills of law for urban development policies, the elaboration of the Participatory Master Plan of urban development the Brazilian municipalities, the creation of councils of cities in the States and municipalities, and the institution of the Board of Management of the National Fund for Social Housing Interest (NFSHI)” (Ministry of Cities, 2006).

The importance of the broad participation achieved in the creation of the Council of Cities and the Conferences of Cities, lies in the fact that the role-players are well-represented and their opinions respected. The way in which the Brazilian people were liberated to participate in policy making, can also not be under-estimated.

According to the Ministry of Cities (2006), “[t]he beneficiaries of the actions accomplished through the Conferences and the Council are the 180 million Brazilians, 82% of whom live in urban areas. The Ministry of Cities has made the option of prioritizing the low income segment of the population in the delivery of programs and policies.

“Thus far, one of the main lessons which were learned is democracy gains more quality when governments add to the accumulated experience of the organized society to increase participation in the elaboration and execution of public policies and programs” (Ministry of Cities, 2006).

### **5.3 TWO CASE STUDIES: BUENOS AIRES, ARGENTINA**

At a conference of the International Society of City and Regional Planners (ISOCARP), O’Meara (2010) presented two social movement organisations in Buenos Aires, Argentina, who participated in government’s housing programmes on behalf of the poor.

O’Meara identified the following three elements that are “crucial” for the effective implementation of housing efforts:

- i) **Effective government:** Governments must be willing to listen to and work with residents in order to determine the best approach for improvements. They must be responsive through the implementation of policies that allow for innovative and sustainable improvement efforts to take place.
- ii) **Social capacity:** There must be in place some level of social and civic capacity in order for citizens to engage with planning processes and maintain active participation within housing improvement projects.
- iii) **Public-private partnerships:** Partnerships must be created and maintained by the government, the public, social organizations, and private stakeholders in order for policies and approaches to be effective.

According to O’Meara, the collapse of the Argentinean economy in 2000 created an opportunity to rethink that country’s housing policies. Because of a process of overall restructuring, “there was also an increased willingness to work with social organizations and civil society in partnership to achieve social goals”.

She also underlines a somewhat unique South American trait: the apparent “willingness on behalf of government agencies and politicians to implement models that favour strong public participation and prioritize changes that will benefit those in need of affordable housing”.

Two movements came to the fore in this regard: the MTL (Movimiento Territorial de Liberación) and the Madres de Plaza de Mayo Association (Madres).

### **5.3.1 Movimiento Territorial de Liberación**

The MTL was created during the economical crisis of 2000, when a large number of low-income residents were faced with eviction orders. The organisation's aims are two-fold: producing labour opportunities through the promotion and organisation of productive enterprises, and demanding at least minimum aid programs from state institutions.

The first housing project the MTL involved itself with, was the Monteagudo-redevelopment. This complex used to be a paint factory, located in the middle of an "old, centrally located industrial district that declined in the 1970's and left a considerable amount of derelict or idle factories, warehouses and industrial buildings" (O'Meara, 2010). Monteagudo is made up of 326 apartments, a complex of 10 business premises, a child-care centre, multi-purpose public room and a public square.

O'Meara recognizes the unique attributes of this development, the central location being foremost. She quotes the MTL on the intentional choice that was meant "to encourage integration with the traditional working class neighbourhood and ensure good accessibility to local transit and commercial districts".

The positive way in which the local residents responded to the construction at Monteagudo was a welcome extra. Many were of the opinion that "it would herald a revitalization of the neighbourhood".

A public-private partnership was created when the Buenos Aires city government Housing Institute provided the necessary finances for the project.

Social capacity was respected in that all the MTL-membership families (a total of 3 500) took part in the process of allocation the available 326 apartments as well as the business premises and child care centre. Some of the criteria taken into account include

- degree of political militancy;
- family structure;
- capacity to live together;
- degree of necessity; and,
- the ability to pay the mandatory instalments to the Housing Institute over 30 years. These instalments were not to exceed 20 percent of a family's total income to ensure permanent affordability.

### **5.3.2 Madres de la Plaza de Mayo**

This organisation has several projects running across Argentina and participation is not limited to membership. Two of their first projects, however, were in low-income neighbourhoods in Buenos Aires.

According to O'Meara "the funding for these projects was provided by the federal government through the Federal Housing Construction Program. The projects in Buenos Aires are jointly managed by the Madres, local housing cooperatives, Ministry of Human Rights, and the Buenos Aires City Government" (2010).

The organisation also campaigns for equal rights for women. In this regard, forty percent of the workers hired, are women. The cooperative pays salaries and provide "technical training, and all the necessary materials to carry out their task". The project's goals were served further when an agreement was signed with the city government in 2007, "authorizing the development of a factory to manufacture all of the panels necessary for housing construction. The plant's production capacity allows for at least 5,000 units a year to be built, and it is currently under operation in a rehabilitated warehouse. This plant is jointly managed by the Madres and the Buenos Aires city government" (O'Meara, 2010).

The Madres have planned to complete 1 700 housing units by the end of 2010, with the first 72 delivered in 2008.

#### **5.4 THE 'BARRIADAS' OF LIMA, PERU**

This case study has not been chosen for its successes. In this research report, Lima is an example of how certain key elements can be present without the desired results expected.

Lima has inspired two widely recognised lines of thought on housing and the poor. As Fernández-Maldonado (2006) remarks: "Informal urban development has been in Lima more extensive, more organized, and in some ways, more thought-provoking than in other Latin America cities which have undergone similar processes of rapid urbanization".

The context of the realities in Lima will be explained, followed by a discussion on the two main agitators of the mentioned theories.

##### **5.4.1 The 'barriadas'**

Lima was founded by the Spanish in 1535 (Fernández-Maldonado, 2006). During the twentieth century a "huge migration stream, among the strongest in Latin America, headed to Lima coming from rural areas of the Andes. Under the impossibility of the newcomers to get land or housing in the city, the first informal settlements, *barriadas*, began to form in the nearby hills or in dangerous places along the river, close to the city centre."

Dictionary.com (2010) defines 'barriada' as a shantytown section on the outskirts of a large city in Latin America. Chambers (2005 cited in Fernández-Maldonado, 2007) defines it as: "an area of fiscal, municipal, communal or privately-owned land that ... has been invaded disregarding legal ownership, with or without municipal authority. These lands are divided and distributed without officially approved plans, and groups of dwellings are built with a variety of basic structures.

Further, the areas lack one or more of the following services: water, sewage, lighting, sidewalks, roads, etc.”

According to Fernández-Maldonado (2006), the formation of *barriadas* resulted in a substantial transformation of Lima’s image. “*Barriadas* constitute an informal way of urban development, in which the population settles in the land before it has been developed. The development of the neighbourhoods becomes then a collective enterprise. After settling in the land, the residents organize in territorial and functional organizations, addressing local concerns and demanding the solution of their basic needs from the government. In Lima, the *barriadas* process has been more extensive, more organized and in some ways, more thought-provoking than in other cities of Latin America.

“Spatially, this process has produced orderly neighbourhoods, which follow the traditional urban grid used in other parts of the consolidated city. Functionally, this process has effectively provided access to land and housing to great part of the city dwellers. Although the physical qualities of *barriadas* are sub-standard, the cultural interpretations of the process are very positive, and served as international example” (Fernández-Maldonado, 2006).

#### **5.4.2 John Turner, urban planner**

John F.C. Turner has been “the most influential writer about housing in the developing world in the post-war period” (Harris, 2003 cited in Fernández-Maldonado, 2007).

Turner was the first from academic circles to oppose the “conventional academic wisdom” that “rapidly growing informal neighbourhoods in Third World cities were by definition slums, places of delinquency and social breakdown (Hall, 2002 cited in Fernández-Maldonado, 2007). In fact, Turner went so far as to promote the support of informal habitat processes, since “the squatters are mainly interested in consolidating their housing investment, getting their kids in school, and identifying themselves as respectable property owners” (Mangin and Turner, 1968 cited in Fernández-Maldonado, 2007).

Fernández-Maldonado (2007) argues that Turner was of the opinion that ‘progressive development’ was the ideal solution to the poor’s housing needs. This allowed them to adapt their housing needs according to the phase of their lives. He also believed that this strategy, rather than the provision of ‘minimum modern standard’ housing by government, “could save up to 50% of the housing costs”. In fact, “[t]he housing deficit would be solved if the State would promote *barriadas* development with training, building materials credits, and financial and technical support”.

He also believed in secondary advantages created by this approach – that the circumstances in the *barriadas* were beneficial for “community integration and development”: “When dwellers control the major decisions and are free to make their own contributions in the design, construction or management of their housing, both this process and the environment produced stimulate individual and social well-being. When people have no control over nor responsibility for key decisions in the



housing process, on the other hand, dwelling environments may instead become a barrier to personal fulfilment and a burden on the economy” (Fernández-Maldonado, 2007).

Fernández-Maldonado (2006) writes: “The strengths of *barriadas* were proved during the difficult 1980s, when a deep economic crisis with hyperinflation affected the whole society. *Barriadas* experienced the flourishing of grassroots associations, survival mechanisms, reciprocity networks, and new associative practices.

“Grassroots networks addressed survival issues, mainly food- and health-related matters. They became a sort of ‘informal welfare institutions’, in view of the lack of public welfare.

“At the same time, the *barriadas* were gradually transforming from mere dormitory areas into sites for informal production and commerce. The oldest *barriadas*, Comas, in the North Cone, and San Juan de Miraflores in the South Cone, developed their own commercial centres and became important centres of informal economic activities.

“However, the most dramatic processes were played in the political sphere. Processes of political violence and terrorism appeared in the poorest areas of Peru in 1982, gradually advancing to take control up to 60% of the total territory of the country. Between the end of 1989 and mid-1992, Lima became the main scene of political struggle.”

Fernández-Maldonado (2006) also describes Turner’s vision as that of “social idealism, based upon human self-fulfilment and housing as an expression of personal values”. Be that as it may, but his philosophy gained world-wide recognition when, first, the IBRD (one of five institutions that comprise the World Bank) and later the First Habitat Conference in Vancouver gave him the platform from which to present his ideas. Not only did the IBRD revisit their policy to one of “local enablement”, but “most international agencies involved with urban issues in developing countries,” embraced his ideas. “Community participation in neighbourhood upgrading programs was strongly promoted. In the following decades, national governments in developing countries withdrew from housing provision, building fewer public housing projects but improving support for neighbourhood upgrading” (Fernández-Maldonado, 2007).

#### **5.4.3 Hernando de Soto, economist**

De Soto’s work came to the fore nearly thirty years after Turner started his work in Lima’s *barriadas*.

In his preface to the 2002 reprint of his book *The Other Path*, De Soto writes:

“What I have come to understand is that today, a massive social and economic revolution is taking place in the developing world that rivals the Industrial Revolution in the West that gave rise to market capitalism. In the last forty years, some 4 billion people, who had been living in the hinterlands of developing countries and former Soviet nations, have abandoned their traditional way of life. They are moving away from small, isolated communities toward a larger and more

global division of labor in the expanding markets that both Adam Smith and Karl Marx had seen emerging in the West two hundred years ago and that are now struggling to emerge outside the West.

“These people clustering around big towns and migrating by the hundreds of millions to larger cities are the newest players in the global scene. Over the past four decades, for example, the population of Peru’s capital city of Lima has increased six fold; Port-au-Prince, Haiti’s capital, has increased at least fifteen times during the same period; the population of Ecuador’s Guayaquil has also increased eleven times. The underground economies in Russia and the Ukraine now account for 50 percent of GDP; the black market in Georgia generates a whopping 62 percent. The International Labor Organization reports that since 1990, 85 percent of all new jobs in Latin America and the Caribbean have been created in the extralegal sector. In Zambia, only 10 percent of the workforce is legally employed. From Peru to the Philippines, these extralegal workers and entrepreneurs are improving their lives. They now read, travel, and have radios and televisions. As a result they know that the westernized elites of their nations live well, and they too aspire to that good life.

“The economic potential is clearly there. Although the new migrants of the developing and post-communist world live in shantytowns and are horribly poor by Western standards, they are not without assets.”

It is these ‘assets’ which he strived to unlock.

De Soto argued that there is a “direct relationship between legalization of property rights and the improvement of the quality of life of the urban poor through habitat upgrading” (Fernández-Maldonado, 2007). As an economist and advocate of this theory, he “heavily influenced” changing world views.

In Fernández-Maldonado (2007) words: “To survive in the city, the newcomers had to make use of informal strategies. The streets of Lima, and especially of the historic centre, gradually became open markets, where migrants exposed goods to sell to passers-by. At the same time, *barriadas*’ urban development gradually transformed them from dormitory areas into sites for informal production and commerce. The strategies of the poor to survive creating informal jobs were appreciated and studied by local urban researches and commentators.”

And also: “These striking local processes inspired de Soto for his pragmatic and unorthodox economic approach centred on legal matters. De Soto’s highlighted the capacities of the poor for generating urban jobs. The informal sector was advocated as ‘The Other Path’ (referring to the Shining Path, a terrorist group active in Peru during the 1980s and early 1990s) for economic development. Already since the 1970s, international academic attention (promoted by ILO) was directed toward the so-called informal sector, trying to comprehend this type of unregistered economic activities. A considerable debate was generated about the concept, its usefulness and its

positive or negative aspects. De Soto was definitely in favour of the concept. He estimated that there were nine billion dollars in real-estate investments in *barriadas*. This huge 'hostage' capital could not enter the formal real-estate market because of the lack of appropriate legal mechanisms. Overcoming this impasse would facilitate the poor's access to credit."

De Soto advocated property rights for the inhabitants of the *barriadas* (1989). He believed that this will give the poor the necessary 'legal' means to operate in the formal economy. Without property rights, the chances of the poor having any way to participate in the formal financial structures, were very poor, De Soto argued.

In this light, the World Bank funded the Peruvian government to create a programme for land titling in informal settlements in 1996. "It aims at promoting access to the financial system with the title as collateral; to promote housing investment, thanks to secure tenure; and to develop a citywide real-estate market" (Fernández-Maldonado, 2007, 2010).

#### **5.4.4 Lima today**

In a paper delivered in 2010, Fernández-Maldonado observes that the process of granting legal tenure in Lima's *barriadas* turned out to be "merely legal and completely divorced from housing policies for upgrading of informal settlements". The true effect of De Soto's philosophy can therefore not be judged in practice.

However, Lima did experience notable growth in the latter part of the 90s as well as in the first couple of years of the twenty first century (Fernández-Maldonado, 2006, 2007, 2010). Together with changes made to national legislation regarding housing and housing rights of the poor "have, both directly and indirectly, contributed to a feverish construction activity" (Fernández-Maldonado, 2010).

According to Fernández-Maldonado (2006, 2010), urban researchers are of the opinion that "a new middle class is emerging in the peripheral suburbs of Lima". This middle class is the product of successful informal entrepreneurs. "While the latter settled in Lima since long time, the new middle-class has a clear migrant and Andean origin, and darker coloured skin and it seems that it is not moving their place of residence to other districts of 'formal' Lima. They prefer to stay in the (former) informal neighbourhoods that their parents built with their own effort" (2006).

But, despite research done on the work of people like Turner and De Soto, Fernández-Maldonado (2006) is of the opinion that a lot must still be said for the way in which these different informal processes influence the society.

One reason Fernández-Maldonado (2010) puts forward, is the lack of an integrated urban planning strategy. "The lack of an integrated urban planning strategy makes the current housing policies unsustainable."

The want for an over-arching strategy might well be the reason why Lima could not, despite tremendous interest and support, succeed in integrating the *barriadas* with the more traditional neighbourhoods in a successful city providing in the housing needs of all its inhabitants.

## **5.5 CONCLUSION**

The analyses of the three case-studies covered in this chapter serve to prove that certain factors are necessary for housing provision programmes to be successful.

As O'Meara (2010) pointed out, three basic characteristics are necessary, namely effective government, social capacity and public-private partnerships. She also suggested further research into the "long term sustainability of policies and programs that are implemented under transitional political climates".

However, as with the situation in Lima, the availability of (some of) these factors does not guarantee success.

In turn, Fernández-Maldonado (2006) suggests further research into how "urban practices work, to draw lessons that can serve to develop more successful urban interventions. At the same time, it is relevant to support those other processes that need to be improved for the sake of the users".

## CHAPTER 6

### SYSTEMS THINKING AS FUTURES METHODOLOGY

#### 6.1 INTRODUCTION

While it is not always possible for the observer to explain the different steps in a rain storm, it is possible to identify and even list the signs of a nearing storm, the storm itself and the aftermath (Senge, 1990). What is more, it is possible to describe the storm not only scientifically, but also from the point of view of an artist, a biologist, a climatologist or several other fields of study.

By including all these points of reference when addressing a specific problem, one starts to operate within the field of systems thinking.

#### 6.2 SYSTEMS THINKING

Senge, an advocate of systems thinking (also known as systems theory), in his book “The Fifth Discipline” writes of the need to adhere to five “disciplines” in order to be successful – one of which is systems thinking (1990).

The understanding of systems thinking lies at the bottom of Senge’s five disciplines. It is only when one has the ability to fathom the so-called “bigger picture”, that it is possible to understand and even foresee the underlying, individual parts that comprise a system.

##### 6.2.1 Definition

Within futures methodology, systems thinking is ideally structured to find solutions with the long view in mind. “It also encourages you to think about problems and solutions with an eye toward the long view—for example, how might a particular solution you’re considering play out over the long run? And what unintended consequences might it have?” (The Systems Thinker, 2001).

##### 6.2.1.1 Social Systems

Because of the complex nature of wicked problems, co-producing factors from within the system as well as co-producing factors that arise from the system’s environment, impact on each other “whereby a problem co-produces and reinforces itself” (Dostal, Cloete & Járos, 2005).

Ackhoff (1984 cited in Introduction to Future Studies Unit 2 & 3, 2009) addressed this complex challenge in his description of social systems: “To understand a system is to be able to explain its properties and behaviour, and to reveal why it is what it is and why it behaves the way it does.”

In describing a social system (a third system developed to address the shortcoming of mechanistic and organismic systems) Ackhoff states that “[t]he performance of a system is not the sum of the independent performances of its parts. It is the product of its interactions ... To understand a system, its structure, processes, and functions have to be examined. A system’s structure is the

way its work is divided among its parts and their efforts co-ordinated, that is, the relationships between its parts”.

### **6.2.1.2 Synthetic Thinking**

According to Ackhoff the more traditional “cause-effect relationship” is not sufficient to understand the workings of a social system. What is needed is to investigate the “producer-product” relationship (Singer, 1959, as cited by Ackhoff, 1984). This entails thorough consideration of the environment in which the product operates as the producer alone does not determine its product.

To understand this performance, Ackhoff (1984) suggests that the structure, processes and functions of the system be investigated. For this, Synthetic Thinking – not only knowledge of a system, but understanding how it works – is required:

- i) In the first step of analysis the thing to be explained ... is taken as part of a larger system.
- ii) In the second step of analysis ... the containing system is explained.
- iii) In the third step of analysis ... understanding of the containing whole is disaggregated to explain the parts by revealing their role or function in that whole.

From this, it is clear that the system is investigated from the outside in, and from the inside out.

## **6.3 SYSTEMS THINKING AND WICKED PROBLEMS**

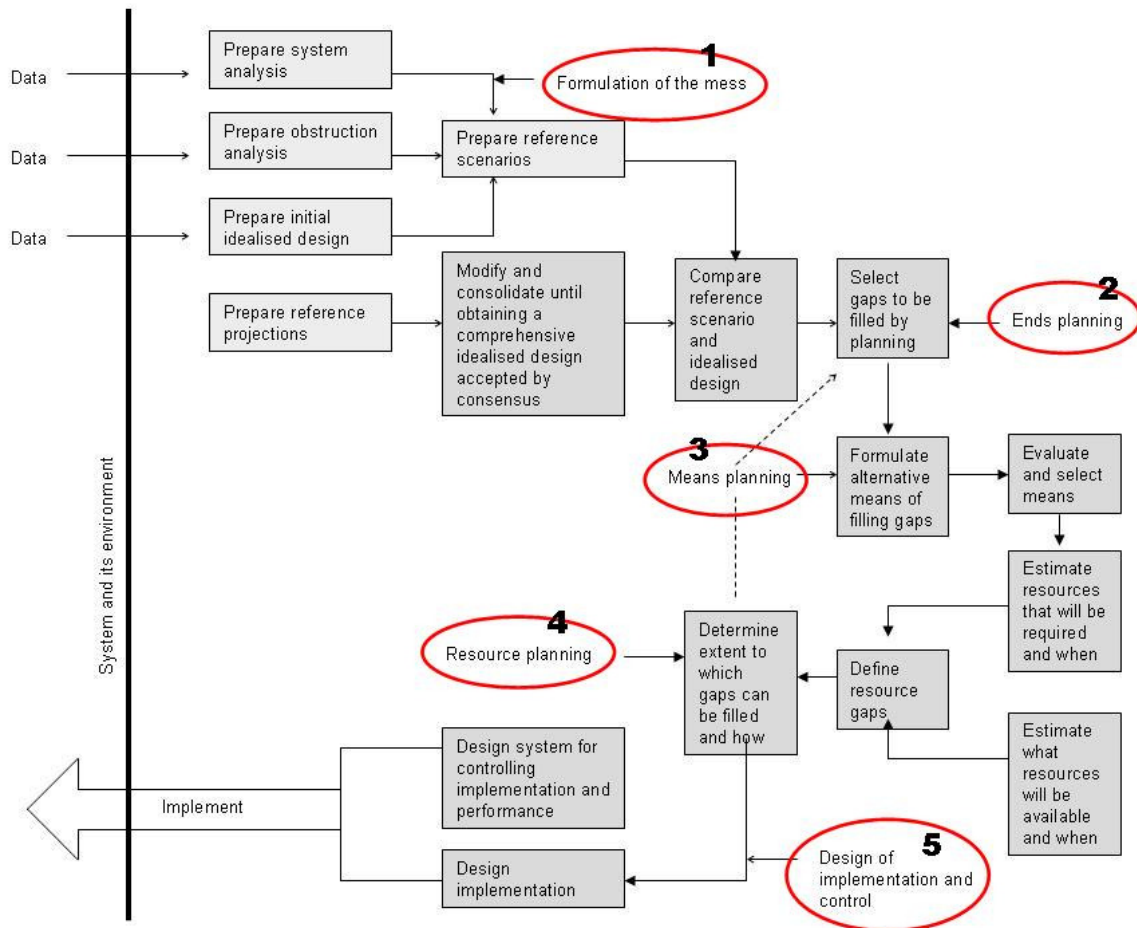
In order to come to a certain understanding of and plan of action regarding wicked problems, Ackhoff, et al. (1984) suggest the use of ‘interactive’ planning.

This form of planning, which “differs significantly from two more commonly used types of planning: reactive and preactive”, acknowledges influences from outside as much as those from within. Interactive planning “is directed at gaining control of the future”. According to Ackhoff, et al. (1984) “this type of planning consists of the design of a desirable future and the selection or invention of ways of bringing it about as closely as possible”.

### **6.3.1 Principles of interactive planning**

Interactive planning operates on three principles (Ackhoff, et al., 1984):

- i) Participative principle: In interactive planning, the process is the most important – even more so than the product. This allows for the participants to understand the organisation as well as the environment in which it operates.
- ii) Principle of continuity: Should one find that one or more of the assumptions acted upon turn out to be incorrect, it is important to adapt the plans as effectively as possible.
- iii) Holistic principle: Plan as broadly as possible, including an entire level at a time (principle of coordination). At the same time, one should also plan for the whole organisation (principle of integration). The “concept of all-over-at-once planning differs significantly from both reactive bottom-up and preactive top-down planning”.



**Figure 6.1: The interactive planning cycle**

Source: IFS, 2009: 260.

### 6.3.2 Phases of interactive planning

Ackhoff, et al. (1984) has also identified five phases in the interactive planning process, which can be illustrated as follows:

- Formulation of the mess.** Identify the problems and opportunities within a certain situation or facing a certain organisation. Be aware of any probable ways in which these opportunities and/or problems might interact. Also be informed of the way(s) in which these elements might constrain any positive action. A thorough formulation will result in a reference scenario.
- Ends planning.** In listing the 'best-case scenario', one will be able to identify goals, objectives and ideals as indicators of the way forward. By comparing the best-case scenario with the reference scenario, it will be possible to recognise challenges, shortfalls and other challenges to be addressed.
- Means planning.** In this step a plan of action is formulated of how to connect the reference scenario with the ideal. Any needs, shortcomings or other wants will be identified here and one now has the opportunity to prepare accordingly.

- iv) Resource planning. What will be needed, in what quantities and by when? Planning to happen accordingly.
- v) Implementation and control. Assign tasks to relevant role-players, together with the timeline of when to act. Monitor the outcomes to assure the ideal results.

## **6.4 APPLYING SYSTEMS THINKING**

The international examples discussed in Chapter Five will now be assessed in terms of the principles and phases of interactive planning in order to establish to what extent systems thinking was applied to the respective wicked problems.

### **6.4.1 The national policy of urban development in Brazil**

This case study is of a government project executed on national level.

#### **6.4.1.1 Principles**

##### i) Participative principle

As indicated in the previous chapter, the Brazilian people have no real history of political participation. “In effect, this entrenched the inequality and lack of access the poorer part of the population was experiencing” (Ministry of Cities, 2006). This underlined the lack of access to housing and land.

However, the first Conference of Cities was completely different than what was, up to that point, usual for Brazilian politics and citizen participation: Delegates from 3 347 municipalities of the total of 5 561 municipalities attended, representing all 26 states as well as the Federal District. A further 2 510 delegates represented “a variety of class entities and professional associations, social movements, non governmental organizations, universities, businessmen, government officials and parliamentarians from all over the country” (Ministry of Cities, 2006).

“This Conference was one of the largest citizenship demonstrations and popular participation events in the country’s history . . . The Conference allowed the Brazilians to have a say on the city project they would like have.”

The Brazilian people in all their different capacities indicated their interests by participating on a grand scale in this process.

##### ii) Principle of continuity

Before this programme was initiated, aspects such as housing, urban land planning and management, environmental sanitation, transportation and urban mobility were handled by different departments and levels of government. The creation of the Ministry of Cities, and the resulting Conferences of Cities, allowed for greater continuity in government planning, erasing any overlaps but also filling any gaps that might have existed before.

##### iii) Holistic principle



In advance of the Conference of Cities, a series of local and state meetings were held. This allowed for participators to proactively give input in existing and proposed legislature regarding Brazilian housing and urban development. The first part of the Holistic principle (to plan simultaneously for all parts of an organisation that are on the same level), was recognised in breaking down the process into smaller meetings, held at regional level. The eventual proposals were then taken forward and discussed at national level, again resulting in a similar set of guidelines and legislation for the whole country.

In this way a national programme was created with input from all levels, while, at the same time, keeping the bigger picture in mind.

The second part of the holistic principle – integration, where different levels of planning must be included at all times – also got recognition as decisions from other levels advanced to a national level, where the practicality and feasibility were taken into account.

#### **6.4.1.2 Phases**

##### i) Formulation of the mess

Brazil's growing urbanisation and the inadequate way in which government (at all levels) as well as the nation, were prepared for this.

##### ii) Ends planning

A national policy of urban development addressing the realities of all involved parties.

##### iii) Means planning

As quoted previously, the Ministry of Cities (2006) is of the opinion that the different rounds of meetings and participation resulted in: a "joint governance pact among the federated beings for the formulation, execution, follow-up and financing of programs, projects and policies of urban development"; as well as the "proposition of a National System of Urban Development structured by Conferences, Councils, Fund and Forums, in all spheres of the Federation, with the representation of the government and of the society in an advisory, deliberative, decentralized and permanent way".

##### iv) Resource planning

The Council of Cities meets every three months to oversee studies and discuss proposed guidelines for the formulation and implementation of the National Policy on Urban Development.

Furthermore, "[t]he operational planning of the deliberations made at the Conferences and other activities related to NPUD take place mostly during the Council of Cities meetings every three months and through the work of the Council's Technical Committees" (Ministry of Cities, 2006).

##### v) Implementation and control

The Council of Cities are responsible for the monitoring of the implementation of the national policy on urban development, discussed at their three-monthly meetings.

### **6.4.1.3 Findings**

Brazil's plan to formulate, implement and execute a national policy for urban development, is a very good example of systems thinking in action.

It shows how a national problem – urbanisation and poor infrastructure planning – was addressed by all levels of government as well as by other interested parties; turned into legislation and now are being implemented.

### **6.4.2 Movimiento Territorial de Liberación**

This case study is of a project executed on local level, with local and national input. The driver is a non-governmental organisation.

#### **6.4.2.1 Principles**

##### i) Participative principle

Four main groups participated, all key in the process. From MTL's side was the MTL itself as well as a group of people being faced with eviction orders. The city of Buenos Aires and residents of the area where the MTL's project was implemented also took part.

"The organization has a double mission: producing labour opportunities through the promotion and organization of productive enterprises, and demanding at least minimum aid programs from state institutions. The MTL developed a construction cooperative that offered opportunities for employment of members of grassroots organizations who had no formal work experience" (O'Meara, 2006). At the time of writing, O'Meara mentioned the cooperative had about 700 employees.

##### ii) Principle of continuity

Not enough information is available to establish whether this principle was adhered to.

##### iii) Holistic principle

As stated previously, the MTL-membership families (a total of 3 500) took part in the process of assigning the available 326 apartments to those in need. This subscribed to the principle of coordination. (This was the MTL's first housing project, meaning that the rest of the families not being helped in this development, were still to be assisted.)

#### **6.4.2.2 Phases**

##### i) Formulation of the mess

Low-earning families were faced with eviction orders in the city of Buenos Aires. There were no real and viable alternatives for them.

##### ii) Ends planning

Secure tenure for the affected low-earning families while also addressing needs such as locality, environment and the like.

##### iii) Means planning

Finding suitable housing with emphasis on locality and access to transport. An added bonus, which helped the success of the project, was the positive attitude of the local community towards the project.

iv) Resource planning

A derelict paint factory was identified for redevelopment. The Buenos Aires city government Housing Institute provided the necessary finances for the project. Where possible, members of the low-income families helped with the conversion process, making use of existing skills and, in some instances, learning new skills.

v) Implementation and control

Once the redevelopment of the paint factory into housing (and a small commercial component) was done, the participating families took control of allocating the available apartments to the most suitable families.

### **6.4.2.3 Findings**

In terms of needs, this first project by the MTL was fairly small in its reach (housing was secured for 326 families out of approximately 3 500 families in need). However, it seems as if the project did address the needs of this small group while also keeping the rest of the families onboard and informed. In terms of means and ends planning, available resources were used to the full, and positive relations were established with the city government as well as inhabitants of the area in which the redevelopment took place.

As the first project for the MTL, it seems to have been a good exercise in taking a systems thinking approach to a wicked problem.

### **6.4.3 Madres de la Plaza de Mayo**

This case study is of a project executed on local level, with national input. The driver is a non-governmental organisation.

#### **6.4.3.1 Principles**

i) Participative principle

According to O'Meara "the funding for these projects was provided by the federal government through the Federal Housing Construction Program. The projects in Buenos Aires are jointly managed by the Madres, local housing cooperatives, Ministry of Human Rights, and the Buenos Aires City Government" (2010).

As for the target groups (low-income individuals and families in need of secure tenure), the Madres focuses on the inclusion of women (40% of hired workers are women) and training is given to assist people in skills development. This is usually in the line of housing, allowing the trainees to then have a skill with which to find paid work.

ii) Principle of continuity

Madres is active all over Argentina with several projects active at any one time. The wide involvement of role-players is a good sign for continuity. The creation of a plant that provides building materials for the Madres' projects provides for further partnerships.

iii) Holistic principle

Again, the number of role-players participating – from local to national level – allows for good planning and execution.

#### **6.4.3.2 Phases**

i) Formulation of the mess

Uncertain tenure for low-income families in Buenos Aires.

ii) Ends planning

Providing low-income families and individuals with secure tenure but also assisting in skills development.

iii) Means planning

Partnerships with different levels of local and national government. The partnership created with the city of Buenos Aires to establish a factory that manufactures the panels used in building housing, addresses not only the provision of building materials, but also answers a long-term need while creating job opportunities for some of the low-income participants.

iv) Resource planning

The partnerships formed as mentioned above, provided a broad foundation from which to work.

v) Implementation and control

Little information is available but the factory that was created in conjunction with the city of Buenos Aires, as well as the Madres' planning for housing delivery, suggest that a long-term plan is in place.

#### **6.4.3.3 Findings**

The Madres' greater involvement in Argentina allowed for a partnership with more role players on different levels (local to national). Their further focus on skills development also creates another, long-term element to their work.

With the limited information available, it seems as if the Madres has secured a solid action plan going forward, which is well embedded in the principles of systems thinking.

#### **6.4.4 Barriadas of Lima**

This case study does not refer to a single project, but rather looks at the influences of two distinct thinkers on the situation of the city's poor.

##### **6.4.4.1 Principles**

i) Participative principle

Both De Soto and Turner were of the opinion that a more pro-active role by government, involving the inhabitants of the *barriadas*, would mean greater success.

ii) Principle of continuity

Especially Turner believed that, with the necessary help from (different levels of) government, the *barriadas* will become completely integrated into greater Lima. He based this argument on the way in which the houses in the *barriadas* were adapted according to the growth of the family – not only while children were still at home, but also the way in which young adults chose to come back to live in the same area in which they grew up. According to Fernández-Maldonado (2006) Turner found that “peripheral *barriadas* had plenty of space for further development. Lots had regular sizes, roads had conventional widths and land was reserved for future amenities.”

iii) Holistic principle

While both De Soto and Turner advocated for involvement on a national level, they never had the authority to implement. Unlike Turner, De Soto was appointed by government, but this often proved to be in an advisory capacity only. While he was asked to assist in incorporating especially those living in *barriadas* into the formal economy, it was also government that terminated his services.

#### **6.4.4.2 Phases**

i) Formulation of the mess

The inhabitants of Lima’s *barriadas* lived in a so-called ‘nether city’, where they created their own structures, infrastructure and urban rules of conduct. By not incorporating them into Lima’s formal structure, the city not only forfeited any possible rates and taxes, but there was no way to regulate the further growth of the city to the advantage of the inhabitants. This included the provision of housing and related services.

ii) Ends planning

Incorporating the inhabitants of Lima’s *barriadas* into the city – both in terms of converting their neighbourhoods into “proper” living areas and as citizens of the city in terms of rights and responsibilities.

iii) Means planning

The first step would be to find a way to include the *barriadas*, which were created by low-income families who could not afford to live in municipal sanctioned neighbourhoods, into the urban fabric. For Turner this would revolve around the fact that the inhabitants of the *barriadas* of Lima had a positive contribution to make: “Optimism in the future and social strengths were their main features: ‘the squatters are mainly interested in consolidating their housing investment, getting their kids in school, and identifying themselves as respectable property owners’ (Mangin and Turner, 1968 as cited in Fernández-Maldonado, 2006). Turner also “advocated supporting informal habitat processes, rather than jeopardizing them (Turner, 1967 as cited in Fernández-Maldonado, 2006).

De Soto believed the “provision of property rights to residents of low-income settlements became central, as the best way to accelerate their incorporation into the whole housing system” (Fernández-Maldonado, 2006).

De Soto’s philosophy entailed adopting “a new, ‘more comprehensive’ approach, more appropriate to shape the economic, social and institutional conditions that would lead to the development of the whole housing sector. The provision of property rights to residents of low-income settlements became central, as the best way to accelerate their incorporation into the whole housing system. According to this view, security of tenure encourages residents to upgrade their houses and settlements. Furthermore, low-income residents could use their homes to obtain credit to initiate new businesses in order to improve their own economic situation, in a process which eventually would lead to alleviate global poverty” (Fernández-Maldonado, 2006).

iv) Resource planning

Turner asked for government assistance and participation in the planning of *barriadas*.

De Soto was given certain government support in his project to secure tenure but unfortunately his project was, in the end, not supported by the whole of government once internal (party-political) problems became prominent.

v) Implementation and control

Turner, being an academic, worked with some of the *barriadas* for a while, but as far as implementation is concerned, he had no real authority, as his work was based on theory and personal experience. It was never formally adopted by government.

De Soto was sanctioned by government to implement his system of security of tenure. However, President Alberto Fujimori, who appointed De Soto, was ousted in 2000 (The World Factbook, 2010 C).

#### **6.4.4.3 Findings**

According to Fernández-Maldonado (2006), Turner’s “vision had a great deal of social idealism, based upon human self-fulfilment and housing as an expression of personal values”. While his philosophy was adopted by institutions such as the World Bank, he unfortunately only served an advocating role and had no real way of ensuring that his theories are executed.

As for De Soto, many of the beliefs he advocated turned out to be not entirely true. For instance, the theory that legal ownership of land would enable the owners to qualify for credit, did not happen. As Fernández-Maldonado (2006) notes: “most credits given to the new owners come from the Materials Bank, a public sector institution, which subsidizes its clients and does not make profit-driven decisions, but rather based on political gains”.

Furthermore, in Peru “security of tenure does not depend on land property rights. It rather depends on the legal recognition of the *barriada* as such by the government instances. In the moment that the public agencies recognized the *barriada* the households were sure that they could not be evicted” (Ramirez, Corzo & Riofrío, 2006 as cited in Fernández-Maldonado, 2006). Studies have

shown that, despite the legalization process being completed, some of the 'legalised neighbourhoods' were still left outside of the urban network.

## **6.5 CONCLUSION**

As with all wicked problems, housing challenges are not easily solved. The programmes discussed, where different levels of participation were actively sought, seem to have been more successful.

While De Soto was operating under a government sanction, it seems that a certain amount of party politics was involved, tainting his work and the outcome.

In the case of Lima's *barriadas*, there is little evidence of involving the people on the ground. While Turner did encourage them to build their own homes, it seems as if the people who were on the receiving end of the initiatives, were not asked to also participate.

In all other instances the opposite is true, allowing for greater ownership and participation. This is one of the elements O'Meara (2010) identified as "crucial" for the effective implementation of housing efforts. The others two elements are effective government and social capacity – both present in the more successful projects.

## CHAPTER 7

### SYSTEMS THINKING AND LOW COST HOUSING IN SOUTH AFRICA

#### 7.1 INTRODUCTION

Having established that elements of systems thinking feature in the case studies discussed in Chapters Five and Six of this research report, the question arises as to whether any of these are present in the South African situation and to what extent.

Schematically, the phases and principles of interactive planning, as well as its absence or presence in the different case studies, are illustrated in Table 7.1.

**Table 7.1: Phases and principles of interactive planning and the presence/absence thereof in the case studies**

	<b>Brazil's NPUD</b>	<b>Movimiento Territorial de Liberación</b>	<b>Madres de la Plaza de Mayo</b>	<b>Turner's influence on the 'barriadas' of Lima</b>	<b>De Soto's influence on the 'barriadas' of Lima</b>
<b>Participative principle</b>	High	High	High	Low	Medium
<b>Principle of continuity</b>	High	-	High	Medium	Medium
<b>Holistic principle</b>	High	Medium	High	Medium	Medium
<b>Formulation of the mess</b>	High	High	High	Low	Medium
<b>Ends planning</b>	High	Medium	High	Low	Low
<b>Means planning</b>	High	High	High	Low	Medium
<b>Resource planning</b>	High	Medium	High	Medium	Medium
<b>Implementation and control</b>	High	Medium	Medium	Low	Low

Source: Case studies discussed in chapters five and six of this research report. Weight per item in accordance with author's interpretation of available information

The successes (or lack thereof) of the case studies were discussed in the previous two chapters. From the above, it is clear that the more successful case studies (Brazil's NPUD as well as the two



projects based in Argentina, the Movimiento Territorial de Liberación and Madres de la Plaza de Mayo) all scored highly for the same three of the possible eight characteristics – participative principle, formulation of the mess and means planning.

The rest of this chapter will establish whether these elements are present in the South African situation and, if so, to what extent.

## **7.2 PARTICIPATIVE PRINCIPLE**

In the case studies, actors from different levels took part. These include class entities and professional associations, social movements, non-governmental organizations, universities, businessmen, government officials and parliamentarians. On government's side, local, provincial and national level representatives were involved.

It is clear that participation was not only as broad as possible but, especially from government's side, as deep as possible.

### **7.2.1 Participants**

According to the DHS's website (2010), three interventions are proposed in order for the department to fulfil its strategic agenda for the medium term:

- i) Improving the national housing subsidy scheme.
- ii) Improve partnerships with the private sector and other housing stakeholders.
- iii) Improving the capacity to deliver and administer and regulate housing delivery.

From the above, it is clear that the DHS recognises the importance of participation. However, from all the available material (as discussed in this research report), it seems as if the DHS is focussing on two groups of participants only: the bodies tasked at assisting government in housing delivery (as discussed in chapter 3.4) and the formal banking sector.

It might be argued that the bodies referred to in 3.4 (NHBRC, NHFC, NURCHA, RHLF, SERVCON, SHF, Thubelisha Homes and HAD) were created to assist the public in obtaining low-cost housing. However, these bodies remain government initiatives.

And while the participation of the formal banking sector is very important in 'opening up' the financing models available to assist those wanting to access housing, this is also a 'limited' partnership in terms of inclusiveness and scope.

Even NGOs working within the PHP emphasise their ongoing struggle to be heard by government. Carey (2009) highlights an instance of this where it played out over a number of years.. While the PHP-process dates back to the 1980s, numerous ministers and their departments were unconvinced of the contribution NGOs can make in a democracy. In fact, at one point Carey points out that only "once appointments and the officials were in the same room and the message could

not be covered up or ignored”, the department “finally sat up and took notice of what people were saying”.

### **7.2.1.1 Potential partners**

A few other participants in the low-cost housing sector in South Africa were mentioned in chapter two (2.5.2). These bodies – the AEC, AbM and DAG – represent participants without government affiliations. In fact, the first two were created out of unhappiness with government policy while the DAG tries to fulfil a need amongst people who qualify for low-cost housing, but who do not necessarily know how to engage with government on their specific needs.

Carey (2009), in a special report on NGO advocacy in the housing process, points out that government (at one stage) held NGO's in a suspicious light. “NGOs working with communities in South Africa since the late 1980s and early 1990s to develop community based and people centred approaches to human settlement developed very valuable experience and expertise in what became known as the Peoples Housing Process (PHP). This experience was initially shared and used by government in developing new post-apartheid housing policy and programmes.

“For various reasons, the initial good intentions of the PHP were lost, and NGOs began to advocate for change in the early 2000's. This advocacy happened in a context where NGOs were viewed with some suspicion by government, donor support for NGOs was declining and where there was no real institutional base or support for the PHP” (Carey, 2009).

### **7.2.2 Government as participant**

Both Pottie (2003) and Baumann (2003) are of the opinion that better participation – and therefore better outcomes – can be devised on local government level. “Although national government could (and has, to an extent) set guidelines for urban planning and development which could increase the likelihood that housing delivery would result in a net increase in beneficiary household assets, delivery practice remains constrained by a number of factors...” (Baumann, 2003).

Carey (2009) agrees: “There are still challenges to getting local government on board with implementation. Local governments are very concerned about the nuts and bolts of the programme and a lot of details still need to be ironed out. Capacity will also need to be built at local government level (which remains responsible for land assembly and infrastructure provision) and working relationships defined among province, local government and the Community Resource Organisations (CROs)<sup>23</sup>. All of which are key to delivery.”

## **7.3 FORMULATION OF THE MESS**

Writing on wicked problems, Ritchey (2005) referred to this type of problem as a ‘mess’. In that regard, one can therefore understand the formulation of the problem at hand, when referring to the ‘formulation of the mess’.

As already discussed, the more successful projects discussed earlier in this research report, all had a very clear understanding of what they were dealing with. In this instance, the mess, wicked problem or challenge they were up against, was very well defined as they set about tackling these problems.

Neither De Soto nor Turner seem to have had this type of clarity: while aware of the potential of the poor and the way in which they organise their physical environment, it is not obvious whether they (De Soto and Turner) were dealing with poverty, upliftment, building practices or economic independence.

The question can now be put: Does the DHS, as the body burdened with the issue of housing provision in South Africa, have a clear view of the problem at hand?

### **7.3.1 Mission and vision of the DHS**

According to the DHS-website (2010 B), the department's vision is for "a nation housed in sustainable human settlements". The mission statement reads: "to facilitate an environment that provides sustainable human settlements".

While it is true that the DHS is responsible to serve the whole of the South African nation, it is still relevant to note the ambiguity and ambivalence in these statements: in both instances the focus seem to be on the *settlements*. This from a department where the number of houses built often weighs more than the product itself or urban framework within which it is placed.

Government's apparent unwillingness to engage with NGOs regarding the PHP is a case in point.

Another important factor is the way in which the three different levels of government approach low-cost housing: as a shared problem or as a party-political problem. Not only is this relevant to having a clear understanding of the problem but it will also have a significant influence on the principle of participation.

In the Housing White Paper (1994), very little is said about the nature of the problem to be addressed. "Housing the Nation . . . is one of the greatest challenges facing the Government of National Unity. The extent of the challenge derives not only from the enormous size of the housing backlog and the desperation and impatience of the homeless, but stems also from the extremely complicated bureaucratic, administrative, financial and institutional framework inherited from the previous government."

However, the only reference made to the problem government is facing and must, subsequently address, is in the following (4.1 Introduction):

"In devising a national housing strategy, the State inter alia has to reconcile the following key factors:

- i) Existing backlogs in housing requiring  $\pm$  200,000 households to be housed annually in order for the backlog to be eradicated over a period of 10 years.

- ii) New household formation requiring a further  $\pm 350,000$  households to be housed annually if backlogs are not to increase.
- iii) A current State housing budget (new allocation) of  $\pm R1.4$  billion per annum (+1% of the total State budget).
- iv)  $\pm 45 - 55\%$  of households in need of housing, unlikely to be able to afford or access credit and therefore entirely dependant on own (limited) resources and State subsidization to satisfy their basic housing needs.

“The required annual delivery rate (of  $\pm 338,000$ ), relatively high proportion of poor households and budgetary constraints do not allow sufficient subsidy money per household to enable the construction, at State expense, of a minimum standard complete house for each household not able to afford such a house. Only a limited State subsidy contribution towards the cost of a house is possible.”

One is therefore left with the distinct impression that government is not clear on

- i) who the provision of low-cost housing is aimed at;
- ii) where these people are and where they should be;
- iii) why they are there (trying to simplify the issue with party politics will not solve the problem);
- iv) how the process should be approached; and,
- v) what is the most preferable outcome.

By answering these questions in an honest, straight-forward way, the wicked problem will start to show its true colours.

### **7.3.1.1 Brazil as an example**

A simple problem statement accompanying the nomination form from the Brazilian Ministry of Cities (2006) for the Habitat Scroll of Honour, reads as follow:

“There are problems and challenges of two different natures. On one side, facing up to the reality of social inequality requires the overcoming of many urban deficits: problems of environmental sanitation - handling of solid residues and rain water, water supply and sewer systems deficits; housing deficits - the existence of 7.2 million people without access to housing and the lack of access to urbanized and regularized land - the presence of irregular settlements was verified in almost all of the Brazilian cities, and it has been estimated that there are 12 million non regularized housing units in the country.

“A deep analysis of available data reveals that the poor population of Brazil is impelled to illegality in order to exercise their right to a living. The disorderly occupation of spaces generates serious effects on the population that lives in the precarious establishments in the absence of the urban needs, and deprived of access to them, besides always being exposed to catastrophes caused by landslides, inundations, and other natural phenomena. The illegal settlements also have compromising effects on the city as a whole for recurrently contributing to the largest incidence of

floods during each rainy season, and to permanent traffic jams. This situation is often worsened by the absence of public resources to urbanize new fronts of city expansion.

“On the other hand, the absence of discussions about the urban questions in the national political calendar and the inexistence of dialogue and negotiation among the concerned parties have for a long time had harmful effects on the local governments' performance and on the social actors' participation in the formulation and implementation of public politics for the city. These absences were reflected in the lack of general guidelines for urban development policies, whose formulation was assigned to the Union by the 1988 Constitution. That gap contributed to hinder still more the nationwide integration of public policies, as well as the establishment of strategies for reducing the regional and urban inequalities.”

The answers to the five simple questions stated in 7.3.1 above:

vi) Who the provision of low-cost housing is aimed at?

The 7.2 million people without access to housing and the lack of access to urbanised and regularised land.

vii) Where these people are and where they should be?

In the irregular settlements in almost all of the Brazilian cities – living an estimated 12 million non-regularized housing units in the country.

viii) Why they are there (trying to simplify the issue with politics will not solve the problem)?

The easy (party-politics motivated) answer will blame all of Brazil's inequality on a previous political regime. However, according to the report it was found that “the poor population of Brazil is impelled to illegality in order to exercise their right to a living”. It seems as if a very large number of these people are finding themselves in a specific geographic and socio-economic position because of their will to survive. The flipside therefore, is “absence of discussions about the urban questions”.

ix) How the process should be approached?

By making an end to “the absence of discussion” among concerned parties, including government, social actors and those affected.

x) What are the most preferable outcomes?

Strategies for reducing the regional and urban inequalities; nationwide integration of public policies; suitable handling of environmental sanitation; access to housing on urbanised and regularised land; establishing dialogue among the concerned parties; and end to the compromising effects the illegal settlements have on the city as a whole.

#### **7.4 MEANS PLANNING**

A lack of means planning seems to be closely related to the unsatisfactory formulation of the mess. By immediately focusing on what is perceived as the desirable outcome, the means planned for becomes a supposed ideal and not a reality.

A clear problem statement will help to identify the gaps. One can now start planning 'backwards' in order to fill the gaps in as positive a way as possible.

From the example in 7.3.1.1, looking at the answers to the Brazilian problem, from a comparison of answers i) and iv) it is clear that, while low-cost housing might be aimed at those lacking access to housing and regularised land, they are not the only affected groups. Concerned parties, which includes government, social actors and those affected (and here the part of the population not included in i) comes to the fore as the illegal settlements have "compromising effects on the city as a whole for recurrently contributing to the largest incidence of floods during each rainy season, and to permanent traffic jams") must all be engaged in order to find the best possible solution to a very complex challenge.

From this, a series of different participants will follow, each with their own concerns, realities and possible solutions. Therefore, in this instance proper means planning will not only lead to better overall planning, but also heighten the level of participation.

In the more successful projects discussed, means planning also had a definite influence on the inclusivity of the process.

Equally, the answers to questions ii) and iii) can further enlighten the issue: by knowing why the affected group is living through a certain set of circumstances, the results of certain actions (or in-actions) become clear.

Carey (2009) is of the opinion that the DHS's focus often is "on the top structure only". She ascribes this to the large degree in which performance is measured as "the number of housing units delivered".

This illustrates the limited outcomes caused by constricted means planning:

- i) The severe shortage of low-cost housing in South Africa, is addressed by building as many houses as possible.
- ii) No room is left for creative or alternative methods of design or building, as this might eat into the already limited time and money, resulting in less houses being built.
- iii) No time is spent on a consultative process, as this might take up valuable time. It is also possible that a consultation process might lead to other – different – potential approaches.
- iv) No time was spent on the clear formulation of the mess, as it would then have been clear that the number of housing units delivered will not solve the issue at hand, and many more.

## **7.5 CONCLUSION**

By working through the different phases of interactive planning and giving priority to the three principles, the way in which one approaches a particular wicked problem can be greatly enhanced.

While it has already been established that no wicked problem has an immediate or ultimate solution (Rittel and Webber, 1973 as cited by Ritchey, 2005), the thoroughness of the interactive

planning process allows for greater manoeuvrability during the process. And since there is no room for trial and error, it is important to be agile and adaptive.

The DHS does not score highly in its interactive planning. By following the principles developed by Ackhoff, et al. (1984), the DHS might just come to a very different approach to addressing the wicked problem of low-cost housing in South Africa.

## CHAPTER 8

### CONCLUSION

#### 8.1 INTRODUCTION

As discussed in Chapter One of this research report, the aim of this study was to prove that South Africa's low-cost housing problems can be solved. Despite the reach of the problem as well as the fact that government could not make a seemingly significant impact in the last sixteen years, it was argued that futures methodology can be used to 'treat' South Africa's housing challenges.

##### 8.1.1 Low-cost housing as a wicked problem

Low-cost housing, it was discussed, does not merely constitute a plot, walls and roof. Factors such as urban sprawl, service delivery and the general state of the larger city are all interlinked. Problems the homeless might experience also have a wider effect than simply affecting themselves. By tapping into the available infrastructure – usually designed for a certain number of people – the whole environment is affected. This can lead to a myriad of other problems – water or electricity shortages, traffic congestion, problems with waste removal etc.

But housing is even more complex than the complex character discussed. It also is affected by the number of claimants; the money government is willing to spend; the resources available for building; the skills on offer; the peoples affected and many more.

All of these 'characteristics' contribute to housing being a wicked problem. A wicked problem, as identified by Rittel and Webber in 1973, and revisited by Ritchey in 2005, is not a problem with a singular answer. In fact, it does not have an answer. With so many different factors contributing to the existence and continuation of the problem, it can never be truly solved. And, while trying to 'sufficiently' solve the problem, it can change and take on new characteristics.

One proven way to address a wicked problem is by using systems theory. This form of futures methodology allows for a method of planning and management that includes high flexibility on the part of the 'manager'. Interactive planning, as it is known (Ackhoff, 1984), focuses on three basic principles when addressing a wicked problem:

- i) The participative principle. This principle focuses on the environment in which an organisation operates as well as the operation itself. By giving attention to both these elements, the problem is understood within its context.
- ii) The principle of continuity. Interactive planning allows for flexibility, as previously mentioned. This principle aims to rectify any incorrect steps taken as soon as possible instead of waiting until the end of a cycle.



- iii) The holistic principle. Together with the inclusivity of process and environment of the participative principle, the holistic principle aims at including an organisation over its depth as well as width, aiming at true, all-encompassing inclusion.

Another very important aspect of systems theory lies in the planning. By understanding the whole procedure it allows one to work with it, being creative and imaginative as the process evolves. The very detailed planning – including a very precise look at the problem and what the ideal outcome should be – promises understanding of the issues at hand.

South Africa is not the only country in the world faced with housing problems. By investigating similar challenges in other cities and countries, one can learn a lot from the different approaches in order to further refine ones own game plan.

The case studies that were investigated were not all of the same scope as that of the South African wicked problem. However, while two of the projects focused on housing developments, one of the case studies was a project planned and executed on a national level.

The Brazilian government was facing a very similar situation as its South African counterpart. A very inclusive process was developed across all levels of government as well as citizenry. Care was taken to allow for continuous feedback, acting as a self-check system as well as ensuring participation.

By then examining these case studies according to the principles and phases of interactive planning, it was clear that a significant number of these principles were present.

The next step in this research report was to identify the principles and phases that were most frequently present and to then test the South African situation against this.

It very soon became clear that the South African government does not seem to have a sufficient grasp of the problem. And without knowing what one is dealing with (ends planning) it is practically impossible to plan to address the issue (means planning).

## **8.2 FINDINGS AND ITS IMPLICATIONS**

Since a wicked problem often manifests in symptoms, it is necessary to first identify the root(s) of the problem. Otherwise one will never make sufficient inroads to have a visible and lasting impact.

By not having a clear idea of the real problem, the South African government is throwing away time, resources and money.

It is clear that there are many reasons why this problem has been ineffectively addressed to date. Despite the fact that the same party has been at the helm for the past decade and a half, changes in approach and management by different ministers and other political players, have had a definite impact. There seem to be mistrust and miscommunication between the bureaucrats and the political appointments.

Outside the Department of Human Settlements, several other lines of participants wait – including NGOs, the homeless, civil society, business and more. And since there is no single voice speaking from within the DHS to the outside, no single message can be conveyed – or acted upon.

In the light of this research report, the DHS must seriously re-examine the problem it is dealing with as well as the way in which it wants to help to bring about lasting change.

### **8.3 LIMITATIONS OF THE STUDY**

While this research report was prepared with care and intellectual scrutiny, the limitations of the study must be recognised. The complexity of the challenge at hand goes without saying. The same goes for the method chosen and applied to address this problem.

However, this report should be seen as a first step in a much bigger approach. More in-depth research is necessary in order for the principles of interactive planning to be applied comprehensively.

This research must be conducted not only on the home-front but the examples looked at, should also be scrutinised again. This will highlight any similarities or differences that should be taken into account once the planning gets underway.

### **8.4 RECOMMENDATIONS FOR FURTHER WORK**

As stated in section 8.3 above, more research is necessary before any changes can be made.

An in-depth study of the work of the DHS – on a political as well as bureaucratic level – is vital to understand the organisation (the holistic principle).

It is also important to understand the South African landscape very well in order to know the different role-players and factors influencing the housing challenges in the country (participative principle).

Then an in-depth study of the Brazilian example is necessary to form a clear idea of how problems similar to those South Africa is facing, are being dealt with (again the holistic principle).

Only once all this research has been undertaken, can one go forward and start engaging in the different phases of the interactive planning process.

### **8.5 CONCLUSION**

The aim of this study was not to accentuate the severe challenges South Africa is facing as far as the provision of low-cost housing is concerned. While this has been highlighted along the way, the real goal was to show that a form of relief is possible.

South Africa has, on many occasions, surprised the world – and itself. Through thorough research, careful planning and creative implementation, the severe shortages in our urban landscapes can be addressed.

## REFERENCES

- Ackhoff, R.L., 1984. Mechanisms, organisms and social systems. In: Introduction to Future Studies Unit 2 & 3. 2009. Stellenbosch: Sun Media.
- Ackhoff, R.L., Gharajedaghi, J. & Finnel, E.V., 1984. A guide to controlling your corporation's future. Background. In: Introduction to Future Studies Unit 2 & 3. 2009. Stellenbosch: Sun Media.
- Anti-Eviction Campaign. 2010. "About us". [Online] Available <http://antieviction.org.za/about-us/> Accessed 31 October 2010.
- Asian Coalition for Housing Rights. 2001. "About ACHR". [Online] Available [http://www.achr.net/about\\_achr.htm](http://www.achr.net/about_achr.htm) Accessed 31 October 2010.
- Australian Public Service Commission. (2007). "Tackling Wicked Problems. A Public Policy Perspective." [Online] Available <http://www.apsc.gov.au/publications07/wickedproblems.pdf> Accessed 1 May 2010.
- Baumann, T., 2003. Housing Policy and Poverty in South Africa. In: F. Khan & P. Thring, eds. 2003. *Housing Policy and Practice in Post-Apartheid South Africa*. Sandown: Heinemann. Ch.2.
- Burkhalter, L. and Castells, M. 2009. "Beyond The Crisis: Towards A New Urban Paradigm." [pdf] Santiago (Chile): Habitat International Coalition. Available at: [http://www.hic-net.org/content/Beyond the Crisis - Towards a new Urban Paradigm.pdf](http://www.hic-net.org/content/Beyond_the_Crisis_-_Towards_a_new_Urban_Paradigm.pdf) Accessed 30 October 2010.
- Carey, S. 2009. "Success at a price. How NGO activism led to changes in South Africa's People's Housing Process." [pdf] Johannesburg: Planact and Rooftops Canada/Abri International: Toronto. Available at: [http://www.planact.org.za/images/stories/documents/research\\_reports/success\\_at\\_a\\_price/PHP%20Advocacy--lessons%20for%20NGOs%20final.pdf](http://www.planact.org.za/images/stories/documents/research_reports/success_at_a_price/PHP%20Advocacy--lessons%20for%20NGOs%20final.pdf) Accessed 3 December 2010.
- Centre on Housing Rights and Evictions. 2010. "About us". [Online] Available <http://www.cohre.org/about-us> Accessed 31 October 2010.
- Community Organisation Resource Centre. 2010. "About us". [Online] Available <http://www.courc.co.za/aboutus.html> Accessed 20 November 2010.
- Conklin, J., 2005. Dialogue Mapping: Building Shared Understanding of Wicked Problems (Chapter 1). [pdf] Napa, California: CogNexus. Available at: <http://www.cognexus.org/wpf/wickedproblems.pdf> Accessed 20 June 2010.

Department of Housing. 2008 "People's Housing Process Policy". [pdf] South Africa: Parliament. Available at: <http://www.participation.org.za/docs/php%20pf.pdf> Accessed 2 December 2010.

Department of Human Settlements. 1994. White Paper on Housing. [Online] Available: <http://www.dhs.gov.za/Content/planned/Docs/Housing%20White%20Paper.pdf> Accessed 13 July 2010.

Department of Human Settlements. 2008 A. "Housing institutions - Servcon". [Online] Available: [http://www.dhs.gov.za/Content/housing\\_institutions/servcon.htm](http://www.dhs.gov.za/Content/housing_institutions/servcon.htm) Accessed 4 October 2010.

Department of Human Settlements. 2008 B. "Housing institutions - Thubelisha". [Online] Available: [http://www.dhs.gov.za/Content/housing\\_institutions/thubelisha\\_homes.htm](http://www.dhs.gov.za/Content/housing_institutions/thubelisha_homes.htm) Accessed 4 October 2010.

Department of Human Settlements. 2008 C. "Housing Institutions." [Online] Available: [http://www.dhs.gov.za/Content/housing\\_institutions/housing\\_institutions.htm](http://www.dhs.gov.za/Content/housing_institutions/housing_institutions.htm) Accessed 4 October 2010.

Department of Human Settlements. 2009 A. "The National Housing Code. Simplified Guide to the National Housing Code. Part 1". [pdf] Pretoria: Government of the Republic of South Africa. Available at: <http://www.dhs.gov.za/Content/Publications/Publications.htm> Accessed 4 October 2010.

Department of Human Settlements. 2009 B. "Annual Report". [pdf] Pretoria: Government of the Republic of South Africa. Available at: <http://www.info.gov.za/view/DownloadFileAction?id=110962> Accessed 7 October 2010.

Department of Human Settlements. 2010 A. "Accounting officer's overview." [Online] Available: <http://www.dhs.gov.za/Content/The%20Department/Strategic%20Statement.htm> Accessed 4 December 2010.

Department of Human Settlements. 2010 B. "About us". [Online] Available: <http://www.dhs.gov.za/> Accessed 27 November 2010.

De Soto, H., 1989. *The Other Path*. New York: Basic Books. Preface (2002).

De Souza, M. L., 2003. Alternative Urban Planning and Management in Brazil: Instructive Examples for Other Countries in the South? In: P. Harrison, M. Huchzermeyer & M. Mayekiso, eds. 2003. *Confronting Fragmentation. Housing and Urban Development in a Democratising Society*. Cape Town: University of Cape Town Press. Ch. 12.

Development Action Group. 2009. Annual Report. Cape Town: Development Action Group.

Dictionary.com, "barriada". [Online] Available <http://dictionary.reference.com/browse/barriada>  
Accessed: November 07, 2010.

Dostal, E., Cloete, A. & Járos, G., 2005. Biomatrix. A systems approach to organisational and societal change. Cape Town: Mega Digital.

Du Plessis, C., 2002. Sustainability Analysis of Human Settlements in South Africa. [pdf] Pretoria: Council for Scientific and Industrial Research. Available  
[http://researchspace.csir.co.za/dspace/bitstream/10204/3522/1/Du%20Plessis\\_2002.pdf](http://researchspace.csir.co.za/dspace/bitstream/10204/3522/1/Du%20Plessis_2002.pdf) Accessed 30 October 2010.

Fernández-Maldonado, A.M., 2006. "*Barriadas* and elite in Lima, Peru: Recent trends of urban integration and disintegration". [Online] Available [http://www.isocarp.net/Data/case\\_studies/848.pdf](http://www.isocarp.net/Data/case_studies/848.pdf)  
42nd International Planning Congress. Istanbul, Turkey 14-18 September 2006. Isocarp: The Hague.

Fernandez-Maldonado, A.M., 2007. "Fifty years of *barriadas* in Lima: revisiting Turner and De Soto". [Online] Available  
[http://www.enhr2007rotterdam.nl/documents/W17\\_paper\\_Fernandez\\_maldonado.pdf](http://www.enhr2007rotterdam.nl/documents/W17_paper_Fernandez_maldonado.pdf) Sustainable Urban Areas. Rotterdam, The Netherlands 25-28 June 2007. Technical University: Delft.

Fernández-Maldonado, A.M., 2010. "Recent housing policies in Lima and their effects on sustainability". [Online] Available [http://www.isocarp.net/Data/case\\_studies/1754.pdf](http://www.isocarp.net/Data/case_studies/1754.pdf)  
46th International Planning Congress. Nairobi, Kenya 19-23 September 2006. Isocarp: The Hague.

Habitat International Coalition. 1992. "Human Settlements, Environment and Development". [Online] Available: <http://www.hic-net.org/document.php?pid=2706> Accessed 31 October 2010.

Habitat International Coalition. 2010 A. "Habitat Key Words". [Online] Available: <http://www.hic-net.org/about.php> Accessed 2 May 2010.

Habitat International Coalition. 2010 B. "New Housing and Land Rights Violations Map 2008–2010". [Online] Available: <http://www.hic-net.org/news.php?pid=3684> Accessed 2 May 2010.

Harrison, P., Huchzermeyer M. & Mayekiso, M. eds. 2003. Confronting Fragmentation. Housing and Urban Development in a Democratising Society. Cape Town: University of Cape Town Press.

Hassen, E., 2003. 'When More Means Less': Low-Income Housing and Macro-Economic Policy in South Africa. In: F. Khan & P. Thring, eds. 2003. *Housing Policy and Practice in Post-Apartheid South Africa*. Sandown: Heinemann. Ch.3.

Housing Development Agency. 2010. HDA in brief. [Online] Available: <http://www.thehda.co.za/> Accessed 8 October 2010.

“Housing: ‘we must learn from mistakes’.” (January 29, 2010). South Africa Info. [Online] Available <http://www.southafrica.info/news/business/630891.htm> Accessed 1 May 2010. SAPA

Khan, F., 2003. Housing, Poverty and Macro-economy. In: F. Khan & P. Thring, eds. 2003. *Housing Policy and Practice in Post-Apartheid South Africa*. Sandown: Heinemann. Part 1.

Khan, F. & Ambert, C., 2003. Introduction. In: F. Khan & P. Thring, eds. 2003. *Housing Policy and Practice in Post-Apartheid South Africa*. Sandown: Heinemann.

Khan, F. & Thring, P. eds. 2003. *Housing Policy and Practice in Post-Apartheid South Africa*. Sandown: Heinemann.

Kienast, G., 2010. “Abahlali baseMjondolo – how poor people’s struggle for land and housing became a struggle for democracy”. [Online] Available: <http://suedafrika.habitants.de/?p=15> Accessed 31 October 2010.

Marx, C., 2003. Supporting Informal Settlements. In: F. Khan & P. Thring, eds. 2003. *Housing Policy and Practice in Post-Apartheid South Africa*. Sandown: Heinemann. Ch.9.

Ministry of Cities. 2006. “Conferences Of Cities And Councils: Popular Participation In The Construction Of The National Policy Of Urban Development In Brazil”. [pdf] Brazilia: Brazilian Federation. Available: [http://www.unhabitat.org/downloads/docs/6564\\_37927\\_MinistryofCities.pdf](http://www.unhabitat.org/downloads/docs/6564_37927_MinistryofCities.pdf) Accessed 1 November 2010.

National Home Builders Registration Council. 2010. Welcome. [Online] Available: <http://www.mindm.co.za/www.nhbrc.org/> Accessed 8 October 2010.

National Housing Finance Corporation. 2003. Company Profile. Corporate Profile. Background. [Online] Available: <http://www.nhfc.co.za/content.asp?level1ID=1&level2ID=1&level3ID=1> Accessed 8 October 2010.

National Urban and Reconstruction Agency. 2007. About us. [Online] Available: <http://www.nurcha.co.za/> Accessed 8 October 2010.

O’Meara, M., 2010. “Innovative Approaches to Housing Policy and Production in Latin America. Two Cases: Sao Paulo, Brazil and Buenos Aires, Argentina”. [Online] Available [http://www.isocarp.net/Data/case\\_studies/1713.pdf](http://www.isocarp.net/Data/case_studies/1713.pdf) 46th International Planning Congress. Nairobi, Kenya 19-23 September 2006. Isocarp: The Hague.

Pieterse, E., 2009. Post-apartheid geographies in South Africa: Why are urban divides so persistent? In: *Interdisciplinary debates on development and cultures: cities in development—spaces, conflicts and agency*. Leuven, Belgium 15 December 2009. Catholic University of Leuven: Leuven.

Pottie, D., 2003. Challenges to Local Government in Low-Income Housing Delivery. In: F. Khan & P. Thring, eds. 2003. *Housing Policy and Practice in Post-Apartheid South Africa*. Sandown: Heinemann. Ch.13.

“R1,3 bn to fix RDP houses.” (November 16, 2009). Fin24. [Online] Available: <http://www.fin24.com/Economy/R13bn-to-fix-RDP-houses-20091116> Accessed 1 May 2010. SAPA

Ritchey, T. 2005. Wicked Problems. Structuring Social Messes with Morphological Analysis. [pdf] Stockholm: Swedish Morphological Society. Available <http://www.swemorph.com/pdf/wp.pdf> Accessed 1 May 2010.

Rural Housing Loan Fund. 2010. About RHLF. [Online] Available: <http://www.rhlf.co.za/> Accessed 8 October 2010.

Rust, K., 2006. Analysis of South Africa's Housing Sector Performance. [pdf] Midrand: Finmark Trust. Available <http://www.finmark.org.za/documents/HSectorPerformance.pdf> Accessed 31 October 2010.

Senge, P.M., 1990. *The Fifth Discipline. The art & practice of the learning organisation*. London: Random House.

“Sexwale, banks discuss housing incentive fund.” (April 20, 2010). Business Day. [Online] Available <http://www.businessday.co.za/Articles/Content.aspx?id=106648> Accessed 1 May 2010. MOKOPANELE, T

Slum/Shack Dwellers International, 2009. “About us”. [Online] Available <http://www.sdinet.org/about-us/> Accessed 31 October 2010.

Smit,W., 2003. Housing Finance Policy in South Africa. In: F. Khan & P. Thring, eds. 2003. *Housing Policy and Practice in Post-Apartheid South Africa*. Sandown: Heinemann. Ch.4.

Social Housing Foundation. 2008. About SHF. Who we are. [Online] Available: <http://www.shf.org.za/about/index.html> Accessed 8 October 2010.

Society for the Promotion of Area Resource Centers. (2010). “About us”. [Online] Available: <http://www.sparcindia.org/aboutus.aspx> Accessed 29 October 2010.



South African Government Services. 2010. "Social Housing Programme". [Online] Available: <http://www.services.gov.za/ServicesForPeople/Aplacetolive/subsidisedhousing/socialhousingprogramme.aspx?Language=en-ZA> Accessed 2 May 2010.

Statistics South Africa, 2007. "Community Survey 2007. The RDP commitment: What South Africans say." [pdf] Pretoria: Government of the Republic of South Africa. Available: <http://www.statssa.gov.za/publications/CS2007RDP/CS2007RDP.pdf> Accessed 5 October 2010.

Statistics South Africa, 2009. "General Household Survey 2009." [pdf] Pretoria: Government of the Republic of South Africa. Available: <http://www.statssa.gov.za/publications/P0318/P0318June2009.pdf> Accessed 8 October 2010.

The Systems Thinker. 2001. Why is Systems Thinking important? [Online] Available: <http://www.thesystemsthinker.com/systemsthinkinglearn.html> Accessed 4 October 2010.

The World Bank, 2009. "Online Atlas of the Millennium Development Goals. More Info". [Online] Available: <http://devdata.worldbank.org/atlas-mdg/> Accessed 30 October 2010.

The World Factbook, 2010 A. Peru. [Online] Available: <https://www.cia.gov/library/publications/the-world-factbook/geos/pe.html> Accessed 20 November 2010.

The World Factbook, 2010 B. Sweden. [Online] Available: <https://www.cia.gov/library/publications/the-world-factbook/geos/sw.html> Accessed 29 October 2010.

The World Factbook, 2010 C. South Africa. [Online] Available: <https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html> Accessed 29 October 2010.

Tonkin, A., 2008. Sustainable medium-density housing. A resource book. Cape Town: Development Action Group.

United Nations. (1948) "Universal Declaration of Human Rights". [Online] Available: <http://www.un.org/en/documents/udhr/> Accessed 27 April 2010.

UN- Habitat. 1996 "The Habitat Agenda Goals and Principles, Commitments and the Global Plan of Action". [pdf] New York: United Nations. Available at: [http://www.unhabitat.org/downloads/docs/1176\\_6455\\_The\\_Habitat\\_Agenda.pdf](http://www.unhabitat.org/downloads/docs/1176_6455_The_Habitat_Agenda.pdf) Accessed 30 October 2010.

UN-Habitat. 2010 A. "Why housing rights?" [Online] Available: <http://www.unhabitat.org/content.asp?typeid=19&catid=282&cid=789> Accessed 30 October 2010.

UN-Habitat. 2010 B. "The Best Practices and Local Leadership Programme". [Online] Available: <http://www.unhabitat.org/content.asp?cid=374&catid=34&typeid=24&subMenuId=0> Accessed 29 October 2010.

Zikode, S., 2005. "The Third Force". [Online] Available <http://www.abahlali.org/node/17> Accessed 31 October 2010.

