MASTER

Housing for starters in South Africa
a business approach for the development of affordable and sustainable human settlements

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Housing for starters in South Africa

A business approach for the development of affordable and sustainable human settlements

Main report
Housing for starters in South Africa

A business approach for the development of affordable and sustainable human settlements

Research report

Name: W.F. (Wim) van den Berg, BBE
Date: February 12th, 2009
Executive summary

Globally the ability to use sustainable housing that fit the needs and affordability of a certain household is one of the priorities that people have in life, because it gives shelter, security and identity. Many people in the world do not have the luxury to live in such a house and are living in semi-optimal houses that hinder their personal development. This research demarcated this problem to households with a middle income living in emerging economies. In these countries the substantial growth of the middle income group takes place. However there people need to be housed in sustainable human settlements in houses that fit their needs and affordability. South Africa is one of these emerging economies and they struggle with housing problems.

In South Africa the gap market can be defined. This is a group of households with a middle income that would like to purchase a house for the first time on entry-level in the housing market. These starters in the housing market are not able to purchase such a house because there are many constraints in this housing market. There are hardly houses available, they can not get a mortgage and their affordability is decreasing. In total there is an estimated lack of three million houses in South Africa, of which about 650,000 in the starters market.

To problems in the housing market are complex and influenced by many factors. However the need for a solution for this group of starter households is urgent because they influence the economic and political stability. This group of middle income earners forms a bridge between the rich and the poor in a country. They are an example for people with a low income and can grow to the high income group. This group is able to pay taxes and forms the working class in the society.

This research describes the fact that starter households are not able to purchase a house that fit their needs and affordability as a process that does not properly work. With the use of ‘Six S’, a method to improve process performance, the constraints in the housing market are analyzed. A list of 23 constraints resulted from this analyses. These constraints are structured with the use of the STEEPLE analyses and are ranked according to the principles of the Porras-method. With this ranking became clear that the insufficient performance of the housing market is caused by social problems in the South African society, urban growth and a lack of governmental capacity.

Looking more specific to the gap market it seems that there are no incentives for the public and private sector to initiate housing development for the starter households. The public sector leaves the housing market to the private sector, and this private sector is because of various not interested to invest in this group of starter households. This results in a stalemate position leaving the group of starter households in a disadvantaged position.

This research claims that there are opportunities in this constraint housing market as well and that sustainable human settlements for starter households in South Africa are possible. There are
different actors that have an interest in the starter households living in sustainable circumstances that they can afford. The public sector has an interest in the development of sustainable human settlements for vulnerable groups and in economic and political stability. The private sector has an interest to create business around the starter households. The starter households have an interest in housing that they can afford in a sustainable neighborhood.

The key issue is that these actors start communicating with each other about their interests. When these interests are in line with each other they can start a joint initiative together to develop products and services for the starter market. This research gives a vehicle to start a real estate development company based on this joint initiative. In an alliance these actors are cooperating towards the development of a sustainable human settlement for starter households that fit their needs and affordability. In the different phases of such a process sub-alliances will be started to gather enough competences and resources to enable the development.

Before the decision is made to start a joint business initiative, elaborate research is needed to the starters market, to the demand of products and services and to the feasibility of a joint effort between the different actors. To describe the qualitative feasibility of this joint effort this research developed a business concept towards starter housing. The business case is built up in three parts: The aspects that are needed to realize starter housing, the aspects that are needed to adapt starter housing to the market and the aspects that are important for the financial feasibility of starter housing.

The business concept describes Starter City. Starter City is an economical entity developed by the joint effort of actors. It contains houses for the starter households to live in, economical opportunities for employment and facilities and services to be able to live and recreate in the environment. The development will be expensive, but the alliance will have an income during the exploitation phase. This research assumes that with a long-term focus this project is profitable. Strategic alliances with different actors are needed to realize this based on risks and responsibilities.

DHV can fulfill different roles in this process towards the development of sustainable human settlements for starter households in South Africa. They can execute pre-feasibility studies towards sustainable housing development in South Africa. In the entire project range, the department of urban and regional development of DHV can offer services from strategic advice to asset management. The joint alliance can also ask the DHV Company to be the organizer of their plans. Eindhoven University of Technology can contribute to a solution for the problems in South Africa by doing research to models towards housing development and knowledge about different housing markets. The other way around, information this international study can be used to have a different point of view on Dutch problems.
Preface

This report is the dissertation for the academic degree of Master of Science in Construction Management and Engineering at Eindhoven University of Technology. The dissertation is the result of an individual research of ten months developed in cooperation with Eindhoven University of Technology and DHV BV.

The idea for this research started during a congress organized at the University of Eindhoven about the global shelter question caused by human or natural disasters in November 2007. At that time I was already interested in poverty and proper housing since my traineeship as building supervisor in Curacao in 2003. The publication 'State of world population 2007' of the UNFPA was an eye-opener for me. Like many others I was not aware of the consequences of urban growth. The number of people in the world that are living in informal settlements was enormous and I was dedicated to do something about that.

During the months afterwards this idea developed itself to a research to the middle income group in emerging economies. South Africa is one of these emerging economies and is also confronted with housing problems. Academic research was possible in this country because of a relationship between Eindhoven University of Technology and the University of Pretoria and a partnership between DHV BV and SSI. Therefore South Africa could function as a case study.

In the time of ten months a study to a business approach for the development of affordable and sustainable human settlements for starter households in South Africa was executed. From April 2008 to July 2008 an introducing literature study about housing problems in South Africa was done during an internship at DHV BV located in Amersfoort. From July 2008 to November 2008 the research was continued in Pretoria, South Africa, to analyze these problems in the market. From November 2008 till January 2009 research was done to the feasibility of a business concept for starters in the housing market in South Africa in the Netherlands again.

Hopefully this research can contribute to the constraints in the housing market in South Africa. I hope you will enjoy reading this report.

Kind regards,
Wim van den Berg
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During the period that I have been working on this thesis I have been helped by many people who contributed towards the success of this research. They deserve a warm word of appreciation for their effort they put in this research.

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At DHV BV in Amersfoort I thank the department of spatial planning and real estate to be able to do an internship at the company. Marianne Nevens, Christiaan Norde and all other colleagues were there to assist when I had some questions. At SSI in Pretoria I would like to thank SF van der Linde for letting me work at their office.

Thanks to the exchange program between Eindhoven University of Technology and the University of Pretoria I was able to study in South Africa. Mahlogonolo Mphahlele and Henny houben arranged my accommodation there. Lecturer Henk Jacobz was responsible for the extra information about the South African housing market in his course ‘Housing’.

Special thanks go to Harmen Oostra, Michelle Essink, Gerard Vermeulen, Kecia Rust, Jennifer Mirembe, Namso L. Baliso, Luanne Werner, Sollie Potgieter, Jacus Plenaar, Mark Napier, Mark Oranje, Paul Canisius, Gerard Engel, Peter Erkelens and Cees Kokke who are willing to make time for me to interview them.

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1 Introduction

1.1 Research topic

Together with food, potable water and healthcare, proper housing is one of the priorities people have in life because it gives shelter, security and identity. It is also in most cases the largest investment people make in one's lifetime. Unfortunately there are millions of people in the world who are not able to live in a proper house because of, among others, human or natural disasters, urbanization and urban growth\(^1\). This research should contribute to the research to proper housing for the world population.

To understand the context and constraints for housing development this research focuses on South Africa. South Africa has the largest economy of the continent Africa and has a large challenge with a shortage of proper houses. The inherent housing backlog is mainly a result of high levels of urbanization, poverty, high unemployment, together with a history of apartheid and segregation. This research will provide the South African context of a global problem. Because of economic development there is a growing group of people with a middle income. This group is looking for affordable housing in a sustainable environment fitting their needs, but there is a lack of products developed for this group. These households have only limited access to the housing market what results in growing pressure on the housing market.

Lack of housing for middle income earners limits entrepreneurial options for households. They do not have the space to start their own businesses. The group of middle income earners has an important role model that a large percentage of the population group aspires to follow. Promoting sustainability in this group would set a good precedent to follow and is therefore important to promote and achieve sustainable building (Müller-Warrens, 2001). Affordable housing should have a priority on the agenda of the public and private sector to stimulate this.

This report pertains to affordable and sustainable housing for the low-middle income households in South Africa, with the focus on housing for starters in the market. It will provide a business concept for the private development of sustainable communities, affordable for starters. The business concept is focused on the South African context, but the concept could have a global field of application.

\(^1\) The definition this research gives to these kind of words or abbreviations can be found in appendix 1
1.2 Research motive

DHV is a leading international consultancy and engineering firm offering services that cover the entire project range, from strategic advice to asset management. The urban and regional development department of DHV, The Netherlands, deals with the growing demand for mobility, urbanization and urban regeneration and the quality of human environment. Housing and real estate programs are characterised by an integrated approach that requires, besides technical expertise, in-depth knowledge of the socio-economic climate and the positions of the various stakeholders. SSI, a DHV Group Company, operates 20 branch offices in South Africa.

The University of Technology in Eindhoven deals with research to Construction Management and Engineering. One of the research groups is focusing on business studies to the build environment. In these business studies the building process is seen as an economical entity. For this research group the development of a feasible business concept to enable housing for starters in the market can be valuable.

1.3 Research setting

This research is divided in six parts. In figure 1 the different parts and chapters are shown. The first part gives an introduction to the research topic. In part B the research background and research are described.

Figure 1 - Research index

| Part A - Introduction | - Chapter 1: Introduction |
| Part B - Research background | - Chapter 2: Research context |
| | - Chapter 3: Research framework |
| Part C - Analyses | - Chapter 4: Process innovation |
| | - Chapter 5: The South African context |
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| Part E - From constraint to opportunity | - Chapter 12: Characteristics of a business initiative |
| Part F - From constraint to opportunity | - Chapter 13: A business concept towards starter housing |
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| Part H - From constraint to opportunity | - Chapter 14: Conclusion and recommendations |

In part C a description of the context of housing in South Africa, a description of the vision and attitude the people involved in the development process of housing and a description of housing for starters are given. In part D the constraints mentioned in part C is summed up and with the use of different methodologies the main constraints are separated with the side issues. In part E is based to convert the main constraints into opportunities. With these opportunities a business concept is set up. In part F the validation, conclusions and recommendations are described.
Part B - Research background

2 Research context

2.1 Urban growth

"In 2008 the world reached a momentous milestone. For the first time in history, more than half its human population, 3.3 billion people, will be living in urban areas. By 2030, this is expected to swell to almost 5 billion. This is mainly caused by urbanization and population growth. Many of the new urbanites will be poor. Their futures, the future of cities in developing countries, the future of humanity itself, all depend very much on decisions made now in preparation of this growth." (UNFPA, 2007)

Economic development in a country leads to urban growth\(^2\). The new economic opportunities enable people to find employment in the economic regions. Urban growth is inevitable, and so are the problems caused by it. But this increase of the urban share can be positive as well. Cities concentrate poverty, but they also represent the best hope of escaping it. Urbanization offers significant opportunities to reduce poverty and gender inequality, as well as to promote sustainable development. Cities embody the environmental damage done by modern civilization; yet experts and policymakers increasingly recognize the potential value of cities to long-term sustainability. If cities create environmental problems, they also contain the solutions. The potential benefits of urbanization far outweigh the disadvantages: The challenge is in learning how to exploit its possibilities. (UNFPA, 2007)

Good governance is essential to create sustainable cities for the future. However, urban governance goes beyond the current needs. Urban governance can be seen as urban management focused on both government responsibility and civic engagement. It refers to the process by which local urban governments in partnership with other public agencies and different segments of civil society respond effectively to local needs in a participatory, transparent and accountable manner. Integrating social and environmental concerns for urban growth within a broader vision of time and space is therefore critical for sustainability (UNFPA, 2007).

\(^2\) Urban growth is the development of a city based on an increasing amount of residents in a city and the services and facilities needed. Urban growth is caused by migration to the urban areas, a higher birth rate than a mortality rate and a tendency of smaller families.
The public and private sector together with civil society, supported by (inter)national organizations and Universities, can take steps now that will make a huge difference for the social, economic and environmental living conditions of a majority of the world’s population.

### 2.2 Emerging economies

In general countries can be differentiated as developed economy, emerging economy or poor / developing country. Countries are characterized as “emerging” when they profit from a substantial economic growth based on significant productivity gains, technological change and a change in their economic philosophy (Füss, 2001). These countries are also seen as emerging when improving the potential for the mass of the population through health, education, workplace conditions, access to title, etcetera whether through public or private channels. This level of development is measured by the gross domestic product (GDP) and the genuine progress indicator (GPI). In figure 2 the “All Country World Index” by Morgan Stanley (MSCI) defines 25 emerging economies (in blue). The developed markets are shown in pink. The countries in grey can be seen as poor or developing countries.

**Figure 2 - The ‘All Country World Index’ by Morgan Stanley (Covarrubias, 2006)**

Emerging economies are in transition from a central planned and non-economical process to become market economies. The developing new economies are growing faster than the established industrial economies of the world, which is a mayor feature of emerging economies. Although these emerging economies are different countries, they equal in having rapidly growing economies and are facing the same problems with the transition into the market economy. These problems can be found in social, technical, economical, environmental, political, legal and ethical matter. Managing urban development in emerging economies therefore could be even more challenging than in developed economies.

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3 More information about different types of economies can be found in appendix 3.
In a country that is in transition to become a market economy, there will be a great change for the population. The new economy gives chances for the population to develop themselves through education and employment. These people are major for the development of an emerging economy, because they are an example of the population and the taxes that are raised on them by the government. The group, which is able to keep up with the economy, will form the middle income group. This group consists of semi-skilled and skilled laborers. They are economically active, but they have a minimal investment income. A part of this middle income group are the starter household, they are looking for a house on the housing market, but do not succeed.

2.3 Importance of housing

To be able to participate in an economy a family has basic requirements. Basic requirements are appropriate shelter, enough food, access to potable water and sewer, security and health care. In emerging economies there is a lack of affordable housing caused by urban growth. This results in a growing pressure on the housing market. Lack of decent housing keeps people from participation in the economy, what results in a lack of entrepreneurial options. When people are not able to participate in the economy, a country is not succeeding (yet) in setting up a sustainable society.

**Housing as a foundation:** Home ownership is a proven driver of household wealth; it is also a tangible asset that can be passed on to children. It helps build reserves and the financial stability that stimulates demand for education and healthcare. It can be used as collateral for a business loan to start up a small or medium sized enterprise. In terms of environmental impact, home ownership stimulates energy and other utility efficiencies, such as solar panels, water saving installations and insulation. A strong housing sector serves as an engine for economic growth and employment, with spin offs to related industries. In many countries, it can contribute as much as 20% of the GDP. Moreover, housing plays an important role in the development of financial sectors, especially capital markets. (FMO, 2008)

The housing sector in emerging economies is in transition to a public and private driven housing market. In these countries the informal settlements do still exist, but the government is trying to intervene in the lower income markets. However these attempts of transition are not without problems and because of the different history of these countries it is questionable that the housing market in these countries will be similar to the developed economies. Housing is however only a small part in major socio-economic problems. Although all problems are connected with each other this research will mainly focus on housing in emerging economies.
Owing your own home is more than acquiring bricks and mortar. If home ownership increases, there are immediate economic and social spin-offs. Access to affordable housing, however, remains a major obstacle in today’s South Africa. (FMO, 2008)

2.4 Introduction to South Africa

South Africa can be found at the southern tip of Africa and borders in the North with Namibia, Botswana, Zimbabwe and Mozambique. The countries Lesotho and Swaziland are located within the borders of South Africa. The administrative capital is Pretoria, the legislative institution can be found in Cape Town and Bloemfontein is the judicial capital of South Africa. (CIA, 2008)

South Africa is one of the emerging economies in the world. Like in other emerging economies, South Africa is facing problems with the transition into a market economy. This research will focus on South Africa and will attend to the matter of affordable and sustainable housing for the households with a middle income and in particular the starters looking for entry-level housing.

The first multi-racial elections in 1994 brought an end to apartheid and ushered in black majority rule. Since this time South Africa is trying to solve the problems that exist due to apartheid. Segregation and housing problems are still two major problems and influences South Africa’s economy and society. The government chose to use a part of this new wealth for large investments in the country. For example South Africa is seen as a leader of the developing world on issues such as climate change, conservation, and biodiversity. But like any developing country there are many problems that occur, like inadequate infrastructure in urban areas, poor housework transportation, lack of capital and low level of skills (Nordberg, 1995).

After the apartheid ended in 1994 the new democratic government gave housing the highest priority to the South African population. Access to housing, and the interplay between demand (long housing waiting lists, burgeoning informal settlements, overcrowded inner city flats) and supply (RDP delivery, social housing and bounded housing) has been given significant attention by policy makers and indeed in literature. Access to recourses like secure land tenure is a significant factor in creating community division (Royston and Narsoo, 2006). Housing is listed under the category ‘boosting ownership of assets and access to opportunities’ (Charlton and Kihato, 2005). The approach of the government had two angles: The government wanted to stop the housing crises by large-scale delivery of subsidized housing for low income households. New housing policies were developed and all previous laws were replaced. South Africa has an

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4 More information about South Africa can be found in appendix 4.
5 In appendix 5 the housing market in South Africa is described.
elaborate housing policy\textsuperscript{6}. This makes South Africa an interesting case for further research to affordable and sustainable housing for a growing middle income group.

\textsuperscript{6} In appendix 6 more information of the housing policy can be found
3 Research framework

3.1 Problem definition

People should be able to live in a house that fits their needs and living standard. Therefore a large differentiation of housing is needed, but in South Africa a large backlog in housing stock exists. This backlog has an awkward negative effect on health, security and the entrepreneurial options of the population.

The group of middle income households in South Africa has limited access to live in affordable and sustainable housing. Because they do not have the chance to live in an environment that fit their needs, they lack social and economical chances to develop themselves. They cannot grow towards the households with higher incomes and so they lose connection with the 'first economy'. They remain stuck in low income housing and invest their money in consumable goods instead of durable goods. The gap between poverty and wealth will grow. This is an ethically as well as a social-economic problem in a country that is one of the most unequal countries in the world. Problems make a sustainable society impossible.

Because the middle income group is of high importance for the future economic development of the country it is necessary to find solutions for this group on the housing market. However, many constraints in the housing market make it difficult to give an answer to the problems in this market. The complications with affordable and sustainable housing in South Africa are complex and a multidisciplinary approach is needed to solve these problems. Different actors are influencing the process to a healthy housing market and they all have a different perception of the problems. With a joint goal for all actors in providing affordable and sustainable housing for the households with a middle income, a solution should be reasonable.

The national government does not have enough resources to fund all the housing developments needed, so private resources are essential. Next to this fact South Africa has a liberal constitution (Pienaar, 2008). Through this the national government focuses on low-income housing and leaves other market segments for the private sector. The private sector is however not investing in this market as well, what creates a gap market (Rust, 2006).

In this research the households with a middle income that are willing to purchase a house that fit their needs and affordability are called starter households. They are looking new on the housing market and looking for housing on entry-level.

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7 More information about housing affordability and housing sustainability can be found in chapter 6 of this research.

8 More information about the gap market can be found in chapter 4.
3.2 Research objective

This research should contribute to the research of affordable and sustainable housing for people with a middle income in South Africa. Large-scale housing development is needed, but this hardly takes place in the gap market (Rust, 2006). In this research the people with a middle income in the gap market who are looking for a house at entry-level to enter the housing market are mentioned as the starters. These households are the target group for this research.

Through a study in literature it became clear that more information is needed about constraints and chances for starter households with a middle income to participate in the housing market in South Africa. This market segment is insufficiently covered in South Africa. This research consists of two parts to contribute to sustainable housing for starter households that fit their needs and affordability:

- The first part aims to understand the constraints in the South African housing market.
- The second part aims to develop a business concept towards starter housing.

This research creates a model to approach the housing market as an economic entity. Because the government is not willing to regulate other housing sectors than the low-income sector (interview Luanne Werner⁹) the initiative will have to come from the private sector. This will result in a business concept that could improve the development of sustainable housing for starters on the market.

Research aim: This research will develop a business concept for a new opportunity for sustainable housing development for the starter households with a middle income in the housing market that fit their needs and affordability based on cooperation between actors in the development process and private sector development initiative.

In this research the following topics to understand the context of the business concept for housing for starters in the South African housing market are described:

- Process innovation for housing development.
- The South African housing market.
- Affordable and sustainable housing.
- The demands of the middle income households.
- Stakeholders that could be involved in housing development for starters.

⁹ The contact information of this contact and all other contacts in this research can be found in appendix 2.
- The complications and opportunities in the housing market.
- How to make a business concept for sustainable urban development.

### 3.3 Research process

In figure 3 the model for this research is shown. This model can be explained as an analysis of subjects involved in affordable and sustainable housing for starters in South Africa who want to purchase a house in a sustainable environment that fits their affordability. The housing market, stakeholders and housing finance are based on information from scientific literature, a case study in a modern South African policy setting and interviews with experts (A). This study explains the context of this research and gives a point of view on the characteristics of sustainable and affordable housing in South Africa (B). This research is important because middle income households have limited access to sustainable housing that fits their affordability (C). With the outcomes of this research a business concept will be set up, meant to give a contribution to affordable and sustainable housing for the middle income households (D).

Figure 3 - Research model (Verschuren & Doorewaard, 2007)

![Research Model Diagram](image)

### 3.4 Research questions

In the previous paragraph the research model was given. To acquire the information needed and to be able to develop the business concept, a list of research questions is set up. This list consists of a main question and several sub-questions. The sub-questions are answered in the
different chapters of this research. Part F of this research can be seen as the answer on the main question of this research.

**Main question:** What business concept can be developed for the realization of sustainable entry-level housing for starters in the housing market that fit their needs and affordability, initiated by the private sector?

**Sub-questions:**
What characteristics from the theory are important to determine the main issues of this research?

- Chapter 4. How could process innovation be implemented for housing development?
- Chapter 5. What are the characteristics of the South African housing market?
- Chapter 6. What do the subjects’ sustainable housing, entry-level housing and affordability mean in the context of housing for starters?
- Chapter 7. What do the subjects’ sustainable housing, entry-level housing and affordability mean in the practical situation in South Africa?
- Chapter 8. Who are the actors in the process towards affordable sustainable urban development and what are their characteristics?
- Chapter 9. What are the characteristics of housing for starters?

What constraints are responsible for the main problem and what can be done to decrease the effect of these constraints?

- Chapter 10. What are the main constraints that are influencing the development of housing for starters?
- Chapter 11. What are the opportunities in the housing market that could positively affect the development of housing for starters?

How can a business concept that contributes to a solution for the starter housing market be made regarding to all different constraints?

- Chapter 12. What are the characteristics of a business initiative towards sustainable urban development for starters that fit in their needs and affordability?
- Chapter 13. What are the main features of a business concept towards sustainable urban development for starters that fit in their needs and affordability?
- Chapter 14. What is the value of this research and its solution? Is it valid?
- Chapter 15. What are the conclusions and recommendations for this research?
3.5 **Research framework**

The issue with affordable and sustainable housing for starters should be seen as one in a broad scale of problems in South Africa. All the complications are related to each other and multiple factors are playing a role in this socio-economic problem. Within the time available for this research the focus is on housing. Other problems will be mentioned, but will not be discussed. This research looks at the development of a housing framework for starters in South Africa. To come to this point problem analyses, problem definition and solution development is needed. The basis of this research is to develop a feasible solution for the shortage in affordable housing for this target group. Therefore a practical and diagnostic strategy is chosen to make structured solution development and validation possible, because not much is known about making housing affordable for starters in South Africa and the multiple causes of the shortage of affordable housing.

The framework shown in figure 4 shows the demarcation of the research, by giving the position of the research aim in a broad setting of topics directly or indirectly related to the main topic. By solving this piece of the puzzle a contribution can be made for the national and international research to affordable and sustainable housing for starters. Process improvement what leads to a business concept has a central position in this research.

**Figure 4 - Research framework**

While the international trend of urban growth continues, housing challenges remain. Worldwide there is a lack of houses which has a negative impact on health, safety and many other topics. In emerging economies and development counties these growth rates are the highest, although stakeholders in emerging economies are able to do something about it. South Africa is one of
Research framework

these countries trying to deal with the problems of a mismatch between supply and demand in the housing sector.

Recently the governmental focus is changing from the low-income market to the whole market. But because this is only recent, the government has a lot of knowledge about the market as a whole to catch up. Also financial institutions avoided for a long time the affordable housing market. This results in the fact that there is only little information available about the middle income households and affordable housing. Affordable housing statistics are only provided in national averages, no differentiation between ‘new’ and ‘existing’ houses is known. There are no standards for affordable housing and the existence of a secondary market is unknown. (Meltzer, 2006)

3.6 Research strategy

The basis of this research is to develop a clear view of the theory and the main issues relating to the housing problems. First broad research is done to the problems in the affordable housing sector and people who are crossed by the problems. In-depth research to one of the many development problems is done afterwards to be able to find a part of the solution demarcated by the time available. The strategy of this research is to combine the methods of a desk research and a case study. This means a literature study and empirical research are combined. In South Africa information of the local markets and local experts is added to the research.\textsuperscript{10}

For the desk research different kinds of data are used. The information came from policy documents, books, scientific journals, newspapers, articles and websites. This literature is combined with interviews for extra information and to become more aware of the South African context. For the case study also different kinds of data are used. Information of the case study came from project visiting, project websites, interviews and newspapers. The list with all the references can be found in the back of this document.

\textsuperscript{10} In appendix 20 all interviews with experts are worked out.
Process innovation towards starter housing

The housing constraints in South Africa are complex and a multidisciplinary solution is needed to solve these problems. A view on the whole housing market is needed and change in policy focus and private sector approach is inevitable to realize sustainable housing for starters that fit their needs and affordability. The process of the development will be examined in this chapter to understand what happens in these process steps.

A model to examine a development process and to aim for process innovation is also known as “Six S”. In figure 5 the model for this research is shown.

**Six S.** “Six S” stands for Factors, Actors, Rules, Decision actions, Phases and Levels that have influence on the process of urban development. The aim of “Six S” is process improvement. This could be aiming at process acceleration, interaction between stakeholders, etcetera. Improving the process in urban development can include the share of shareholders, the level and phases of decision-making, creating a model for decision-making or the governance of a project. (Schaefer, 2008)

Figure 5 - Model of ‘Six S’ for sustainable housing for starters

The ‘Six S-model’ gives a structure to a complete view over the aspects where improvement can take place. The six aspects in the process together are able to improve the market for starters in
South Africa. This works according to an iteration process. The aspects for this research are the following:

**Phases:** In a project different phases can be defined\(^\text{11}\). Every phase has its own characteristics and needs another approach. The phases together must be an entity that forms a starter product. The success of a business concept is supposed to be the combination and implementation of all phases. Property development starts with a given parcel of land where something can be developed on or with an idea and land to search for.

*Figure 6 - The different phases in the process to housing development*

In figure 6 the different phases of the process to housing development are shown (Pienaar, 2008 & Schaefer, 2008). This research will focus on the first phase in the development process: the development of a program and business concept to improve the performance of affordable and sustainable housing for starters on the housing market in South Africa. In this phase the pre-conditions for a sustainable housing project are set and the focus of this research will be on the feasibility of a starter housing development.

**Levels:** In a certain phase there are different levels in the organizational structure. In every level in the organizations decision-making processes and responsibilities can be defined\(^\text{12}\). The level of the decision-making process in this research is on strategic level. On this level long-term objectives are set. Available resources in the presence and the future are estimated and policies and frameworks to reach the objectives are developed. The development of sustainable houses for starters that fit the needs and affordability of the starters is a business full of financial risks that could influence the continuity of a company. On strategic level a decision is needed to start an alliance for housing development.

\(^{11}\) In appendix 14 these phases are further defined
\(^{12}\) In appendix 14 these phases are further defined
**Rules and regulations:** Rules and regulations are about the governance of a project, the rules, processes and behavior that affect the way on which powers are exercised. In this research the private sector is supposed to initiate a housing development where they should cooperate with the public sector and the starters. The rules of doing fair business matter for all parties. Three things about the public sector and the starters are important to know:

- The public sector has hardly laws, regulations and procedures to influence the private sector to start developing starter houses.
- There are hardly laws, regulations and procedures to influence the private sector to involve the starters in their developing process.
- There is no quality standard described for houses for starters.

This research takes the view that the mentioned rules and regulations are in place. In chapter eleven are some examples of rules and regulations shown that positively could influence the development of the houses for starters.

**Decision action:** The situation where this research starts with, is a market where hardly starter housing development takes place. The aim of this research is to create an opportunity to develop enough sustainable starter houses that fit in the needs and affordability of the starters. The action is to improve the performance of the project development for starter housing. In the business concept described in chapter 12 the pre-conditions of the decision actions are described.

**Factors influencing the process:** This research approaches the factors that influence the process by looking to the characteristics of the South African housing market. Also subjects like sustainable housing, affordable housing and entry-level housing in the theoretical and practical context of South Africa are looked at. In chapter five to nine the factors that influence the housing sector in South Africa are mentioned. In chapter ten of this research the constraints in the development of housing for starters are summed up.

**Actors influencing the process:** Public parties, private parties and consumers are the main actors in the process to an improvement of the performance in sustainable housing for the starters. These actors and their characteristics in the development process and the characteristics of starter households can be found in chapter eight.
5 The South African context

In this chapter characteristics of South Africa are mentioned to learn about the situation in the country. Also the housing situation in South Africa is described.

5.1 Social characteristics of South Africa

South Africa has an estimated population of 47.7 million people in 2008. The expected population in 2050 is 48.7 million. The next 5 years the urban growth rate will be 1 percent afterwards the growth will be less. In 2005 sixty percent of the population was living in urban areas. In 2005 the life expectancy had an average of 44.2 year. The infant mortality rate (39 per 1000 live births) is high according to European standards (9 per 1000 live births) but rather low according to the rest of Africa. From the population between 15 and 49 years old, 15 percent of the men have HIV and 22.5 percent of the women (UNFPA, 2007).

The transition in the economy can be found in demographics as well. Since South Africa has a fast growing economy, a lot will change in the demographics of the country. Because of the modern technologies a new place for cultural aspects must be found. Women, who were always disadvantaged, are now important in the labor force. This is something that will change the normal family structure dramatically. (Sachs, 2007) The reason that the demographic transition is not happening faster is because of diseases like HIV/AIDS, high unemployment, crime, lack on housing and disrespect to women in South Africa.

Education used to be a primary vehicle for systematic, racially based unequal treatment of people under the apartheid order. After 1994, with the advent of democratic government, access to education was enshrined in the constitution as a basic human right. Education is regarded as a key element in the strategy of government to bring about social transformation. This implies improving access to educational opportunities for the historically disadvantaged and implementing policies that focus on redressing the inequities of the past (Statistics South Africa, 2007-2). The lack of education causes a lack of skills in the population.

5.2 Economic characteristics of South Africa

South Africa has the largest economy of the African continent. The international position of South Africa got stronger in the last few years (AT Kearney, 2008). The South African economy can be defined as a combination between the characteristics of a development country and the

13 In appendix 4 more information about social characteristics of South Africa can be found including some explaining figures.
characteristics of an industrialized nation. Domestic demand has been the key driver because consumer spending has been increasingly financed by credit and rapid increase in fixed investing.

Household consumption expenditure remains under threat because of higher fuel and food prices, a moderation in the real disposable income of households, higher debt servicing costs and overall tougher economic conditions. The inflation rate in South Africa is above 10% and the governor of the South African Reserve Bank (SARB) is warning that the global conditions are becoming more difficult caused by inflation in the next years. To face the inflation the interest rate rose along with the inflation to 15.5% in October 2008. Inflation will stay in double figures, especially if price inflation remains high, as seems probable, and the Rand continues to slide (The Economist, 2008). However, despite the expected slowdown in household spending, South Africa's economic growth remains strong and the economy is likely to continue expanding at levels above 4% per annum. ABSA Bank expects the economic growth in 2008 to be considerably lower than during the past three years and it will rebound in 2009 and 2010 (ABSA Bank, 2007).

The unemployment rate is slightly declining. From 2001 to 2007 the unemployment rate decreased from 29.4% to 23.0%. Although this is an improvement, still a large percentage of the potential labor force is unemployed. The government is creating many new jobs, but can not keep up with the urban growth in the country (Statistics South Africa, 2007-1).

About 79% of the South African households earned R3.50014 or less per month during 2004. Ten years before this was 86% of the total households. Taking into account the levels of unemployment, the government is facing a great need to improve the living conditions for a larger proportion of the population (RSA, 2007). Because of inflation the people's income has less value in 2008 than it had in 2004.

5.3 South Africa's policy on housing

The housing policy, adopted in 1994, has evolved over the years into a complex, multifaceted entity with many components. A variety of factors influenced and does still influence the evolution of policy. Research, politics, power struggles, pragmatism and constraints in the external environment are responsible for the housing policy of today.

After apartheid the government started the enormous job to ensure that the whole population has a place to live. The conditions at that time where desperate and demanded a fast quantitative

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14 The conversion rate of the Rand: €1 is worth R13,60 and R3.500 is worth about € 257,- (December 23rd, 2008)
The South African context

solution. The solution of RDP\textsuperscript{15} was only a short-term solution and more recent the government started to stimulate more qualitative housing for the low income group\textsuperscript{16}. The intention was to deliver a starter house, which beneficiaries would add to and consolidate over time. This incremental way of achieving the right to housing was related to a key assumption in the policy that beneficiaries would be able to access loan finance which would be spent on improving the house. (Charlton and Khato, 2005) The government used different housing papers\textsuperscript{17} for their policy. The most recent one is the Breaking New Ground policy. For the first time the whole housing market is part of the policy. This housing paper shows the governmental concern with housing for the population, improving the quality of life, access to title, breaking barriers between the rich and the poor and sustainability.

**Breaking New Ground policy.** The policy, introduced in 2004, aims at the following topics. These topics are also relevant for the business concept in chapter twelve.

- Utilizing provision of housing as a major job creation strategy.
- Ensuring property to be accessed by all as an asset for wealth creation and empowerment.
- Combating crime, promoting social cohesion and improving quality of life for the poor.
- Utilizing housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring.
- Accelerating the delivery of housing as a key strategy for poverty alleviation.
- Leveraging growth in the economy.
- Supporting the functioning of the entire single residential property market to reduce duality within the sector by breaking the barriers between the first economy residential property boom and the second economy slump.

Out of this policy are two financial mechanisms developed to reduce the gap between the poor and the rich in South Africa. These two policies do not work because the affordability of the South African decreases every year because their income increases less than the inflation does.

- **The Financial Sector Charter** is a program developed in cooperation with government, business, labor and community constituencies to make agreements on transforming the financial sector to help the black population gain economic power. The charter focuses on targeted investments in the black population of South Africa like infrastructure, agricultural

\textsuperscript{15} The Reconstruction and Development Program (RDP) focused on building houses for households who were earning less than \$3,500 per month. They wanted to build 1 million houses in 5 years starting in 1994. Finally this was done in seven years.

\textsuperscript{16} The low income group is earning less than \$3,500 per month and where able to get a subsidized house from the government. Other income groups were not helped by the government.

\textsuperscript{17} More information about the housing papers can be found in appendix 7.
development and low-income housing. Investment for low-income housing is for people earning between R1.500 and R7.500 and will rise together with inflation. Caused by the rise of the CPIX-index the cover of this program is for people with an income between R1.800 to R9.080 in 2008.

- **Finance-linked subsidy program** is introduced to assist first-time home buyers who earn between R3.501 and R7.000 per month to obtain a home loan. The subsidy attaches to the beneficiary and not to the property. This will be used to decrease the mortgage bond and is only applicable to people who have never before been assisted by the government. It is disbursed as a once-off subsidy.

### 5.4 The housing Ladder

During their life people need housing that fits with their needs on that certain moment. These needs are changing together with major happenings in life. During childhood, a person lives with parents and they move out when they start working or studying. Afterwards this person wants a house together with a partner and later on they need room for kids as well. Locations of work can change, together with financial resources and living circumstances. This research is based on the fact that there should be proper housing available in every segment of the society for every phase in life. This is called the housing ladder or the living career.

*Figure 7 - The housing ladder (Rust, 2006)*

<table>
<thead>
<tr>
<th>Monthly household income</th>
<th>Normal Housing</th>
<th>Rental</th>
</tr>
</thead>
<tbody>
<tr>
<td>R20,000 and more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R9,080</td>
<td></td>
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<tr>
<td>R7,500</td>
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<td></td>
</tr>
<tr>
<td>R7,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R5,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R1,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No wage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In an ideal situation every person owns a house that fits in his needs. In every culture people have pre-conditions on how housing should look like. Regarding to the different cultures in South Africa, it would be an utopian situation that everyone would live in a fitting house. However, providing different types of housing can make this possible. In figure 7 a global interpretation of
the South African context

In this research the group earning between R3,500 and R12,000 can be described as the gap market and will be the target group for this research. This group is chosen because they are not able to get housing finance, there are no houses available for them and their affordability is decreasing unless there are subsidy arrangements and is market in the figure with the red line.

5.5 Backlog in housing in South Africa

There is a large backlog in housing in South Africa. There is an estimated demand of 3 million houses for the population (Nell et al, 2005; FinMark Trust, 2006; Jansen, 2007). For a long time the focus of the government was on low-income housing with the result that a lot changed in the lower segments but nothing really changed in the higher segments. In figure 8 the housing ladder is combined with information about housing demand and supply.

Figure 8 - Housing supply and demand in South Africa (Meltzer, 2006 & Rust, 2006)

The group with a middle income contains about 22% of the South African society. This group should be able to live in a house that fits in their affordability class, but only a small percentage does. Projects for affordable housing is very rare, which means that a majority of this 22% lives in places that does not fit their needs. The 18,000 units that are developed do not end up in the group with a middle income. These units are taken by people with a higher income because in that segment is a backlog as well. People in the middle income segment are stuck in informal settlements, in RDP-housing or living in overcrowded houses with family and friends. Housing
shortages can lead to undesirable situations. Overcrowded houses, homeless and displaced people and rising housing prices are results of a lack of housing. These results have also some side effects. Population without shelter is not able to work. This makes purchasing food, following education and improving their situation a lot more difficult. Homeless people are more vulnerable for health problems and violence. These problems hinder the development of healthy communities. In a healthy community it should be possible to live in a house fitting to the persons own needs, paying less than 25% of the total income for housing. People with a higher income should be able to live in larger houses or should be able to upgrade their former house.

A house in the middle income segment was R265,000 in 2007 (ABSA, 2007). Current interest rates are at prime 15.5% and the Financial Sector Charter is at 16.5% because of the risk, administration et cetera. To be able to afford a house, you need to earn an income of R12,000 per month. This upper boundary of R12,000 for the target is chosen because it is the price of the cheapest house in the private market that was available in 2007. The price of R265,000 is increased in 2008, but was not definite during research. A mortgage in South Africa is very expensive for consumers because of the interest rate. For banks this rate seems necessary to take the risks into account.

There is a growing housing demand from 650,000 in 2005 to 725,000 in 2008 for people with an income between R2,500 to R7,500 per month. For the group from R7,500 to R12,000 the backlog is not specified (Neill et al, 2005). An average of 18,000 affordable housing units is constructed each year in the FLISP-market and the government promised to bring this to 30,000 units. But because of the rise of fuel prices, interest rates and the current credit crises this number is not reached (Interview Kecia Rust). However a production of 132,000 per year is needed to solve the problem (Coovadia, 2006).

"Very little new development, especially in respect of the middle income target, has happened in recent years. The biggest problem here is that housing is not really available for the middle income households. There are a few resale market houses but marginal" (Rust 2006).

There is hardly development of housing for the people in the middle income market. There are many problems that are negatively influencing the development process of new residents for people in this target market. In chapter 10 these problems are summed up. In appendix 4, 5, 6 and 7 more information can be read about the problems in the housing sector.
6 Affordable and sustainable housing

6.1 Affordable housing

In many countries the term affordable housing can be applied to public sector and private sector efforts to help the middle income group to purchase a home. South Africa is in an early stage to realize affordable housing which is part of the reason why affordable housing statistics are only provided in national averages. No differentiation between ‘new’ and ‘existing’ houses is known yet, there are no standards for affordable housing and the existence of a resale market is unknown.

**Definition:** The term affordable housing means that the monthly costs of a household for their housing may not exceed 25 percent of the gross income of the household. The restriction of 25 percent is necessary to ensure the other monthly expenses are met adequately from the remaining household income and to avoid financial difficulties in the future. Affordable housing is housing that fit in the needs of the household paying a rent or bond of less than this percentage a month. Affordable housing can be either rental or ownership.

In this research the people with a middle income in South Africa earning between R3,500 and R12,000 per month are not able to live in a house that is affordable for them. There are no houses where they can stay and have monthly expenses on housing between R875 and R2,500. ABSA Bank describes affordable housing as houses between 40 and 80 square meters and costing less than R265,000 (ABSA, 2007). Because of inflation, affordable housing prices are growing every year.

For people with a middle income housing is the largest investment one’s lifetime. For the households it is important that the asset of the house keeps its value, but it is also important for economic growth of a country, the development of human settlements and job creation.

6.2 Sustainable urban development in South Africa

Sustainability has become an increasingly important element to be considered in the planning of urban areas. Although it is central in the consideration of cities, for some reason it has received less attention in the development of neighborhoods. (Choguill, 2007) Sustainability is generally referred to the three P’s which stands for People, Planet and Profit. In the sense of affordable housing sustainability can mean various things, not excluding that they can contradict each other. This chapter will clarify what sustainability stands for in this research.

18 In appendix 7 an elaborate document about the importance of housing as an asset is added.
General definition of sustainable urban development

Generally sustainability (People, Planet and Profit) is the term used to describe an environmentally responsible way of development by reducing the negative impact of pollution, continued growing traffic flows and scarcity of space. Also it contains increasing demands for sound public health and robust ecosystems while simultaneously meeting the needs of current users and respecting the needs of future generations. Sustainable urban development refers to the quality of new urban projects in the urban environment. The combination between the social, economical and environmental component of sustainability represents a viable development for bearable neighborhoods with equitable chances for the population. (DHV, 2008) A house has been recognized as an influential factor that contributes to sustainability and the health of the living environment. (Müller-Warrens, 2001)

Sustainability can be divided into three main directions. Together they are the basis of sustainable development. These directions are:

- People, also mentioned as social sustainability.
- Planet, also mentioned as environmental sustainability.
- Profit, also mentioned as economical sustainability.

In housing environmental sustainability refers to the durable use of energy and resources, waste management and the care for nature and requires judicious and informed management. For this research this refers to quality of the urban environment in specific urban zones, such as city centers, public transport hubs, industrial estates, urban renewal quarters and new housing developments. In the development of urban area's space, energy, services and utilities should be used efficiently, therefore awareness among citizens and business, communities is needed. This growing market is supported by new international legalization and declarations like the Kyoto and Bali conventions (DHV, 2008; Boley, 2006).

In figure 9 these topics are shown together with their internal connections for sustainable urban development. The Netherlands ministry of Housing, Spatial Planning and Environment (VROM) focuses on six key aspects to realize the development of sustainable neighborhoods. They are also shown in the figure.
Using the six aspects of the Netherlands ministry of Housing, Spatial Planning and Environment, a more practical approach to sustainable housing is given.

- Sustainable housing and efficient use of energy. Taking into account the citizens' demands and needs gives a view what is needed to be produced. The efficient use of resources, house maintenance and waste management, the quality of the building and the awareness of residents to be sparing with resources, can realize this. (Boley, 2006).

- The attitude of residents to sustainable housing. The residents need to be aware what the issues of sustainability are and they should be willing to attribute to it.

- The improvement of health aspects. Home security, shelter and adequate services are health aspects. A near medical clinic and pharmacy as well.

- The livability of the neighborhood and value development. Secure land tenure, no crime, a healthy neighborhood and the availability of economic chances are elements that encourage families to invest into upgrading their plots and diversify their use. This gives them protection against possible evictions and provides them with an asset that may serve as a guarantee in certain markets (Boley, 2006).

- Construction regulations. There should be clear quality targets for construction.

- Cooperation based on results. A quality mark is needed for houses built. A building team is ready and should get paid after a set quality target is reached.

The combination of people, planet and profit together with the aspects for sustainable urban development is an approach to realize sustainable development in South Africa. Sustainable
housing refers to the development of sustainable residential communities for the people in South Africa. This means that the social, economical and environmental characteristics of the community are generating a livable neighborhood. In the textbox the definition of the South African government towards sustainable urban development in South Africa is shown.

**Sustainable urban development in South Africa**
Sustainable housing is the establishment and maintenance of habitable and sustainable public and private residential environments. In these environments viable households and communities are ensured in areas allowing convenient access to economic opportunities, and to health, educational and social amenities. In these areas all citizens and permanent residents of the Republic of South Africa will, on a progressive basis, have access to:

- Permanent residential structures with secure tenures, ensuring internal and external privacy and providing adequate protection against the elements; and
- Basic services like potable water, sewage and electricity. (RSA, 2000)

### 6.3 Relevance of sustainable urban development

Regarding the problems for the households with a middle income, the housing sector is not affordable and sustainable in South Africa. By the lack of housing the community has limited access to entrepreneurial options what keeps this group of right-minded participation in the economy. As a result of the segregation policy of the apartheid regime, different races are still living apart from each other and the gap in inequality does not derive yet.

Because people do not live in the house that fits their needs, they do not take care of it. This results in bad conditioned houses caused by the lack of maintenance and the garbage is spread over the garden. To create a sustainable environment in South Africa people need to have a chance to live in the houses that fit in their needs. They need to be able to use transport, their houses should be properly serviced, they have to feel save in their environment, they have to have job opportunities or other entrepreneurial options and social help for who needs it, et cetera.

To realize sustainable housing initiators should concentrate on solving the problems of the majority of urban populations in ways that make use of their own creativity and involve them in decision-making (Boley, 2006) but current information available on sustainable housing does not address the specific needs of the households with a middle income (Müller-Warrens, 2001).

The challenge is in finding creative and sustainable solutions in providing affordable housing for the South African population. Decent shelter constitutes a major investment and confers status of its owner, and in many cases creates places of work (Turner, 1976).
7 Case Cosmo City

7.1 Implementation of Breaking New Ground

Cosmo City is a housing project initiated by the national government and the city of Johannesburg that started in 2004 as an example of the Breaking New Ground policy. The key-items of the housing policy are implemented in the housing project about 25 kilometers northwest of Johannesburg. This chapter is a part of this research because it gives the practical implementation of the breaking new ground policy of the government.

The national government is initiating these projects because of the 2014 target that no squatter areas will remain in South Africa. Therefore the city of Johannesburg has set itself the goal of completing 100,000 houses by 2011 and continues to develop the total amount of 450,000 houses which is short. In total there are 182 informal settlements around Johannesburg, with some 350,000 people living in shacks. (City of Johannesburg, 2008)

Figure 10 - One of the informal settlements near Johannesburg

Formalizing settlements involves registering the properties, naming streets, and putting in services. Settlement dwellers will be given the land on which their dwelling has been erected, along with title deeds, thus formalizing their ownership. The City has made this goal more manageable by means of a five-year plan, the Housing Master Plan. It ensures that all informal settlements will be formalized, and that hostels, originally created for single, migrant men, will be upgraded and transformed into family units.
7.2 The Cosmo City Project

Cosmo City\(^\text{19}\) is a mixed-use, integrated housing development made up of fully and partially subsidized dwellings, rental apartments and bonded houses near Kya Sands in northern Gauteng. The Department of Housing currently provides subsidies for the construction and servicing of 12,300 units (www.infosouthafrica.com). Cosmo City provides four different types of housing:

- 5,000 fully subsidized units of 32m\(^2\) on a plot of 250m\(^2\). These units are available for people earning less than R3,500 a month and are a part of the RDP-program. The new occupants were living in informal settlements near Cosmo City.
- 3,000 partially subsidized units of 60m\(^2\). These units are part of the FLISP and are meant for people earning between R1,500 and R7,000 a month.
- 3,300 affordable housing units. People with a middle income can purchase a house. This is housing within the financial sector charter or without governmental help when the household income of the purchaser exceeds R9,080 per month. The affordable housing units are fully bonded houses to be sold on the open market and costs between R275,000 to 675,000.
- 1,000 units in flats. These units will be developed by social housing institutions to cover the subsidized rental market for people with an income between R1,500 and R7,500.

(City of Johannesburg, 2005)

\(\text{Figure 11 - An overview of the affordable housing units in project Cosmo City}\)

Cosmo City covers an area of about 1,200 hectares and is a Greenfield\(^\text{20}\) project. About 15% of the area, or 50 hectares, has been earmarked for parks. There will be a park within a 10-minute

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\(^{19}\) In appendix 8 more information about Cosmo City can be found than mentioned in this chapter.

\(^{20}\) A greenfield project is a project that is build on new ground that was not used before or for agriculture.
walking distance of any given point. Some 230 hectares of fenced-off conservation areas will form a green corridor. All roads will be tarred and have lighting. Informal trading will be allowed in demarcated trading areas, which will have proper marketplaces. The development will also have twelve schools, clinics, libraries, a police station, 40 churches, sports fields, a public swimming pool, taxi ranks, markets, shopping centers, business nodes, petrol stations and an industrial site on the Kya Sand border. Commercial and industrial sites, churches and other sites will be sold on the open market and the Department of Education will pay the bill for school development. The development costs of housing units will be borne by Codevco, the Cosmo City developers. In figure 12 the location of Cosmo City is given.

Figure 12 - The location of project area of Cosmo City

The project is being coordinated by the Gauteng provincial government and the City of Johannesburg. It comes with a R2-billion price tag, with funding from the private sector and government. The work began at the end of 2004 and it is called an ideal mixed development, with nearby economic opportunities by the initiators of the project. In a mixed income area people with a middle income can help the people in a lower income group. Sustainable communities can develop when those who earn better salaries are able to create jobs for the unemployed. The mixed housing for the mixed income groups creates a nicer environment by the diversity of houses and gives people the possibility to identify themselves with their house. The presence of trees, gardens and parks makes the place look friendlier. Safety is given by building high walls around the houses.
To realize the projects the developers knew that community participation is essential for the success of the development. The community was engaged via workshops, public notice boards, advertisements and personal notification processes. The design proposal accommodated the community's comments. On completion, the population of Cosmo City is expected to be between 65,000 and 70,000 people, according to a report compiled by the City's department of development planning and urban management.

Now Cosmo City is expected to be completed in September 2009, new developments for projects are initiated. The new Cosmo City will be Chief Albert Luthuli Housing Park and is projected in the east of Johannesburg near Benoni. 10,300 houses will be built over the next three years (from 2007), with the bonded houses expected to cost between R180,000 and R300,000.

7.3 Challenges

Many beneficiaries of subsidized housing who moved to Cosmo City operate businesses from their homes as their only income. These businesses range from spaza shops\textsuperscript{21} to crèches, and even butcheries and taverns. According to the department of development planning and urban management report, these businesses do not comply with the town planning scheme and related by-laws, and cause unnecessary crime, noise and other disturbances. Residents are also concerned when shacks are built. They feel that when people settle illegally they engage in criminal activities and the crime level in the area rises. The government wants visitors to see the beautiful houses. That is not possible if someone has got a cellular container right in front of the house. In some instances people spray paint their walls to market their spaza shops. Because Cosmo City is a new area and not provided with an own police force, people are very concerned with crime.

7.4 Affordable and sustainable housing

Regarding the 3,300 houses build for the middle income group, the cheapest house costs approximately R275,000. Out of the theoretical research\textsuperscript{22} is shown that a house of this price is only affordable for the upper end in the middle income group. For the people earning between R3,500 and R12,000 per month there are no houses constructed. However the cheapest houses in Cosmo City what is available now is not in the range of prices between R275,000 and R675,000, but the price range changed into R400,000 to R1,000,000. People who want to

\textsuperscript{21} A spaza shop is the South African name for an informal business usually run from home. They serve as convenience shops and sell small household items.

\textsuperscript{22} This can be found in chapter 4.5.
purchase the cheapest house, with a twenty year bond and a present interest rate of 15.5 percent, should earn at least R17,500 a month to be able to pay for the home loan.

During a site visit different measures were found that enable the residents of Cosmo City to live in a sustainable environment. The availability of services, the condition of the houses, the mixture of the housing project, the infrastructure of the project and the parks seems developed according to the aims of the initiators of the project. The first signs out of the community that a sustainable society is developing can be seen in the people who are taking care of their houses and gardens and garbage is removed.

In the prevention of backyard shacks and other kinds of informal housing, Cosmo City looks structured and clean. Cosmo City however does have a large attraction for people not in the possession of proper housing. Around the city informal settlements are created by this attraction.

This Cosmo City is a part of this research to show that the theory about the development of a city for a mixed population is different than the practice. The Breaking New Ground policy of the National Department of Housing seems to be a clear policy and in many views this policy is well implemented in a practical situation as Cosmo City. The topics combating crime, promoting social cohesion, improving the quality of life of the poor and the speed of the development seemed to be in order. The problem of the gap-market, inefficient land use, locations far from economical opportunities and levering growth in the economy however are still problems in project Cosmo City.

There must be another way to realize housing projects that add value to the public sector, the private sector and especially the population itself that is not able to find a house that fit their needs and affordability. Therefore this research tries to contribute to this problem. In a business concept to develop housing in South Africa this research tries to realize a part of another solution.
8 Actors in housing development

8.1 Housing development

There are three parties who are able to start a housing initiative. This could be the public sector, the private sector and consumers. Because South Africa has a liberal constitution, the government prefers not to interfere in the middle income housing sector and they are only focusing on the lower income group. For the private sector, the middle income group is not interesting based on risk and profit that they can make in this income group. The size of the middle income group is interesting. The consumers are organizing themselves on a small scale at the moment in South Africa to initiate housing projects (interview Jennifer Mirembe). New housing development, the development of property or real estate is based on three main actors in the process:

- **The consumer sector**: in this research the starter households in the market
- **The public sector**: National, provincial and local governments and governmental related organizations
- **The private sector**: Banks, developers, suppliers, contractors, et cetera

8.2 The starter households in the market

This research will focus on the middle income group. This target group is chosen for this research because it is a vulnerable group, although the group is important for the country. The people with a high income can take care of themselves and the low income market is in need for help, but is already taken care of the South African government.

A characteristic that shows the development of an emerging economy is the growth of a group with a middle income (Unilever, 2007). This group has an important role in a country for the sustainable development of a country. Three reasons for this are:

- This group of middle income earners forms a bridge between the rich and the poor in a country. They are an example for people with a low income and can grow to the high income group. The gap between the rich and the poor can be made smaller by the growth of this group of households with a middle income.
- The growth of the group of households with a middle income is important for a sustainable economy in the country. When the group of middle income households gained an economic position in the country, they are able to pay taxes and to be active on the consumer market.

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23 Other income groups are mentioned in appendix 9.
These economical activities result in new jobs that enables the possibility for low income groups to grow.

- Social and economical development is only possible with a stable democracy and the development of the group of middle income households can establish a stable democracy.

This middle income group is not a homogenous group. In figure 13 the middle income group is divided into different sub-groups. Within this group of middle income earners a group of starters on the housing market can be defined. It is a group of households who are looking for entry-level housing on the housing market that fit in their affordability level. Starters are new on the private housing market and do not have a stable economic position in the country yet, because they are stuck in a semi-optimal place\textsuperscript{24} to live. They did not purchase their own house before and are not having a housing asset\textsuperscript{25} yet. Their problem is that they can not afford a mortgage for a house that fit their needs, what makes them a vulnerable group within the middle income group.

\textit{Figure 13 - Sub-groups in the middle income market}

This research will focus on starters who are looking for a house for ownership. At the moment they are living in a semi-optimal place and are looking for sustainable housing in a house that fit their needs and affordability. This group is vulnerable on the private housing market and is different in characteristics from other income groups because of their affordability, education and employment. Therefore this group has different needs and constraints than other groups have.

\textsuperscript{24} With the word semi-optimal is meant that these households are living in informal settlements or RDP-housing, bad-conditioned houses, with family or friends, or far away from their work.

\textsuperscript{25} The group living in RDP-housing but with a middle income does have a housing asset and should part of the target group. There are more reasons that they are not moving up to housing for people with a middle income although they should. In appendix 9 more information about this problem is written although this research will not look closer to it.
8.3 The public sector

After a review on the housing policy in 2004 the government decided to focus on the development of sustainable communities in their policy Breaking New Ground. Since that time a lot of policies were developed going beyond the department of housing. Communication between departments is more important than ever. These departments are for example the housing department, the water department, the transport department, et cetera. The department of housing itself is looking to ideal housing location, building techniques, design, layout, orientation, parks and open space to make is more sustainable. This is both a community and governmental initiative (interview with Namso L. Baliso).

Practically the government stayed focused on low-cost housing production, partly influenced by the reduced delivery by the private sector. The government stated that the private sector should take care of other housing market segments (interview with Namso L Baliso).

Many mainstream housing finance providers overlooked or actively avoided the low and middle income market, while others interacted with it in a fairly narrow product range. Therefore the government started up the Financial Sector Charter in 2004 to force business and employers to invest in low and middle household incomes. The Finance Sector Charter (FSC) and afterwards the Finance Linked Subsidy Program (FLISP) were developed by the banks and government. They agreed to split the risk in mortgage bonds for these income groups. “These policies did not really work because in this case funding is not the problem but there are no houses in stock. There is no use in having a loan without the opportunity to buy a house.” (Interview Kecia Rust)

When the government (in 2004) found out that the middle income market became distracted this did not result in a policy change. After setting up the FLISP and FSC the government did not interfere in this market again because of the liberal constitution of the country. Although it is important not to distract the housing market by interfering in it, a housing market is too important for the countries’ economy for the government not to regulate it (Sachs, 2007; interview with Luanne Werner).

The problem is that there is no sufficient regulation. The private market is manipulating the market and creating an even bigger problem to the state. As a reaction the government is pointing to responsibility so the private market will look to the social aspects of development as well. This is on own initiative and not regulated by law. Cooperating with the government is a sign of good will. It is not legally bonded, but the different stakeholders are trying to help each other in a project with their own expertise. The Financial Sector Charter is an example of this cooperation (interview with Luanne Werner).

26 In appendix 10 is an explanation given about this manipulating and what the government is doing about the situation at the market.
An important issue in developing a housing policy for South Africa is the question of how marketing risk is to be handled. In short the issue here is who should bear the risk of selling the affordable units for the middle income segment: the private sector developer or the government. The issue is particularly pertinent if government imposes a mandatory quota of starter houses per project and also specifies standards for affordable housing which may affect price and hence marketing. One approach would be for government to buy the units from the developer (at cost or an agreed profit) and then take responsibility for the marketing of the properties (and make arrangements for their subsequent management). Because the percentage of starter units is not too high, it might be reasonable for developers to take this risk. Once the proportion of affordable units goes beyond this level, other arrangements may need to be made to deal with marketing risk (Smit, 2005).

The (national) government is facing a lack of skills and capacity within the organization. They are trying to solve the problem with scholarships, promoting the government as employer and the exchange of international experts (Interview with Namso L Baliso).

8.4 The private sector

The private market can operate free in the housing market above the household income of R3,500 per month. The government predicted that the private sector would be able to make the backlog in this part of the housing market smaller.

Commercial banks encounter difficulties to extend loans in the affordable housing market despite supporting initiatives by the government. There is a lack of knowledge on the borrowing behavior and preferences and experiences of low and middle income households in accessing housing finance from the commercial banking sector. Recently banks started to provide accurate statistics about the low and middle income housing sector, but still there is a lack of data to support critical analysis of the nature and extent of the credit problems experienced by households and banks on the housing market. (Pillay and Naudé, 2006)

Needed is optimization and modification of existing mortgage products and their associated processes to align with the needs and risk profile of the different housing markets. At a higher level, banks also need to engage productively with government to demonstrate clearly if and where additional non-commercial interventions are required in order to enhance access to housing finance on the target market. (Melzer, 2006) Even if optimized mortgage products are unlikely to meet the needs of the majority of households. Thus, the development or support of non-mortgage housing finance products, specifically incremental housing loans, is also required if access to housing finance is to be enhanced in the low and middle income housing market. (Melzer, 2006)
"The providers of long-term individual mortgage loans are, today, essentially the large A1 commercial banks. The lending practices of these banks with traditional credit criteria applied for higher income housing sector have resulted in significant gaps in the end-user financing of entry-level and lower-income housing sector." (Nell et al, 2005)

Besides all the other financial products and loans of banks, housing loans are the only key category to show a decline in penetration year after year. There are positive signs for the housing loan industry with an increasing number of people perceiving their home as growing investments and a growth in numbers of people considering to move up the property chain. (FinMark Trust, 2007)

To help the starters, the financial institutions could develop specific services such as mortgage products and loans for the market. Developers can develop starter housing concepts that fit in the demand to this type of housing and create sustainable neighborhoods for the starter households with a differentiation in housing types. The aim is to lower the monthly costs and enable housing finance. For these types of developments knowledge about this market segment is needed. Next to the measures done by the private sector, the public sector and consumers have to support these measures to share risk.

Financial constraints are not the only constraints in the private sector. There is a large number of building projects going on in South Africa. The construction companies have their hands full on the projects for the World Championships of Soccer in 2010 and the projects as a matter of the economical growth of South Africa. Next to these influences there is a lack of capacity in building skills and machinery. Further investigation to this problem is needed, but it seems that finding a solution for the housing problem is not only finding a solution in the financial sector, it is also a matter of investment in relating sectors such as in education, employment and machinery in the building industry.

8.5 Actor analyses

Within urban development co-operation between the different actors is inevitable. The market mechanism (Vries & Schröder, 1993) in figure 14 is combined with the relationships between the different actors in the development process. The KEI-centre27 (2008) developed this model that elaborated the relationships to urban development. The figure shows the possible relationships between the actors and the contracts that result from these relationships.

27 The KEI-Centre is a Dutch institute to gather knowledge about urban renewal topics.
The model in the figure shows the following aspects of market mechanisms:

- **Competition in the housing market.** Because of the lack of capacity in the market, there is hardly competition in the market. This does not force developers to specialize in certain markets. Competition in the housing market directs to new trends of professionalizing in the market what results in new concept development (Drenth, 2006).

- **Governmental regulations.** South Africa has a system of urban zoning plans where they point out locations for development of residential neighborhoods. In these plans they also mention maximum building heights and percentages of low- and middle income housing. But there are no regulations for developers to develop middle income housing, so the government is not able to control the market. Therefore the middle income market will have no central role in the housing market, because developers are not forced to move into this market.

- **Needs and demands of the consumer.** In a market based on consumer demand the wishes and needs of the consumers should fulfill a central role. To develop specific concepts for a certain market customer requirements can be within reach of the developer.

From the viewpoint of the developer three main relationships can be mentioned (Bloks, 2008):

- **Co-operation with residents and consumers.** Residents can be, together with a market participant, owner of a building. In this kind of co-operation the residents are responsible and involved in the project. This will have positive influences on the sustainability of a community.

- **Co-operation with institutions and market participants.** When both parties have a common purpose in a project, they can form a strategic alliance.

- **Co-operation with the government.** The co-operation between the government and private companies can be named 'Public-Private-Partnerships' (PPP). The aim of this co-operation is to realize commercial and communal goals. In South Africa this partnership is known,
however the Gautrain project\textsuperscript{28} is the first large PPP-project since the elections of 1994 so there is not a lot of experience available.

The government is hardly regulating the market so there is no control over the private market and over the fact that this private market has problems in developing products for the target group. The target group itself is inexperienced on the housing market. In total there are quite a few constraints in the market which need to be solved to be able to develop a model to make starter housing development possible. Change in this situation is needed, because housing prices are still rising and the lack of housing for households with a middle income is still growing. The problem will only get worse.

The government can regulate the housing market, the private sector can develop specific products for the market and the middle income households can give insight in their needs. In table 1 this is summed up in a scheme.

\textit{Table 1 - Scheme with key-characteristics from the actor analyses}

<table>
<thead>
<tr>
<th>Actor</th>
<th>Role</th>
<th>Background</th>
<th>Goal</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starter households</td>
<td>Demand</td>
<td>Households with a middle income without housing that fit their needs</td>
<td>To purchase or rent a house</td>
<td></td>
</tr>
<tr>
<td>Public sector</td>
<td>Regulation</td>
<td>Building regulations for sustainable urban development</td>
<td>Regulation of urban development and housing stock</td>
<td>Diverse housing policies</td>
</tr>
<tr>
<td>Private sector</td>
<td>Supply</td>
<td>Risk-bearing investor in real estate</td>
<td>Continuity of the company and profit</td>
<td>Develop products for the market</td>
</tr>
</tbody>
</table>

\textsuperscript{28} The Gautrain project is a rapid train connection between Tambo International Airport, Johannesburg and Pretoria (www.gautrain.co.za). The first part of the construction work will be finished before June 2010.
9 Starter housing concepts

This chapter presents in more detail a closer look at the starter housing market in South Africa and how starter housing internationally is adopted.

9.1 Starter housing in South Africa

Definition of a house for a starter. Housing for starters is defined in the category above RDP-housing. The floor area is normally between $40m^2$ and $80m^2$, the minimum size of a small house. The house should cost less than R265,000 according to 2007 standards. Because of the high interest rate households with an R12,000 income are able to afford this R265,000. In this research’s calculations, the restriction on housing expenses is 25% of the income. Starters have different demands in housing. Some define their house as one with two bedrooms, a kitchen, a bathroom and a living and dining area others just need a studio in a flat. This depends on household size, age, employment, income and personal taste.

The price of a single unit is depending on different factors such as location, building height, building type, size, use of materials, et cetera. An optimal mixture between these factors can enable a solution for an affordable unit with correct quality standards.29

In South Africa a project for starters does not exist yet. A project in South Africa that is comparable with starter housing is being constructed during this research in Johannesburg. The project is a social housing project30 and initiated by Joshco31 and the municipality of

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29 In appendix 10 a summary of different building types is given.
30 Social housing focuses on rental housing for the income group between R1.500 and R7.500. A part of this target group is comparable with starter housing.
Johannesburg. The project is called brickfields and has the size of a housing block shown in figure 15.

9.2 The need for a business concept

Together the public sector, private sector and starter households are able to find a solution for the current situation. To achieve this, there is pressure on all players to find innovative ways of keeping housing costs down, funding and using alternative technology and developing innovative financing products for affordable housing (RSA, 2006). To initiate starter housing on the housing market in South Africa a business concept is needed to position the product into the market. Marketing research is needed to find out what the needs are of a certain target group. Afterwards a concept for the product can be developed that fits in the need of the target group. After testing the feasibility of the business concept the next step will be the start of the implementation. This research faces the housing problem for starters the same way. After analyzing the starter market, a business concept for the target group will be made.

Three themes are important in the development of a sustainable human settlement and in this research for a place for starters. These themes are live, work and play (Verweij, 2008). Below these themes are explained:

- **Live.** Residential units are needed for people living alone, couples who are living together and families with children. Because of the variety in households a mixture in social background can develop. This is one of the targets in the Breaking New Ground Policy.
- **Work.** Starters are normally employed, so near a housing development for the starters economic opportunities should be available. This shortens traveling time and transport costs between home and work. In South Africa already big problems exist with traffic jams in the morning and evening. Office space, retail, industry and grocery stores are needed for employment, but also to purchase products.
- **Play.** All activities that starters can do in their spare time are preferred near their houses. Sport facilities, leisure facilities, shopping facilities, spiritual facilities, educational facilities, cultural facilities and communal facilities are needed in the close environment of a development. These facilities keep the residents happy and healthy.

The development of starter housing is more than only building houses. The starter market is part of a dynamic lifestyle. A concept that is able to integrate these themes can be successful. Being a starter in the market means a few things. Starters begin building up a housing asset, but they can not afford luxury. The starters are economically active and a place for living near working opportunities is desirable. Regarding the jobs the ideal place for living is in urban locations.

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31 *Joshco is a social housing institute in Johannesburg*
Regarding to land prices the development of starter housing will be medium and high rise building. This has a few advantages:

- It is a reaction against suburban growth and urban sprawl.
- The use of limited resources of land and finance can be optimized.
- Costs of infrastructure and other services can be reduced.
- Concentrating population results in greater viability of public transport, amenities and facilities.
- Traveling time and expense can be reduced and private traffic can be cut down.
- More land remains for open space. (Pienaar, 2008)

Creating a concept for the starters market, the developers should adapt to the lifestyle of the futuristic residents. Concepts with a combination of condominium and rental, with a mix of functions in the neighborhood, with local economical options, focused on middle income demands and needs can be successful. For structural development of a business concept Tinge (2003) has a model that divides the development process in different phases shown in figure 16. After every step is a go or no go moment to control the process.

**Figure 16 - Phases in the process for new product development (Tinge, 2003)**

- **Idea phase**: There is a certain demand for affordable and sustainable starter housing.
- **Market exploration**: A market research to the opportunities and constraints in the market to develop starter housing.
- **Product planning**: The development of a business concept to improve the performance in affordable and sustainable starter housing in the middle income group.
- **Detailed development**: The business concept will be worked out in detail. In agreement of the stakeholders involved.
- **Testing and evaluation**: The business case will be tested and evaluated. Depending on the risk to implement the starter concept, a go or no go decision will be made. A no go means stopping the project or adjusting the concept.
- **Market introduction**: The starter concept is introduced in the market.
This research focuses on the first three steps. The generic model and business case will be the final products of this research. In chapter thirteen this business concept can be found.

9.3 Starter housing international

Many solutions are developed for low- and middle income earners in the world. Mechanisms differ, but there are also characteristics they have in common. Private and public parties are always involved in the process. Public parties are in all cases developing regulations for the housing market. And there always is discussion about finance. In appendix 10 starter housing concepts in different countries are worked out. The five examples given are in the United Kingdom, the Netherlands, Malaysia, Australia and China. In these countries the low and middle-income residents are helped within different housing policies. There are differences in implementation, but in all countries subsidies are available to keep the prices of low- and middle income housing affordable.

The level of regulations on the housing market differs in the countries. In the United Kingdom, the Netherlands and Malaysia the regulations made by the national government are elaborate. In Australia and China the regulations are less elaborated. Also the level of private market participation is different in the countries. In China and Malaysia the private market is active in low- and middle income housing development. On a large scale new projects for this target group are developed in these two countries. In Australia and the Netherlands development of housing for the target group by private developers has a more cooperative approach between the public and private partners. In the United Kingdom the initiative is on the site of the government. Their change from governmental initiative to private initiative generates some complications. A relationship between the governmental regulations of the market and the level of private party participation in the process is put in a basic model in figure 17.

Figure 17 - Relation between regulations and market participation in different countries
Part D - From constraint to opportunity

10 Constraints in starter housing development

In chapter 5 it is mentioned that constraints hinder the development of starter housing. There are 23 constraints that can be summed up from chapter five to chapter nine. More constraints can be described, but more elaborate research is needed then. These constraints are all related to the problem that starters in the housing market are not able to live in entry-level housing that fit their needs and affordability. Within this list of constraints a few are a cause of this fact and some are more an effect of this fact.

In this chapter this research wants to structure the constraints to see in what kind of perspectives the constraints can be seen. The method of STEEPLE is used for this. STEEPLE stands for social, technical, environmental, economical, political, legal and ethical aspects. The result of this analysis is not very survey-able. With the use of the Ishikawa-model the constraints are visualized in a figure that looks like a fish-bone.

Now that the constraints are structured this research wants to find out what constraints are more important than the other ones. Therefore the ranking principles of the Porras-method are used. In a kind of flowchart the constraints are linked to each other. The constraint that is only a cause of a problem and is no effect of another constraint will be the main constraint of this research. To solve the problem of the main constraint, the Porras-method assumes that the size of the remaining problem decreases. At the end of this research, one of the constraints will be used to find a solution for the housing problem of starter households.

10.1 Methodology

The constraints found in this research are structured according to the principles of STEEPLE. This analyzing technique approaches a problem from seven different categories. Using these categories a broad spectrum of constraints can be structured. The STEEPLE analyzes for this research focuses on the lack of housing development for starters as described in chapter 8. In table 2 the categories and the perspective for this research are shown.

<table>
<thead>
<tr>
<th>Category</th>
<th>Perspective impacting this research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>The social-economical problems influencing housing and vice versa.</td>
</tr>
<tr>
<td>Technical</td>
<td>The physical aspects in housing and housing development.</td>
</tr>
<tr>
<td>Economical</td>
<td>Economical and financial constraints in the housing market.</td>
</tr>
</tbody>
</table>
Environmental | Sustainable use of scarce resources.
---|---
Political | Political statements how the housing market should function.
Legal | Legislation provided by the government to control the quality in the market.
Ethical | Illicit actions in the housing market.

The Ishikawa model is used to put the amount of constraints in this research in a survey-able model. The Ishikawa model is an example of a cause-and-effect diagram shown in figure 18. The aim of the Ishikawa method is to find with a survey-able and visual approach a broad amount of causes for a certain problem (the effect) so all causes will be analyzed before well-considered decisions can be made. (Blokhuis & Gassel, 2005)

With the use of the Porras-method the main cause out of all the causes will be found. With this method the relations between the constraints within a problem are mapped. This method continues the research were the Ishikawa model stops. At first the relationship between the considered constraints is worked out in a table. Afterwards the considered constraints are ranked in importance in a diagram to visualize the table. This ranking process is done in measure of a constraints are more or less a cause or effect of another constraint. The main constraints will end up at the top of the diagram and will be used for further research.

**Figure 18 - The Ishikawa model in combination with STEEPLE categories**

10.2 **Constraints sorted by the STEEPLE analyses**

Starters in the housing market have limited access to housing that fit their needs and affordability. They are hindered to live in sustainable human settlements where they can develop themselves. The constraints of the research are put in the Ishikawa model shown in figure 19. The elaborate description of the constraints can be found in appendix 12.
### Constraints in starter housing development

#### Figure 19 - Ishikawa model for the problems of the starters in the housing market

<table>
<thead>
<tr>
<th>Topic</th>
<th>Starters in the housing market are looking for a sustainable and affordable place to live</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cause</strong></td>
<td></td>
</tr>
<tr>
<td>Social aspects</td>
<td>• People are not willing to move up the housing ladder.</td>
</tr>
<tr>
<td></td>
<td>• Starters lack financial understanding.</td>
</tr>
<tr>
<td></td>
<td>• People are living in undesirable situations.</td>
</tr>
<tr>
<td></td>
<td>• The population is dysfunctional because of social problems.</td>
</tr>
<tr>
<td></td>
<td>• Urban growth.</td>
</tr>
<tr>
<td>Technical aspects</td>
<td>• There is a lack of building capacity.</td>
</tr>
<tr>
<td></td>
<td>• There is a lack of sustainable human settlements.</td>
</tr>
<tr>
<td></td>
<td>• There is no quality framework in construction.</td>
</tr>
<tr>
<td>Environmental aspects</td>
<td>• The housing market is distracted.</td>
</tr>
<tr>
<td></td>
<td>• The price of a house is increasing.</td>
</tr>
<tr>
<td></td>
<td>• The price of land is increasing.</td>
</tr>
<tr>
<td></td>
<td>• Lack of information about the starter market.</td>
</tr>
<tr>
<td></td>
<td>• The private sector is moving away from the starter market.</td>
</tr>
<tr>
<td></td>
<td>• Much of the housing asset is lost.</td>
</tr>
<tr>
<td></td>
<td>• People can not get a mortgage for a house.</td>
</tr>
<tr>
<td>Legal aspects</td>
<td>• No voice for the starters.</td>
</tr>
<tr>
<td></td>
<td>• Lack of governmental capacity.</td>
</tr>
<tr>
<td></td>
<td>• Housing and land are political sensitive subjects.</td>
</tr>
<tr>
<td>Ethical aspects</td>
<td>• The private sector is manipulating the market.</td>
</tr>
<tr>
<td></td>
<td>• The private sector is suspicious of making cartel arrangements.</td>
</tr>
</tbody>
</table>

#### Effect

| Problem | Starters in the housing market have limited access to housing that fit their needs and affordability |

### 10.3 Constraints analyzed by the Porras method

The list of constraints of the Ishikawa model in figure 19 is used for the Porras analyses. These 23 constraints are first put in a matrix to find their mutual relationships. Because this matrix is not survey-able, the constraints are ranked in a diagram. The table and diagram belonging to Porras analyses can be found in appendix 13. The results of the Porras analyses are described below.

There are three constraints ranked as main cause of the fact that starters have limited access to sustainable housing that fit their needs and affordability. These are named the first ranked constraints and are shown in figure 20. These first ranked constraints are:

- The population is dysfunctional because of social problems.
- Urban growth.
- Lack of governmental capacity.
Figure 20 - Ranked constraints as result of the porras analyses

<table>
<thead>
<tr>
<th>Porras analyses</th>
<th>First ranked problems</th>
<th>Second ranked problems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The population is dysfunctional because of social problems.</td>
<td>Urban growth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of governmental capacity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of rules and regulations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There is a lack in building capacity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There is no quality framework in construction.</td>
</tr>
</tbody>
</table>

The Master Construction Management and Engineering is a combination between the themes business engineering and construction. However recognizing major social and political problems is an aspect of the study finding solutions for these topics is not one of its fields of research. That is why this research will continue to focus on the second ranked problems in the technical category of the STEEPLE analyses.

This research will not focus on the lack in building capacity and not on a quality framework in construction as well, however a solution for these constraints should be found before sustainable human settlements for starters can be developed.

This research should contribute to the development of sustainable human settlements for starters in South Africa that can afford.

All the constraints in figure 20 are putting a large pressure on the housing market. For finding a solution for the starters the first ranked problems are accepted and put aside. This enables this research to start somewhere in the field of problems to contribute to sustainable human settlements for starters.
Opportunities for starter housing development

11 Opportunities for starter housing development

As already seen in the list of constraints in the previous chapter there are many factors of influence in housing development. Because of the diversity of constraints there will be no specific solution for the problems but a combination of opportunities that do enable housing for starters. This research assumes that the way that people are looking to housing development can and should change, but also in aspects that are more related to building itself there could be a change in mindset. The aim of this chapter is to provide a broad spectrum of possible solutions for the development of sustainable human settlements. However this research focuses on a business concept, these summed up factors are not less important for housing development.

11.1 Sustainable human settlements as a private initiative

In most situations the public sector is the initiator of the development of cities. When the private sector is the initiator the approach on the development will be different. The approach of the private sector will be business like and this sector sees a housing development as an economic entity.

Rudy Stroink, the director of TCN Property Development, is an advocate of the private sector initiating housing development. "A more flexible approach and more private initiative would have resulted in more balanced development" (Reede, 2007). The governmental interference in the market is causing friction. The role of the government in urban development is too big and equilibrium is to be found for steady growth. Stroink says: "The government decides where the buses stop, who receives permits, where land is released, et cetera and has become a multi-headed monster that is turning into an urban monopolist. Everything is governed and planned on the basis of risk management. We need to look for the tricky balance between dreams and practical implementation" (Reede, 2007).

The economic entity will be self-containing and profitable with a long-term strategic focus on sustainability of the neighborhood to maintain the value of the project. Self-containing means that the residents can live in the area. They are able to meet their daily needs for food, leisure and shopping but the area can attract other consumers as well. This also creates local employment. Self-containing means the governance of the area as well. The role of the government can be minimal and the development can be seen as a company. In a private urban development the public facilities are organized by a private organization.

Internationally there are already residential projects provided by the private sector. Between these examples there are a few similarities.32 The private cities are all developed in a certain

32 Examples of private sector initiated projects can be found in appendix 15.
theme and the target group is defined in detail. These developments are produced for the higher and luxury segment and not for low and middle income households. When starter housing is seen as a theme of development it might be successful. Not only housing development but also the infrastructure, services and facilities should be involved focused on this market.

When private developers are convinced that such a development could be valuable for a long time, there will be the incentives needed to start the development. With a minimal role of the government the speed of the decision-making process can be fastened. A detailed business concept with an estimated return on investment and long time profit will attract large investors.

11.2 Practical point of view on opportunities

The development of starter products is limited by different boundaries also mentioned in chapter 10. Different points of view and aspects can contribute to a successful concept for starter housing although the financial feasibility is the most important aspect (Strik, 2007). The KEI centre (2008) gives advice to make a sustainable housing project for starters affordable. Initiatives to improve the performance of the starter market can be divided in four categories. An optimal solution between these four categories can improve the performance of the starters market in South Africa. The categories are (KEI centre, 2008)\(^3\):

- **Constructional opportunities.** The constructional opportunities are all opportunities in the physical approach of a building. Options are to lower the costs of a project or to improve the quality and functionality. In the physical construction value of a building can be created with the smart use of space, materials, building processes and techniques.

- **Financial opportunities.** Financial opportunities are available for developers and starters to realize and maintain starter housing. This can be seen in two different ways: in project development and in the financing mechanisms for future residents to be able to afford a house of their own.

- **Rules and regulations.** South Africa is a country with a liberal constitution and wants the private market to operate without barriers. However a little regulation of a market is needed to keep control so the market can not be abused. The amount of regulation can be discussed because next to the advantages, regulating the market will distract the market as well, just like what is happening with RDP-housing. Regulating the market means rising prices. Rules and regulations mentioned can create more structure in the market. It results in the opportunity to develop housing for every segment in the market and it forces the private market to focus on more community groups.

\(^3\) More information about these categories and initiatives to improve the performance of the starter housing market can be found in appendix 15
Opportunities for starter housing development

- **General opportunities.** Next to the three points of view for improving the performance of the starter housing market, there are a few general points that need attention to find an ideal solution for improving the performance of the housing market for starters. These points can be found in the environment of housing and are part of the components of a housing delivery system (IHS, 2008).

These opportunities can be summarized in a model. In this model is visualized what the opportunities are for a housing delivery system for sustainable housing for starters that fit their needs and affordability in South Africa. The majority of the topics mentioned are inevitable for the success of entry-level housing development for starters. In figure 21 the aspects of the different opportunities are shown.

*Figure 21 - Possible opportunities for entry-level housing development*

<table>
<thead>
<tr>
<th>Demand/supply factors</th>
<th>Opportunities/financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve education</td>
<td>Build on a smaller plot</td>
</tr>
<tr>
<td>Enable economic chances</td>
<td>Specify the product on buyers prevalences</td>
</tr>
<tr>
<td>Community services (Public facilities)</td>
<td>Large scale housing development.</td>
</tr>
<tr>
<td>Municipal services (Infrastructure)</td>
<td>Prefabricated housing for standard elements</td>
</tr>
<tr>
<td>Differentiation of housing and people</td>
<td>Use of modular building systems</td>
</tr>
<tr>
<td>Central role for starters</td>
<td>Repetitive building or standardization</td>
</tr>
<tr>
<td>Development time must be short</td>
<td>Build medium or high density products</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial opportunities</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>Governmental guarantee fund</td>
</tr>
<tr>
<td>Shared ownership</td>
<td>A clear and short framework of procedures</td>
</tr>
<tr>
<td>Equity share</td>
<td>Institutions for starter housing</td>
</tr>
<tr>
<td>Sectional title</td>
<td>Legislation for starter housing development</td>
</tr>
<tr>
<td>Low-cost discounted market sale</td>
<td>Extended policy for urban planning</td>
</tr>
<tr>
<td>Affordable housing for rent</td>
<td>Starter housing procedures</td>
</tr>
<tr>
<td>Personal finance</td>
<td>Protection for stakeholders and residents</td>
</tr>
<tr>
<td>Discount on the product</td>
<td>Pressing measures</td>
</tr>
<tr>
<td>Special loan</td>
<td>Governments claim requirements for land use</td>
</tr>
<tr>
<td>Buy-under-preconditions</td>
<td>A system based on permits</td>
</tr>
<tr>
<td>Profit sharing</td>
<td>Tax incentives for starter housing</td>
</tr>
<tr>
<td>Collective private partnerships</td>
<td>Stimulating measures</td>
</tr>
<tr>
<td>Governmental subsidy</td>
<td>Direct subsidies</td>
</tr>
<tr>
<td>Land and building are disconnected</td>
<td>Decreasing costs</td>
</tr>
<tr>
<td>Flexible mortgage</td>
<td>Density bonuses</td>
</tr>
<tr>
<td>Sell and buy back</td>
<td>VAT reduction</td>
</tr>
<tr>
<td>Lower Interest rates</td>
<td>Provide starter housing on non-residential land</td>
</tr>
</tbody>
</table>

*Project finance*  
- Subsidized development  
- Project extrapolation  
- Large-scale development  
- Long time exploitation
12 Characteristics of a business initiative

12.1 Introduction

This research wants to contribute to the research for the development of sustainable housing for starter households in South Africa. This group of households is not able to find a house that fit their needs and affordability. In the analyses of this research is shown that this has various reasons. One of them is the lack of development of sustainable human settlements for starter households. This chapter wants to add to a possible solution for the development of sustainable human settlements for starter households. As starting point there are two principles to mention:

- The private sector as well as the public sector does not have the priority to develop housing for starter households in South Africa. The private sector is not interested to invest in this group because of the high risks and low profit in this market segment. The public sector is not involved in this market because they do not want to elaborate their subsidy system.
- Starter households are an important group to invest in. This group can realize economic stability and political stability. They form a bridge between the rich and poor in South Africa and are an example for the poor people in the country. This group is growing in size what stimulates the South African economy.

"Currently entry-level housing does not fit in the economic incentives of the developers. That is awkward, because there is a large growing middle income market." (Unilever, 2007)

In business concepts for property development the participants involved are coming from the public sector, the private sector and the consumer sector. They have to move to each other to make entry-level housing for starters possible. This is possible in a project where these actors can reach the following targets that results in a save bet situation.

- The target group can to live in sustainable housing that fits their needs and affordability.
- The public sector can fulfill their responsibility to provide housing for vulnerable groups.
- The private sector can make profit for the continuity of their business.

Before the people can actually live in the houses they wish for, the public sector fulfilled in their responsibility and the private sector makes profit a certain process will precede34. Before that time

34 This is shown in figure 16 in chapter nine: The phases in the process for new product development.
at least an analyses of the market, a business concept and a pilot project should be initialized to make sure the development of housing for starters will be successful. This chapter will focus on the actors that are important that can make a business concept feasible.

Figure 22 - Aspects that influence the development of housing for starter households

Based on process innovation, the aspects that influence the development of housing for starter households are shown in figure 22. There are different phases during the process to housing development. During these phases there are various participants involved. These actors are involved in different decision levels in the process. They are needed to make the housing development possible however these actors have an interest that influences the development process. During the different phases to housing development factors and rules and regulations are influencing the feasibility. For this chapter is important:

What is needed to start a successful housing development project for starter households?
What aspects are responsible for the value of a business concept for the development of sustainable housing for starters in the housing market?

Housing development is a sensitive topic and a development according another system will take time. In figure 23 a model is shown how the process to housing development can look like and is

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35 This is shown in figure 6 in chapter four: The different phases in the process to housing development.
Characteristics of a business initiative

divided into small process steps. This makes change easier to bear. In this model interests of different actors are put in a vehicle to ensure all interests do justice. These interests will result in the initiative to start a housing development. To realize the housing development all kinds of alliances between stakeholders can be made dependent on the amount of influence and responsibility a certain actor will have. In this chapter this figure is explained. In the figure the numbers of the paragraph are added where more information can be found.

Figure 23 - A vehicle to enable sustainable housing for starters

12.2 The target market

12.2.1 Characteristics of the starters households

The target market for this research is a group of households who are willing to participate on the housing market in South Africa. These households want to purchase a house on this market on the entry-level of the housing market, because they have a middle income. In this research this
group is named the starter households. This group of starters is not a homogenous group. There are differences in their employment, education, income, social status, development, et cetera.

The group of starters that is used for the business concept is the group of households who will be part of the middle income group for a long time. They are employed and have jobs in the category of clerks, administrators, assistants, bookkeepers, skilled workers in construction and relating functions. This research assumes these starter households on the housing market have a joint income between R3.500 and R12.000 per month and are living in a semi-optimal place to live based on interviews with Kecia Rust, Michelle Essink, Gerard Vermeulen and Harmen Oostra. This income group will change because of income growth and inflation.

In the past a lot went wrong with banks caused by the banks’ resistance or by perception of the market. Therefore a lack of confidence in financial institutions exists. People are afraid and highly suspicious of the institutions due to past experience. People think they do not qualify for a loan, they do not know the principle of savings and they lack relevant information (Pillay and Naudé, 2006). When a person is buying a financial product at a bank, this person has to be educated properly about the product. He needs to know what the importance of a housing asset is and what the advantages and risks are.

In the reports of FinMark Trust and the South African Bureau for Marketing Research research is done to the income and expenditure of the middle income group. Between 25% and 30% of their income is spend on housing and household equipment. The starters have access to different kinds of financial products, such as loans, savings, investments and insurance. An average of one or two persons in a starter household is responsible for the household income. The average size of a starter household differs between 3 and 4 people.

12.2.2 The needs of the starter households

People who qualify for starter housing are in general looking for a house on a location near economic opportunities, shops, schools and other services and facilities. Often is this near the center of urban areas. The starters need a place where they feel safe and with good amenities. Most of the people are looking to a house with two bedrooms, a kitchen, a bathroom and a living and dining area. The normal size of such house can be between 40m² and 80m² (ABSA Bank, 2008). It is plausible that these requirements can be afforded by the majority because of the intended price below R265.000. But for most of the middle income households this remains unattainable. Among the target market it would appear that affordability is not the key obstacle.

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36 In appendix 9 more information about the characteristics of starter households is summed up.
37 In appendix 9 more information about the marketing research is summed up.
and that the desired house may be attainable, proved that blockages relating to availability of suitable housing stock and finance could addressed (Pillay and Naudé, 2006).

This research presumes that a sustainable human settlement can be created when people are able to live, work and play in the neighborhood\(^3\). These functions are needed in this urban development as well. In the new development the words live, work and play can be interpreted as shown in table 18. Next to these words, different fields of attention can be mentioned such as security services, health aspects and space to live and recreate.

*Table 3 – Tangible products for live, work and play*

<table>
<thead>
<tr>
<th>Live</th>
<th>Work</th>
<th>Play</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential units</td>
<td>Office space</td>
<td>Cultural and spiritual facilities</td>
</tr>
<tr>
<td>Hotel rooms</td>
<td>Retail &amp; Grocer areas</td>
<td>Communal facilities</td>
</tr>
<tr>
<td>Services</td>
<td>Public transport</td>
<td>Leisure facilities</td>
</tr>
</tbody>
</table>

In the analyses of this research is already mentioned that the middle income group is not able to access finance to purchase a house. A financial service that is designed for this specific market is needed to facilitate the starter households with housing finance. Because the group of starter households is not homogenous there are different financial solutions needed. Also for the people who will stay for a long time in the houses has different characteristics that make those different products necessary.

**12.2.3 Products and services that fit the needs of the starter households**

The product that is needed for people in the starter market is a house where they can live pleasant, what fit their needs and what they can afford. A housing project is more than building houses like creating services and facilities to change the location into a sustainable environment. A developer should be aware of the needs of the starter household and an elaborate market research is needed before the feasibility phase starts.

The house itself is the physical product that is developed. To make the transaction possible for the starters in the market, there is a financial service needed as well. Mortgage products for the starter market are not affordable yet. For the starter market a rent-to-buy construction could work.

\(^3\) In appendix 17 more information about tangible products for a sustainable human settlement are shown.
Rent-to-buy. The starter will pay a monthly rent for the use of the house. At the end of the contract the starter will have the opportunity to buy the house for a reduced amount, because the starter already paid a lot for the house. Therefore he needs a decreased mortgage, what will be affordable for the starter at that moment. The advantage is that the starter can live in the house from the start. A disadvantage is that rent-to-buy options are relatively expensive comparing with other lending opportunities. When the bank does not receive the rent needed, the institution is allowed to evict the starter out of the house.

Rent-to-buy can be adapted to the different characteristics of the target group. A personal approach for a household needed to accomplish that. Some starters can use the subsidy programs that are available for them to purchase a house. The Financed-Linked subsidy program for households with an income to R7.000 and the Financial Sector Charter for people earning an income to R9.080 in 2008 are available.

When the developer of the house will only sell the house itself and remains owner of the land the costs of the mortgage can be lowered. The house will be sold to the starter household on the principle of sectional title. The starter builds up a housing asset for its own private area of the house. Semi-public and public space and the land property remains part of the developer.

12.3 The interest to invest in the target market

In the previous paragraph the market and target group is described. They are in need of sustainable housing and financial services. The private sector, the public sector and target group have all different interests in this target group. This is summed up below.

Starters' interest in the starters market:
- **Starters.** The starters themselves have the largest interest in their market. They need housing to live and develop. They can group themselves and can add input such as finance, labor and information. With their input they can have a strong position in the decision making process that will result in housing that fit their needs and affordability.

Public sector interest in the starters market:
- **Government.** The government has an interest in the development of sustainable human settlements for vulnerable groups. The starters market is one of them. Investing in the starters can eventually create an income for the government when they are economically active and able to pay taxes. The government can add land positions or financial support in guarantees or loans. It is possible that the government is also the employer of starters. Their interest counts as well.
Private sector interest in the starters market:

- **Investors.** Investors have large amounts of cash that they would like to invest. Their aim is to get revenue on their investment. Two or three percent revenue will be the minimal interest for these investors to participate. The starter market can be market for them.

- **Employers.** Employers that have starters in their list of employees have a similar aim to accommodate starters in sustainable housing that fit their needs and affordability. When the starters are living close to their work they have less transportation costs. An employer can invest in the houses to ensure that their employees can live in proper housing or an employer could invest in an office near the project location and will function as marketing for the project.

- **Banks.** Like investors banks can invest in projects to aim for revenue on their investment. Their second interest is the market of starters. Starters are customers of the bank so the bank will be interested because the group of starters is a growing market for them.

- **International organizations.** In South Africa is corporate social responsibility not very common yet. Internationally a network from small to large-sized enterprises is investing in emerging economies to help them in their development. Their aim is not only to make some profit but also to add in the social position of the population and to help the environment. These companies do also aim for the development of sustainable human settlements for vulnerable groups.

- **Retail.** Large retail companies such as Pick 'n Pay, Woolworths and Mr. Price in South Africa have people from the starter households in their list of employees and starter households are buying products at these companies because they are affordable for them. Especially this kind of retail companies can add to corporate social responsibility to participate in a housing project for these starters.

### 12.4 Actor conversations

There must be at least one actor who is initiating the housing development. The private sector, the public sector and the target group are all able to start development of a sustainable human settlement for starters as long as it is a part of their interests. When actors have similar interests in the target market they can move towards each other how these interests can be combined to a feasible housing project. The interested actors can point out a few spokesmen that will start conversations about the interests of the different actors. In these conversations becomes clear if there are possibilities to start a housing development project together and will be decided whether the actors are going to work together towards sustainable human settlement development.

For South Africa this is already a large step in the process. The different actors are not used to work together in this country and a well-structured approach is needed to start a positive conversation between the actors.
12.5 **Business initiative**

When the results of the actor conversations are positive they can form a team together to start feasibility studies whether their business initiative will be feasible. This can be a research to the exact wishes of the target group, how they want to live, how do their demographics look like and what can they afford? Also has to be studied how the organization to arrange a whole project should look like and what kind of product and service will be developed for the starter households. In this phase the initiatives and interests are structured to make a project realizable. When all such questions are clear and the actors have faith in a positive result they will pass a go, or no go point to set up a vehicle towards the development of sustainable housing for starters.

12.6 **A vehicle to make housing development feasible**

A vehicle to implement the interests of the initiating actors is needed. This vehicle is already shown in the first paragraph of this chapter. The vehicle is an organization that clusters the interests of the actors and that enables the development of sustainable and affordable starter housing. The actors will start their own real estate development company that functions as a self-supporting private sector company. The type of legal entity of this real estate development company does not matter for this research. That type is dependent on the preferences of the shareholders in a specific case.

The success of a real estate development company can be found in the following:
- **Flexible**: A project rather than a program focus (nothing is permanent), extensive use of outsourced contractors and partnering with foundations, management support organizations, private consultants et cetera.
- **Small**: Structured as a vital corporation with no 'offices', minimal overhead and outsourcing of nearly everything.
- **Market-oriented**: A high-profile presence, a profit-like emphasis on marketing.
- **Entrepreneurial**: An emphasis on new project development and fee generation and a goal of becoming self-supporting through fees and project-specific grants.
- **State of the art**: No excuses for outdated technology, facilities, programs, or ideas.

(NoNB, 1998)

A real estate development company can be a small flexible organization. That makes the organization able to grow in energetic periods and shrink in economical hard times. Competences and resources are sourced from external parties. Specific knowledge and expertise that is needed can be applied on the right place at the right moment in the development process.

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39 Chapter thirteen will describe a business concept that will focus in detail to this business initiative phase.
Therefore the real estate development company needs a broad network of actors that can add value to the development process. A strategic sustainable relationship with actors can turn out in intensive and long-term relationships what has a positive influence on the development.

For the continuity of the company they aim for profit, although this will maybe hard in the segment the development will take place. Profit can be used for the start of new sustainable projects, or will be divided among shareholders. Because of the governmental background of the organization it will be easier to get a loan.

The real estate development company will start alliances with public and private sector companies to realize the product and service needed. The principle for cooperation with the real estate development company is sustainable human settlement development in combination with sustainable economic growth and social responsible entrepreneurship. A sustainable human settlement improves sustainable economic growth and vise versa. The real estate development company is operating in between the public sector, the private sector and their target group. They bring parties together to start up the housing development project. The real estate development company has the role of promoter, coordinator, consultant and project manager during the development.

The steering committee is a group of experts attracted by the shareholders that is responsible for the performance of the alliance. They drive operational management in line with the vision of the board of directors. The shareholders have influence on the strategy and policy of the company and are represented by a spokesman in the board of directors of the alliance. They also have a broad network that the organization can use. With the use of this network sustainable alliances can be made with different organization in the society such as universities, housing institutions, the chamber of commerce, retailers, employers, the government, energy suppliers, banks, et cetera. Operational management is done by a group of professionals that are experts in project and process management to realize a housing project. They are driven by the steering committee and board of directors of the alliance.

12.7 Alliances and sub-alliances

A real estate development company is highly interdependent. They are dependent on the competences and resources of other parties in the different phases to be able to develop their own product. In chapter 4 of this research the different phases in the process of housing development are shown. In every phase in the development process different resources and competences are needed for progress in the development. The company has to source these resources and competences. This could happen in cooperation between different actors. In figure 24 an amount of resources and competences are shown.
This cooperation can happen in different ways and is dependent on the resources and competences needed, but also on the role of the actors in a certain phase of the housing development and their interest. In table 4 the different phases in a project are shown. In this table are some major aspects in housing development mentioned and the actors that could be involved in this aspect. An amount of different taskforces are shown. Cooperation in these taskforces will be different.

Table 4 - Different phases, aspects and actors involved in the housing development

<table>
<thead>
<tr>
<th>Phase</th>
<th>Desired result</th>
<th>Taskforce</th>
<th>Other actors involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation phase</td>
<td>Concept for a housing development for starters</td>
<td>Initiation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Land authorization</td>
<td>Land acquisition</td>
<td>Land owners, government</td>
</tr>
<tr>
<td></td>
<td>Market survey to target group</td>
<td>Market survey</td>
<td>Starters, market research office</td>
</tr>
<tr>
<td>Feasibility phase</td>
<td>The business concept is feasible</td>
<td>Feasibility studies</td>
<td>Consultants specialized in different fields of study</td>
</tr>
<tr>
<td></td>
<td>The business concept is financial viable</td>
<td>Financial viability</td>
<td>Bank, investor, private sector and public sector parties and starters</td>
</tr>
<tr>
<td>Pre-design phase</td>
<td>Complete design of the housing development project</td>
<td>Design team</td>
<td>Architect, developer, contractor</td>
</tr>
<tr>
<td></td>
<td>A feasible financial plan for the housing development</td>
<td>Secure funding</td>
<td>Bank, investor, private sector and public sector parties and starters</td>
</tr>
<tr>
<td>Pre-contract phase</td>
<td>A complete building team</td>
<td>Building team</td>
<td>Contractor, supplier</td>
</tr>
<tr>
<td></td>
<td>Cost administration</td>
<td>Project control</td>
<td></td>
</tr>
<tr>
<td>Post-contract phase</td>
<td>Marketing of the housing product to starters</td>
<td>Project marketing</td>
<td>Marketing office, starters</td>
</tr>
<tr>
<td></td>
<td>The new residents of the housing development</td>
<td>Selection</td>
<td>Housing institute, starters</td>
</tr>
<tr>
<td>Close-out phase</td>
<td>Ownership transfer from developer to resident</td>
<td>Transfer</td>
<td>Starters, bank</td>
</tr>
<tr>
<td>Exploitation</td>
<td>The housing development is</td>
<td>Project usage</td>
<td>Exploitation company</td>
</tr>
</tbody>
</table>
Characteristics of a business initiative

<table>
<thead>
<tr>
<th>properly used</th>
<th>Project maintenance</th>
<th>Exploitation company, contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>The housing development is properly maintained</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For example the real estate development company can outsource the search for certain information. For example the company can order a market research office to start a market survey to the group of starters. The market research office delivers the survey and the company pays the company for it. Consultancies are asked to inform the real estate development company about social, technical, economical, environmental, political, legal and ethical aspects during the development process.

A certain construction company can propose to arrange the land and to service the land so it is ready for building activities. This company will use his own network to finish this job. He starts a sub-alliance with his suppliers that are indirectly building for the real estate development company. They can work as contractor and sub-contractor, as a consortium in a tender, et cetera. The alliance between the real estate development company and the construction company can be different as well.

12.8 The real estate development company

In South Africa there is hardly development for starter households. As mentioned in chapter nine already the need for a business concept is substantiated. However a team is needed that is going to initiate this business concept. This team, their vision and their mission are the key factors whether this business concept is going to be successful. Many questions occur while describing the characteristics of a business initiative towards starter housing.

The vehicle that is used in this research is the start of a real estate development company to cluster interests of the private sector, the public sector and the starter households. So the starter households can to live in sustainable housing that fits their needs and affordability, the public sector can fulfill their responsibility to provide housing for vulnerable groups and the private sector can make profit for the continuity of their business.

A large network of stakeholders is needed to realize the aims of the shareholders. In many different kinds of alliances the process will proceed. There are best practices of different actors starting a shared business to realize their goals. One of them is the example of Atlantic Station in the United States of America. Others can be found in appendix 15.

Atlantic Station, United States of America

The real estate developer AIG investments started together with a large retail developer, the environmental protection agency, local and state government and diverse neighborhood partners the development of Atlantic station. The project contains homes for 10.000 people, employment
opportunities for 30,000, with shopping and entertainment for even more people. It is a 24-hour community with pedestrian traffic on wide boulevards and leisure in the sidewalk cafes and expansive parks. Atlantic Station aims for smart growth and sustainable development. The project developers focus on architectural quality, functionality and finesse that combines an attractive mix of affordable, middle-income, and up-scale housing with world-class restaurants, theaters, and retailers.
13 A business concept towards starter housing

13.1 Introduction

According to the Breaking New Ground policy Cosmo City is constructed. This governmental initiative succeed in the fast development of a human settlement, however they did not create a housing project that will be sustainable. This is based on the fact that there are no starter households able to live in entry-level housing, there is a lack of economical opportunities near the project, that the land in the project is inefficiently used and the gap between the rich and poor is still very wide.

There must be another way to realize housing projects that add value to the public sector, the private sector and especially the population itself that is not able to find a house that fit their needs and affordability. Therefore this research tries to contribute to this problem. In a business concept to develop housing in South Africa, this research tries to use another point of view to the situation. The business concept in this research is based on qualitative feasibility. The quantitative feasibility would be the next step after this concept. With the use of literature, interviews, observations and assumptions this business concept is developed. The phase that this business concept is written is during the business initiative phase, described in the previous chapter.

Business concept: A business concept is a set of assumptions about how a firm will create an appropriate value for all its stakeholders by connecting technology to economic profits.
(Verhoef, 2008)

This chapter will describe how a team of actors who have benefit to cooperate with each other will develop a business concept for their business initiative. First this group will be described and with the use of a business model the business concept will be worked out. In figure 25 the business model that is used for this research is shown. The model is split into three components: infrastructure management, market segment and financial management. These components and their subcomponents are described in the figure. This model to develop a business concept is the base of the business concept of housing for starters.

The process to make this concept is an iteration process. All components are related to each other and are influencing each other. For example: what could be an effort for one stakeholder could be negative for another stakeholder. More relations between the subcomponents can be made. This is, for example, shown in the figure with the dash line.
13.2 The business concept: Starter City

Starter households are not able to find entry-level housing in a sustainable human settlement, that is affordable for them and that fit their needs. They are not able to find the physical house, but housing finance is a problem for them as well. This is the base of this research. In a practical situation a more elaborate research and description of the target group and their needs is needed of course.

The public and private sector do have their interest in the group of starter households. The public sector is, among others, responsible for economic and political stability. Their interest in the starter market is economical growth and personal wellbeing to succeed in their responsibilities. For the private sector the starter market is a group where they can develop products and services for to succeed in the continuity of their business and making profit.

As mentioned in chapter twelve this research wants these groups of interest to have a conversation with each other where different interests and aims can be shared. These conversations are major for the incentives for cooperation between actors. This research
assumes that these actor conversations went well and that four actors were positive to start a business initiative together. These actors are:

- **Starter households.** The starters themselves have the largest interest in their market. They need sustainable housing to live and develop. They can group themselves and can add input such as finance, labor and information. With their input they can have a strong position in the decision making process that will result in housing that fit their needs and affordability.

- **The National Department of Housing.** This department is responsible for housing in South Africa. The government has an interest in the development of sustainable human settlements for vulnerable groups. The starters market is one of them. Investing in the starters can eventually create an income for the government when they are economically active and able to pay taxes. The government can add land positions or financial support in guarantees or loans.

- **A large South African Bank.** Banks can invest in projects to aim for revenue on their investment. Their second interest is the market of starters. Starters are customers of the bank so the bank will be interested because the group of starters is a growing market for them. They want to extend their network with starter households.

- **An international NGO.** Internationally a network from small to large-sized enterprises is investing in emerging economies to help them in their development. Their aim is not only to make some profit but also to add in the social position of the population and to help the environment. These companies do also aim for the development of sustainable human settlements for vulnerable groups. An example of such network is ORIO initiated by the ministry of foreign affairs in the Netherlands. They are introducing Dutch enterprises in an international environment and vise versa.

Their mission is to determine the feasibility of the development of a real estate development company for the development of housing for starter households that fit in the interests of the different actors. Therefore a team of representatives of the actors will be formed. This group will start their own real estate development company to start their business. This business alliance will aim for business continuity; their profit can be divided among the stakeholders.

In chapter seven is spoken about Cosmo City. Cosmo City is the public sector equivalent of a low and middle income housing development. This business concept will introduce an imaginary project so-called ‘Starter City’. The main objective of this business concept is to describe the qualitative feasibility of Starter City. The strategy of this business concept is to create bridges between the private sector, the public sector and the starters. These bridges should develop to strategic partnerships in the future between these actors. This is a key factor to realize sustainable human settlements for starters that fit their needs and affordability. Because of social dysfunctional behavior in South Africa reliability and responsibility are important for this strategic partnership.
Starter City is a sustainable human settlement with houses affordable for starter households. There are opportunities for employment and opportunities for leisure. For them Starter City is an attractive place to work or recreate. The exploitation of Starter City is based on the income of live, work and play that are also available for people from outside Starter City. These aspects create a sustainable human settlement and it creates an income for the business alliance. Interests of the actors involved are coming together into a business alliance.

Starter City will be an open community where education, employment and social coherence will be important. All services and facilities that are needed to realize these targets need to be available in Starter City. In figure 26 the main idea of Starter City is shown.

Figure 26 - The main idea behind the business concept

13.3 Infrastructure management

In the business model one of the three main items of a business concept is infrastructure management. This part is about the realization of the product and services for the starters from the point of view of the business alliance. Within infrastructure management this research focuses on insourcing, resources and competences and production. About insourcing is already spoken in chapter twelve and the previous paragraph.

Resources and competences. The business alliance is in need of different kinds of resources and competences from the first to the last phase in housing development and exploitation. Therefore the business alliance starts new alliances with stakeholders that are willing to cooperate. These alliances can have many types of legal structures based on the best way to

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40 In appendix 16 the challenge of the development of Starter City is explained.
41 In appendix 17 this paragraph about infrastructure management is worked out more specifically.
cooperate for both parties. Possible legal structures could be alliances such as a corporation, a tender or a alliance. Even these alliances can have sub-alliances. This research however does not look closer to these kinds of alliances.

Some stakeholders will, but some stakeholders will not be interested in only profit. Other things that add value to their effort could be topics such as the extension of their network, marketing, branding, improved client relations, a living area for employees, office space and corporate social responsibility. In every phase other stakeholders will be needed. All alliances are based on interests of the stakeholders coming together to start cooperation. Eventually a broad network of stakeholders will be involved in the development.

Figure 27 - Resources, competences and organization structure for Starter City

In figure 27 the resources and competences shown are the seven competences of a housing delivery system (IHS, 2008). This is a system to involve all stakeholders that should be involved in the development process. Resources and competences like exploitation and maintenance are needed when the development is finished.

Production. The development of a product and service is based on three terms that can enable a sustainable human settlement. These terms are live, work and play (Verweij, 2008). The product and service is based on the following points of attention.

- The location. The center of Johannesburg is too expensive to develop residences for starters. That is why the location of Starter City is will be best on the edge of the city near good infrastructure and industries. Cosmo City is built on a location with good infrastructure.
There are two highways close to the project and an airport close. Industries are not close to this project.

- **Market positioning.** A house is for many people the biggest investment that they will ever make in one’s life, what makes it an important strategic product for them. It is a risk for people to buy a house, because it is insecure what the future will bring. Purchasing a house is accepting a long-term relationship with a financial institution or housing institution. The starters want to cooperate with an alliance that is reliable. The alliance and his partners should position themselves as a reliable and willing to help the starters. Starter households are also united in the alliance so they can help to position the product in the market as well.

- **Cost reduction.** Cost reduction is necessary to keep the costs of the project affordable for the starter households. Low costs make it easier to find finance for the houses and starters have less trouble to pay their mortgage. This results in less risk for all the stakeholders in the process. Cost reduction does not mean quality reduction.

- **Conceptual planning.** The factors live, work and play can be further developed to a list with tangible facilities and services. A few examples of services are: Infrastructure, waste management, security and maintenance. A few examples of facilities are a church, a community center, a school, a park, a doctor, a restaurant and café, a market, a sports field, a hotel et cetera. In appendix 17 these facilities are also shown in a table.

- **Design.** The design of this new urban location will be functional and pleasant to stay in. To lower the development costs, large-scale development would be an option, although more a pilot project would be recommended first. In this matter prefab, standardization, modular systems, repetitive building or new materials can be used to realize this. A team of architects specialized in designing houses for the starters or middle income housing will be responsible for the design of well considered architecture; not too expensive but with a sufficient quality. A good design can also create a secure environment (interview with Mark Napier). To create a compact city attached houses in a medium to high density setting will be developed. The combination between commerce and residential units can be made. The availability of shops on ground level with residential units or office space above them could be an option. It should all fit in the lifestyle of the starters.

### Unique welling points could be:

- A reliable determined alliance that is open for input from the starters, the public sector and private sector working with leading consultants and participants to support the project.
- Support of national and international (governmental and non-governmental) organizations that support private sector initiative in housing development and social vulnerable groups.
- The development of a business concept that is based on the needs and affordability of the starters in the market and that is possibly feasible to realize and to exploit.
13.4 Market segment

This part of the business concept is about the question how to market the product and services for the starters from the point of view of the business alliance. Within the market segment this research focuses on the value configuration of the product, on the distribution and human resources management and on the consumer segment.

Offer (value configuration). There are three physical things that will be offered to the starter in the project.

- **The house.** A house that is affordable for them that fit their needs. In an apartment block that is three stories high, the price of a simple three bedroom apartment of 45 m² costs approximately R260,000 (Pienaar, 2008). This is a fully serviced house that could fit the needs in space for a starter. To save costs the houses does not have to be completely finished. The starter households who are going to live in the houses should be capable to do some construction work as well. An example could be that a contractor builds the carcass work and that the structure is closed for wind and rain. The wet spaces can be constructed by a contractor but the division of space in the house can be done by the starter household. The starter households can finish their house themselves. They can realize their kitchens or they ask a company to do it for them. This could be seen as an appearance of inclusionary housing or self-help.

- **Housing finance.** Housing finance so the starters are able to live in the house. The group of starter households is not a homogenous group. Housing finance should be arranged per household. People will have more or less trouble to pay their mortgage loan. The income of starters can be variable. Flexibility in housing finance could be pleasant for the starter households. A financial product should accompany this flexibility. The principle of rent-to-buy is a mechanism that can include this flexibility although it will result in extra costs because of the personal approach and the rent-to-buy system. The bank involved can develop this flexible product for the starters. When such a product can be developed by a bank, the banks' profit will be less, but other values can be created by servicing the starter households with a financial product for their house.

- **Services and facilities.** To create a sustainable human settlement for a starter household services and facilities should be provided. For the public facilities and services, the starters have to pay. For the other facilities they have to pay when using it, like shops and the sports centre. The aim of the services and facilities is to create a healthy community. For the starters

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42 In appendix 18 this paragraph market segment is worked out more specifically
43 R260,000 was worth about €20,000, on the 23rd of December 2008
44 In appendix 17 more information about facilities and services is given.
this is an opportunity to become part of a community. The starters have similarities with each other, but there are still large differences. The lower boundary is three times less than the upper boundary set for the starter group. The starter group will not be a homogeneous group so there will develop a variety in cultures.

**Distribution of the products and human resources management (HRM).** A team that should introduce the product in the market needs skills to manage the introduction and knowledge about the local market. Marketing for such a project is when people who are living in Starter City are enthusiastic about their living environment. These local people are also important for the organization for information about their needs as starter. The sub-alliance can in cooperation with an educational organization, educate local starters and give them a position in the organization.

This group of starters is a dynamic group and their needs will change. With starters in the organization or close to the organization the needs of the group remain up to date. People’s management is very important with this group. Some of the starters will be in the target group for the long time and others only for a few years. This needs another approach per starter household.

The distribution systems used are those within the stakeholders involved in the project. For example banks have a lot of experience with mortgage products. A local bank in the development project will provide special mortgages to the starters who are going to live in Starter City. Housing institutions have a lot of experience with property management and exploitation of a housing development for low and middle income groups.

**Consumer segment.** The consumers have a quite vulnerable position in the housing market and are dependant on the help of the public and private market to succeed in finding a house. The time between marketing and the moment that people can move into their houses should not take too long. Most starters are in direct need of a house and can not wait for a long time. In Starter City their voice is important because without the help of the consumers the alliance is not able to create a sustainable human settlement. The role of the starter households as an initiator, shareholder and end-user is to give input in the process to realize the houses they need. They can help to finish the construction of the house, with input in the project development and finally with participating in the human settlement.

**Unique selling points could be:**

- The long-term relationship can contribute to social coherence.
- The starter market is a niche in the market with only little concurrency.
- The starter households are a key group in the development process.
- The products and services do fit in the needs of the target group.
13.5 Financial management

The feasibility of the project is dependant on the finance available, the time planning of the project and the concept plan for the development. The success of the project is dependent in the ability and willingness of the private and public sector to participate. With a lower profit share, and the ability to use the unique project for marketing and branding and creating goodwill for future project, they can participate. The project will be a long-term investment for about 20 years. The property itself should be designed for a period of about 50 years. In this research the feasibility is not based on calculations, but on literature, interviews, a case, own observations and logical thinking.

This research focuses on three things. The costs of the project, the revenue of the project and the cash flow during the project. The main constraint in developing starter housing is that starters do not earn enough money in the first few years that they are living in Starter City. On the other hand the costs of the development of the project are the highest in the first few years. This creates a problem in the cash flow of the project. There are a few opportunities to make this less of a problem such as:

- **Risk sharing.** When the cash flow is divided under the stakeholders involved the risks that there will be major problems in the cash flow will be less. This is better than one stakeholder bearing these costs.
- **Phased development.** When the development is organized in different phases, the business alliance is already earning revenue during the development.

In figure 28 the costs and revenue for Starter City is shown from the point of view of the alliance. In this figure is also shown how the alliance can receive investments, knowledge and guarantees from the stakeholders and the consultants in the process. However the parties in the alliance have to divide the profit when the alliance gets profitable. The revenue of the alliance is coming from the starters living in Starter City, companies who are having their shops and offices in Starter City and people from outside Starter City who are visiting the settlement. The costs for the organization are the development, exploitation, management and maintenance of the project.

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45 *In appendix 19 a figure of the cash flow is shown to explain the potential problem more specific.*
Figure 28 - The cost and revenue structure for Starter City

![Diagram showing the cost and revenue structure for Starter City.](image)

Figure 29 - An indication of the cash flow of Starter City

![Diagram showing the cash flow of Starter City.](image)
In the construction phase there will be the highest costs. In that time there will be no income for the alliance. After the first buildings are in use, there will be an income. This can cause problems with the cash flow. The project will have in relation to the high costs, low revenue. A financial partner has to be found that is willing to bear the risks of a strategic long-term loan agreement. An arrangement with long-term revenue of 2 or 3 percent a year will be the bases. This loan can be secured with the asset of the project. In figure 29 a simplified model of the cash flow is shown for the project Starter City during the different phases of the project.

The financial feasibility must count for the starters as well. One of the things that should be calculated in the quantitative analyses is that the maximum costs for housing may not exceed 25% of their monthly income. In figure 30 this is shown in a model.

**Figure 30 - Income and expenditure structure of starter households**

![Diagram showing income and expenditure structure]

### 13.6 Qualitative feasibility of the project

In this qualitative analyses about the product and the theoretical feasibility of it are aspects mentioned that are needed for the success of the project and the alliance. There are constraints as well and most of them are mentioned in chapter ten. The success factors of Starter city are the value drivers of the alliance; the constraints and the value blocks.46

Starter City is an imaginary project to project the idea of a private sector initiated project on a South African background. The aim of this business concept of private development is to contribute to the research to realize affordable and sustainable housing for the starters in the population group of middle income households. The starter households, the government and private sector parties have together a central role in this development, because they have various interests in these development activities. This research gave a qualitative analysis of the project

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46 In appendix 18 these value drivers and blocks are described.
and the opportunities and constraints to realize housing for starter households. It is a topic to discuss and reflect with people involved in a potential project for starters in South Africa.

This qualitative research aims to bring these different parties together and invite them for a conversation what they can do for each other. This business concept gives an example how starter housing can be realized with the aim that all stakeholders involved will have advantage with this development. In every part of the decision-making process this 'save-bet' approach is important.

13.7 International context of the business concept

This research was focused on South Africa as one of the emerging economies. An emerging economy has the characteristic of a growing middle income group and the characteristic of urban growth as well. These characteristics are resulting in a lack of houses that fit in the needs of the population. The fact that these countries are emerging economies at the moment means that they were not able to develop themselves in the past century. Human or natural disasters were in many cases keeping these countries from development (Sachs, 2007). Another similarity could be the social problems in these countries although every country deals with these problems on another way.

The vehicle that is shown in figure 22 and figure 23 could be used in other emerging economies. Figure 22 gives a method to analyze the problems in the housing sector based on process innovation. After this analyzes the strength, weakness, opportunities and threats of their housing delivery system can be stated. Then a country can start with finding a solution for their problems in housing development. Figure 23 gives a vehicle for countries that have problems to develop houses for vulnerable groups. The government is not able to supply houses for all so they need the private sector to enable housing development. However often is forgotten that the private sector needs the target group as well to sell or market their products. The target group can be a partner in development when they organize themselves. The use of a business concept is an effect of the change in approach for the starters market in other countries such as the United States of America, Malaysia and India. Often these economic entities are meant for the higher income segment or with the use of cross-finance also for middle and low income housing. In this research the feasibility such a project only for middle income households is discussed. When this feasibility is quantitative based, it could work for South Africa and other countries interested.
Validation and valuation of this research

14 Validation and valuation of this research

14.1 The constraints in the housing market in South Africa

The analyses of this research gives a global view on the major problems of the housing market focused on the starter households who are looking for entry level housing. In the analyses of this research literature is used written by authors who are involved with the social-economical and housing problems in the country. Interviews are held with people who are involved in housing in South Africa from the private and public sector from different points of view to the building sector. Also in the Netherlands experts are interviewed about project development in emerging economies. The Case study Cosmo City was important to get practical insight in the housing situation in South Africa. Based on process innovation the search to constraints in the market is started. These constraints were found and structured by STEEPLE analyses. For visualization of the problems the constraints were put in an Ishikawa-diagram. The Porras-method is used to understand the mutual relationships between the constraints and to rank the constraint from cause to effect.

The value of this research is to understand that the problem in the housing market must be put in a broad context of social-economical problems. The apparently problems in technical and financial problems seem to be less important. However this research justifies that building regulations and capacity problems do instigate in the development of sustainable human settlements for starter households.

14.2 The business concept for housing development

In fact there are two products for this research. The second product is a business concept as a contribution to a solution for the constraints analyzed. A different approach to housing development is needed since there is a stalemate situation in the housing market for sustainable human settlements for starter households. New opportunities for the middle income market in South Africa can be enabled in a business concept that brings the different actors in the development process together. Inspired by best practices around the world the idea of a thematic development of an urban settlement focused on starters was born.

The key of success is according this research to bring the actors involved together. Although they have different interests in starter households, together they can create a plan that is feasible and will create profit for all. Central is the thought that sustainable human settlement development for starter households can be affordable for starters and be profitable as well. The type of legal form
this alliance between starter households, the private sector or public sector must have is not important jet at the moment. This research could be a motive to start a joint effort for housing development for starter households.

Looking practically at the research it is hard to gather private parties, public parties and consumers for the business concept this research describes. High risks and low profit are not two aspects where investors are interested in. Most of the South African private sector companies are not involved with corporate social responsibility (interview Gerard Engel). The value of this research is the fact that it contributes to a new vision on the housing market for starter households.

14.3 Disturbing thoughts
This paragraph is about possible constraints in the implementation of the business concept. It is based on own observations and on interviews held. In this report is mainly spoken about housing complications in South Africa. Next to housing there are more major problems in the country, that are able to influence the development of the housing market on a negative way as already mentioned in chapter nine and the analyses. In the search for a solution these social-economic problems were put aside to create an environment to work in.

Affordable and sustainable housing is just a piece of a large puzzle to make South Africa from an emerging economy into a developed economy. As long the major problems in education and employment are not solved, there is no use to even try to develop housing. The lack of economic options for a large part of the South African population is making the gap in equality bigger than ever. Crime rates are increasing and the hope of people is decreasing because of all the promises the government did last 15 years, but did not substantiate. South Africa is in need of good leadership to prevent the country for a disaster. All aspects are available: There is a global economic crisis that affects also South Africa, the parliament is recently collapsed, there is a lot of inequality, people are disappointed, Political parties disagree with each other and there is no strong leadership (interview with Mark Oranje).

The political structure of South Africa needs change. In the fifteen years the ANC is in charge in the country, they made a good policy. But the practical outcome of the policy is in need of drastic improvement. Local governments have a lack of skilled personnel. This has a strong connection with the lack of education that people have in South Africa. The intention of the government is good, but because of the lack of a framework to work in and a roadmap to realize goals is missing, the policy does not work.

An example of this is Cosmo City. Cosmo City is one of the products coming from the Breaking New Ground policy of the national government. The policy has a basic framework and roadmap
but is not detailed enough with a timeline and a progressive scheme to realize the aims in the policy. One of the aims of this policy document is to realize quality mixed-use housing to accommodate the low and middle income groups. However there was no affordable housing developed for people earning between R3.5000 and R17.500 per month.

For this research the residents, public sector and private sector are important. Unfortunately residents are living still separated since the apartheid and are very cynical about new policies and developments. The residents do not trust the public sector as the private sector. The government does not trust the private sector and the private sectors opinion about the public sector is not positive as well. Before they can cooperate with each other there are still many problems to overcome.

14.4 The potential role of DHV in this research

The DHV Group is active as consultant on the housing market. With the information of this research DHV can extend their knowledge of the housing market. In South Africa DHV is not active in this topic yet, but the role as consultant in the development of sustainable human settlements has potency for the company. In cooperation with their South African partner SSI they can enter the consultancy market in South Africa in housing.

DHV can fulfill different roles in this process. They can execute pre-feasibility studies towards sustainable housing development in South Africa. In the entire project range, the department of urban and regional development of DHV, can offer services from strategic advice to asset management. The awarding authority can also ask the DHV Company to be the organizer of their plans.

In this research is spoken about international development programs in cooperation with international enterprises. DHV could be a partner in this network of enterprises.

14.5 The value of this research for Eindhoven University of Technology

Eindhoven University of Technology deals with research to Construction Management and Engineering. One of the research groups is focusing on process innovation in the building environment and is using business models to accomplish that. In these business studies the building process is seen as an economical entity. The development of a feasible business concept to enable housing for starters in the South African market can contribute to this research.

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47 R17.500 is the monthly income needed to be able to afford a mortgage of R400.000 with an interest rate of 15.5%. This is the cheapest house available in Cosmo City.
This research shows that in an international environment countries are using different approaches to give shelter to the population. These approaches can be interesting for Dutch problems as well. The Netherlands is also known with people who wants to purchase a house but are for different reasons not able to do so. International research, including this research, can contribute to a solution for these problems.

The other way around, Eindhoven University of Technology can contribute to a solution for the problems in South Africa by doing research to models towards housing development and knowledge about different housing markets. In cooperation with local South African Universities they can do research to specific problems. The role of this research can be seen as an introduction in the problems in South Africa. It also gives a model to work with to come to a solution. Eindhoven University of Technology can continue with research on topics that are not in detail described yet\(^{48}\).

\(^{48}\) Topics for further research are mentioned in the paragraph recommendations in chapter fifteen.
15 Conclusions and recommendations

15.1 Conclusions

This research shows South Africa as one of the emerging economies. The emerging economies have similar characteristics such as large economic growth (Fuss, 2001), urban growth (UNFPA, 2007), demographic change (Sachs, 2007) and the development of a middle income group. The starting position to economical change is different in the emerging countries. The growing middle income group in South Africa is not sufficiently served at the housing market. This is a cause of many complications that have developed in the past decennia, but it effects the development of the middle income group and the development of a healthy housing market as well (Royston & Narsoo, 2005). This research approaches starters in the market. This part of the housing market is defined as the gap market (Rust, 2006). In this gap market the public sector and private sector have come into a stalemate position. South Africa has a liberal constitution which means that the public sector leaves the market for the private sector (Interview Luanne Werner). The private sector however is leaving the middle income sector. In different researches is already shown that there are many complications with the housing supply for the people in the gap market and that there is an urgent need for a solution (Charlton & Kihato, 2005). If home ownership increases, there are immediate economic and social spin-offs. Access to affordable housing for most households, however, remains a major obstacle in today’s South Africa. (FMO, 2008)

South Africa has a shortage of around 3 million houses (Nell et al, 2005) mainly in the low and middle income sector. This research focused on the shortage of about 650,000 houses that are needed in this market for households that are willing to purchase their first house. These starters on the housing market looking for entry-level housing in a sustainable environment. To contribute to a solution for this problem the following question is asked for this research.

**Main question:** What business concept can be developed for the realization of sustainable entry-level housing for starters in the housing market that fit their needs and affordability initiated by the private sector?

This research was built up in two parts. The first part is about the problems in the housing market in South Africa. The second part focuses to a solution for the main question. This research will develop a business concept for a new opportunity for affordable and sustainable housing development for the starter households in the market with a middle income. This is based on cooperation between actors in the development process to start a joint effort of housing development. In chapter three the following sub questions are written down to contribute to the housing problem in South Africa. In chapter four to chapter thirteen the answers of these questions are given. Below the summary of these answers are shown.
How could process innovation be implemented for housing development?
In this research is assumed that the problem that starter households can not purchase a house, is an effect of the housing delivery process that does not effectively works. The method of ‘Six S’ is used to structure process innovation in housing development. In the phase where the program and concept development takes place a business concept can be made to approach housing for starter households in an urban development initiated by the private sector. On a strategic level decisions actions are made that are influenced by rules and regulations, factors and actors.

What are the characteristics of the South African housing market?
South Africa has the largest economy of the continent Africa and has different characteristics of a development country and an industrialized nation. The growth of last years has been strong but the country has problems with high inflation and rising land and building prices. The country has the heritage of a past with apartheid which still leads to social problems resulting in a dysfunctional part of the population.

The constitution of South Africa is liberal and therefore the public sector is not involving in the private sector housing market. They count the middle income sector also as a part of the private sector market, but hardly housing development takes place in this market segment. Rules and regulations are needed to structure the private housing market and prevent that abuses occur. A quality mark is needed to ensure the quality of the houses built.

The lack of housing in South Africa distracts the market that seems more a delivery problem than a financial problem (Rust, 2006). People are not able to move up the housing ladder to live in housing that fit their needs, although their financial and social situation gets better.

What do the subjects’ sustainable housing, entry-level housing and affordability mean in the context of housing for starters?
Sustainable housing is the establishment and maintenance of habitable and sustainable public and private residential environments to ensure viable households and communities in areas allowing convenient access to economic opportunities, health, educational and social amenities (RSA, 2000). Starter households are not able to live in such sustainable human settlements. Starter households are not able to afford an expensive house, so they are looking for entry-level housing in the private housing sector. Affordable means that the monthly costs of a household for their housing may not exceed 25 percent of the gross income of the household. Affordable housing can be either rental or ownership and is in South Africa described as housing with a floor area between 40 and 80 square meters and costing less than R265.000 (ABSA, 2007). There is a lack of approximately 650.000 units for starter households (Nell et al, 2005).
What do the subjects' sustainable housing, entry-level housing and affordability mean in a practical situation in South Africa?
The national government took initiative to start mixed-use housing development in their Breaking New Ground policy to decrease the effect of segregation in the country caused by building low cost housing. Cosmo City was an example of this new housing policy of the government, but the development forgot to develop housing for the middle income households earning between R3,500 and R17,500. There was eventually no entry-level housing developed for the middle income household that they could afford. However the development was focused on sustainability.

Who are the actors in the process towards affordable sustainable urban development and what are their characteristics?
Starter households on the housing market have a joint income between R3,500 and R12,000 per month, are living in a semi-optimal place and are looking for sustainable housing. This group is vulnerable on the private housing market and is different from other income groups because of their affordability, education and employment.

The public sector is not willing to develop rules and regulations for the housing sector but is however concerned with the housing market. They presume the private sector is dealing with this. The public sector has problems with their capacity within their organization. That is the reason that process time and policy development in the organization is going slow.

The providers of long-term individual mortgage loans are, today, essentially the large A1 commercial banks. Because of the high risk and low profit in the middle income market and the distraction of the market the developers and banks moved away from the market.

What are the characteristics of housing for starters?
Housing for starters is defined in the category above RDP-housing. The floor area is normally between 40m² and 80m², the minimum size of a small house. The house should cost less than R265,000 according to 2007 standards. Because of the high interest rate households with an R12,000 income are able to afford this R265,000. In this research's calculations, the restriction on housing expenses is 25% of the income. Starters have different demands in housing. Some define their house as one with two bedrooms, a kitchen, a bathroom and a living and dining area others just need a studio in a flat. This depends on household size, age, employment, income and personal taste. Sustainable human settlements are needed for this group. The words live, work and play are the principles of such a sustainable human settlement.
What are the main constraints that are influencing the development of housing for starters?
To structure and rank the constraints found in the analyses of this research the methods of STEEPLE and Porras are used. There are three constraints ranked as main cause that starters have limited access to sustainable housing that fit their needs and affordability. These are a dysfunctional population as an effect of social problems, urban growth and a lack of governmental capacity. This research focuses on one of the fields of study of the master Construction Management and Engineering. This is the approach of business engineering on housing development processes.

What are the opportunities in the housing market that could positively affect the development of housing for starters?
In most situations the public sector is the initiator of the development of cities. When the private sector, the public sector and the starter households start a joint effort the approach on the development will be different. With the use of a business concept the joint effort will start a real estate development company to realize their aims. To make housing development successful a developer should consider a list of opportunities to realize sustainability, cost-reduction, et cetera.

What are the characteristics of a business initiative towards sustainable urban development for starters that fit in their needs and affordability?
Currently the development of entry-level housing does not fit in the economic incentives of the developers. This research assumes that there must be another way to realize housing projects that add value to the public sector, the private sector and especially the population itself that is not able to find a house that fit their needs and affordability. The public sector, the private sector and the target market have to move to each other to make entry-level housing for starters possible. This can be possible when all actors can reach their targets:

- The target group wants to live in an affordable proper house that fits their needs.
- The public sector has to fulfill their responsibility to provide housing for vulnerable groups.
- The private sector should make profit for the continuity of their business.

When the need of development is clear the different actors can share their interests with each other. They can combine these interests with each other that lead to an alliance that will be a shared business initiative of a real estate development company. This company will provide products and services for the starter households in the market. To structure this business initiative this research developed a vehicle to organize the development. The alliance of shareholders in the project is starting new alliances with stakeholders to make developments such as market research, housing design, construction and exploitation possible. These alliances are needed because there are many resources and competences needed in the different phases of a housing project.
What are the main features of a business concept towards sustainable urban development for starters that fit in their needs and affordability?

The business concept described in this research assumes that the four actors have the incentive to start a business together because it fits in their interests. These actors are a South African bank, the National Department of Housing, an international NGO and the starter households that united themselves in a group of interest. Together they start a business initiative so-called Starter City. In this research a business model is used to provide an example of how housing development for starters could look like. The business model describes Starter City as an open community and functions as an economic entity. The business concept describes the resources and competences needed to make the development of products and services for the starters possible. The concept also deals with the products and services and the marketing aspects of such products and services. The financial aspects are perceived with a qualitative point of view. The ability to live, work and play is important for two reasons:

- These are three items that can create a sustainable human settlement for starters.
- All three items can generate an income for the alliance. People from outside the city can be attracted by its facilities as well. The exploitation of the houses and facilities is optimal when many people are using it.

The aim of this business concept of private development is to contribute to the research to realize affordable and sustainable housing for the starters in the population group of middle income households. The starter households, the government and private sector parties have together a central role in this development, because they have various interests in these development activities. This research gave a qualitative analysis of the project and the opportunities and constraints to realize housing for starter households. It is a topic to discuss and reflect with people involved in a potential project for starters in South Africa.

The value of this research is to understand that the problem in the housing market must be put in a broad context of social-economical problems. The apparently problems in technical and financial problems seem to be less important. However this research justifies that building regulations and capacity problems do instigate in the development of sustainable human settlements for starter households.

The key of success of a business concept is according this research to bring the actors involved together. Although they have different interests in starter households, together they can create a plan that is feasible and will create profit for all. Central is the thought that sustainable human settlement development for starter households can be affordable for starters and be profitable as well. The type of legal form this alliance between starter households, the private sector or public
sector must have is not important yet at the moment. This research could be a motive to start a joint effort for housing development for starter households.

15.2 Recommendations

This research can be divided in two parts. The qualitative analyses of the constraints and opportunities in the housing market in South Africa and the development of a business concept to start an alliance to realize a sustainable human settlement for starter households in the housing market in South Africa. In these recommendations topics are given that could use extra attention or detailed research. Research institutes such as Eindhoven University of Technology could help in this detailed research needed.

Qualitative analyses

In a qualitative analyses to the opportunities and constraints in the housing market in South Africa literature and interviews are used. This gave a broad research to these problems with the result that a list of constraints was set up in the housing market focused on the starter household. This list is structured and ranked from cause to effect to conclude that the housing constraints are an effect of social-economic problems, urban growth and a lack of governmental capacity. This research has been broad and not every topic is described in detail. These details might be important in the development of a housing project for starters. There are many things that influence a topic like housing, so more academic research will be needed to specify the problems. Towards the qualitative analyses this research summed up the following recommendations:

- There was during the research not a lot of quantitative information is available. People in South Africa are not aware of the size of their housing problems, because such information is not available. For example the last population census was done in 1995 and since that time no large scale research to the population is done. This information could help in the image formation about the starter households, the availability of houses for this target group, market prices of these houses, et cetera.
- The interviews for this research gave a background for the problems in South Africa and a taste of the sphere in the housing business. During this research not every actor is interviewed to realize a complete view in the market and the constraints. For a better view on the market it would add to interview a group of starter households, banks, et cetera.
- This research argues that rules and regulations are needed to ensure that the quality of the projects and processes will be sufficient. Also a framework for the housing policy is needed to disseminate the policy among the people using it. How these rules and regulations should look like is not mentioned in this research.
- This research argues that social problems are making the society dysfunctional. About this topic a lot is already written. Education, employment and social help are needed to do something about these social problems. This research however did not look closer to these
problems. It could be that more problems are influencing the society on a negative matter. This needs further research.

- In this research a few times the problems of a capacity problem in the government and also in the construction sector are mentioned. This is based on interviews, but exact information is not available about these capacity problems. The question whether it is a lack of skills or a lack of materials or an increased demand can not be answered yet.
- At the moment the actors are not really cooperating with each other. It is known that there are many social problems in South Africa. It could be that this is the reason that they are not cooperating. Maybe other reasons are influencing this.

**Business concept**

In the development of a business concept to start an alliance to realize a sustainable human settlement for starter households in the housing market in South Africa not all aspects are worked out in detail. Towards the business concept this research summed up the following recommendations:

- More market research is needed to the starters in the housing market. There is only little known about their needs, they live and what the effects of the backlog in housing are. Before this is possible the group has to be defined carefully. The need of the starters is now based on little literature and some assumptions are made. For future research more literature or other information is needed. An example of an assumption in this research is that the government is seen as a homogenous organization. In reality there are differences between the national, provincial and local governments. The same counts for the starters market.
- The business case of Starter City is based on projects like Sun City in the United States of America and projects in India and Malaysia. For this research only the concept of these projects is used. An interview with the developers or extra information of these projects can be used for project Starter City. Their experiences can add a strong background for private incentives for the project. Also the financial data of these projects can be used to determine if project Starter City is feasible.
- This research focused on the qualitative feasibility of housing development in the concept phase of a housing development. In a quantitative analyses can be shown whether the project will be financial feasible or not. For the business concept is mostly spoken about the concept phase of the project. In other phases and on other decision levels in different kinds of alliances are also problems that need a solution.
- The feasibility phase is a creative phase in the process with many opportunities. In this research is chosen to focus on a business concept. Other solutions are possible as well. With the focus on the business approach the opportunity of the development of an economic entity like Starter City is not the only solution. Also within the business concept not specifically has to be chosen for a business alliance to start a real estate development company.
When in theory is determined whether such project is feasible a start can be made with the housing development itself. A small-scale pilot project to test the business concept in practice can convince other actors as well if it is successful and start a movement towards the starter housing market. After the successful pilot project, a project on a larger scale is possible.
References

Policy documents
• Republic of South Africa (2000) *National Housing Code*, Department of Housing
• Republic of South Africa (2008) *The subsidy scheme*, Department of Housing
• Statistics South Africa (2007-2) *Using the 2001 Census, Approaches to analyzing data*, in collaboration with the Human Sciences Research Council, Pretoria, South Africa

Books
• Müller-Warrens, M.R.M. (2001) *Towards sustainable building design principles for medium density*, middle income housing in Gauteng, University of Pretoria, Faculty of Engineering, Built Environment and Information Technology
• Sachs, J.D. (2007) *Het einde van de armoede*. Hoe we dit doel in twintig jaar kunnen bereiken, Lemniscaat

Articles
• BMR (2004) *Household income and expenditure patterns in the Cape Peninsula By Living Standard Measure (LSM) Group*, Bureau of Market Research, research report No 345, University of South Africa, College of Economic and Management sciences
• BMR (2005); *Total household cash expenditure in South Africa by Living Standard Measure (LSM) Group and product*, Bureau of Market Research, research report No 347, University of South Africa, College of Economic and Management sciences
• Choguill, C.L. (2008) Developing sustainable neighbourhoods, Department of Urban Planning, King Saud University, Saudi Arabia, Habitat International 32, 41-48
• DHV (2008) International urban & regional development, a market analysis, pre-IJM session urban development, Amersfoort
• Economist (2008) High inflation in South Africa, Interest rates are likely to rise again in South Africa, the Economist Intelligence Unit ViewsWire
• FMO (2008) Creation Access, affordable housing, information folder
References

- IHS (2008) *The seven components of a housing delivery system*, IHS lecture series on housing policy, document prepared for dinner meeting: Affordable housing in developing countries, Slum world, United Momentum group and NCDO
- Rust, K. (2006) *Analysis of South Africa’s Housing Sector Performance*, FinMark Trust
• Tinge, J.W., 2003, Een plan van aanpak voor new business development, van idee tot succes in de markt, Afstudeerverslag, Universiteit Twente, Enschede
• Tomlinson, M.R., (1999-2), South Africa’s housing policy, lessons from four years of the new housing subsidy scheme, Third World Planning Review, 21(3).
• Unilever (2007) Black Diamond 2007: On the Move, University of Cape Town’s Unilever Institute of Strategic Marketing and TNS Research Surveys
• Urban Landmark (2007) Voices of the poor, literature review.
• Urban land institute (2003) Encouraging workforce housing in the Chicago region, Atlanta and the district of Columbia, United States of America
• Verweij, G.C.J. (2008) Van concept tot vastgoedproduct, Wereldhave, San Antonio, Texas, USA,

Methodology documents
Media articles

- Johannesburg News (2005-1) Cosmo City on track for first residents, 24 May 2005 www.joburgnews.co.za
- Johannesburg News (2005-2) Big plans being laid to house the poor, 13 June 2005 www.joburgnews.co.za
- Johannesburg News (2005-3) Mayor hands over Cosmo City keys, 18 November 2005 www.joburgnews.co.za

Internet references

- ABSA Bank South Africa www.absa.co.za
- AT Kearney www.atkearney.com
- Central Information Agency www.cia.gov
- City of Johannesburg www.joburg.gov.za
- Cosmo City news www.cosmocitynews.co.za
- Department of Housing South Africa www.housing.gov.za
- Eighty20 market research www.eighty20.co.za
- Federal Reserve Bank of St. Louis www.stlouisfed.org
- First National Bank www fnb.co.za
- Governmental information www.info.gov.za
- Gauteng Department of Housing www.housing.gpg.gov.za
- Human Sciences Research Council website www.hsrc.ac.za
- Information about South Africa www.southafrica.info
- Institute for Housing and Urban Dev. studies www.ihsl.nl
- International Development Corporation www.idc.co.za
- International Real Estate Digest www.ired.com
- Johannesburg News www.joburgnews.co.za
- Morgan Stanley Consultancy www.mscibarra.com
- National banking Association South Africa www.banking.org.za
- Private Property www.privateproperty.co.za
- SA Goodnews (Newspaper) www.sagoodnews.co.za
• Statistics South Africa
• South Africa Financial Sector Forum
• Sun City, Arizona USA
• Sun City, Pilanesberg South Africa
• Sun City, Pilanesberg South Africa
• The Affordable Housing Institute
• The Economist
• The Social Housing Foundation
• UN Habitat
• United Nations
• Worldbank
• World maps (Downloaded May 21, 2008)

Interviews
• Harmen Oostra
• Michelle Essink
• Gerard Vermeulen
• Kecia Rust
• Jennifer Mirembe
• Namso L. Baliso
• Luanne Werner
• Sollie Potgieter
• Jacus Pienaar
• Mark Napier
• Mark Oranje
• Paul Canisius
• Gerard Engel and Carlijn Bosman
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This report is about the constraints in the housing market in the emerging economies focused on South Africa. There is an urgent need for housing for starter households in South Africa. Sustainable human settlements that fit their needs and affordability are not available for this group.

In this research an analyses of these constraints in the housing market in South Africa is made. Based on this analyses a business concept and its characteristics is described to enable sustainable housing development for starter households in South Africa.