SOCIAL HOUSING IN ARUBA

Transforming the social housing sector in Aruba, to make it feasible and sustainable for the future.
FOREWORD

This is my final thesis for my master education in Housing at faculty of Architecture at the Technological University of Delft. The thesis addresses a process of housing, namely the financing and the realization of social housing with the focus on Aruba. I chose to address the social housing of Aruba and the challenges it faces because I knew and understood little about it. And in my opinion that is the case for a lot of actors associated with social housing on the island.

My graduation firm is Fundacion Cas pa Comunidad Arubano (FCCA), the only public party, active in social housing on Aruba. My mentor at this firm is M.C. Laclé, the director of financial and general affairs. I would like to thank her for her guidance during my visits on Aruba and for the many correspondence trough mail.

I would like to especially thank my tutors, Kees van der Flier and Peter de Jong, for their guidance and clear recommendations during this last year. I would also want to thank the board of examiners delegate Peter van Swieten and all the people who collaborated with my research in one way or another.

Last I would like to note that since September 2009 a new government was elected in Aruba and the new Minister has made it clear in April 2010 that he has a different point of view on how the FCCA should be managed compared to the previous government, see annex 1. The Minister of Infrastructure and Planning was unavailable to answer questions during the series of interviews for this thesis, in March and April 2010. The point of view of the current government is based on the latest developments (annexes 1 – 5).

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J.R.Boekhoudt@gmail.com
June 15, 2010
PERSONAL VISION

PERSONAL MOTIVATION
I have a personal thrive to contribute to the improvement of my island Aruba. One of my favourite quotes is:

*Ask not what your country can do for you:*
*Ask what you can do for your country.*
John F. Kennedy

So with this philosophy, I feel that, I should put my education to use and seize the opportunity to study the current housing market in Aruba and social housing in particular. With my fresh look at the challenges, I look forward to add something to the body of knowledge, however small it may be.

PROFESSIONAL PERSPECTIVE
My interest lies in housing policy and project development of housing. I would like to have a professional career in either one of these two fields. When I graduate I want to work in the Netherlands, to gain some experience. And then, after a few years, I will move back to Aruba to pursue my career in the social housing sector in Aruba. With my education and some experience I trust that I can contribute to meet some of the challenges in the future for social housing in Aruba.

LEARNING OBJECTIVES
In writing this thesis I hope to gain an in-depth knowledge and understanding of:
- The social housing system of Aruba and the challenges it faces today.
- The general financial aspects and challenges concerning the social housing for developing countries. Particularly the financial challenges for housing in Aruba.
- Besides these specific themes on Housing, I would also want to learn more about the organizational part of conducting a research; how to work independently, how to search for literature for specific subjects, how to take a good interview and how to rearticulate these interviews into a clear and concise text.
ACRONYMS AND GLOSSARY

**Aedes:** Union for all the Dutch Housing Associations

**AFL:** Aruban florins. The Aruban florin is linked with the US dollar: 1,79 AFL = 1 USD

**AIB:** Aruba Investment Bank

**ANG:** Netherlands Antillean Guilder. This is linked with the US Dollar: 1,78 ANG = 1 USD

**Arubabank:** Aruba Bank N.V.

**Arubahuis:** The embassy of Aruba in The Hague, the Netherlands

**BNG:** Bank Nederlandse Gemeenten

**CBA:** Centrale Bank van Aruba

**CBS Aruba:** Central Bureau voor de Statistiek van Aruba. The central bureau of statistics of Aruba.

**CFV:** Centraal Fonds Volkshuisvesting

**Cheap money:** Low-cost for borrowed money. The interest rate for money loans is relatively lower than the market rate.

**CMB:** Caribbean Mercantile Bank N.V.

**Cross subsidization:** Investing profit of commercial activities into public activities, within the same company. In the case of FCCA, investing the profits of the mortgages into the building of social rental dwellings.

**DIGH:** Dutch International Guarantees for Housing

**DIP:** Directie Infrastructuur en Planning op Aruba

**DLV:** Dienst Landmeetkunde en Vastgoedregistratie op Aruba

**DOW:** Dienst Openbare Werken Aruba

**Effective:** Adequate to accomplish a purpose; producing the intended or expected result (www.dictionary.com). In this case, an alternative is effective when the goals of reducing the cost are realized

**Efficient:** Performing or functioning in the best possible manner with the least waste of time and effort; having and using requisite knowledge, skill, and industry (www.dictionary.com). In this case, an alternative is efficient when the benefits and goals are reached with the least possible cost, time and effort.

**FCCA:** Fundacion Caspa Comunidad Arubano

**FNGV:** Fundacion National di Garantia pa Vivienda. This foundation guarantees a maximum of 20% of the mortgage for the lower middle and middle income groups on Aruba. The mortgage sum cannot exceed the limit of AFL 250.000 (USD 140.449).
**Income rent:** This is the amount that a client is able to pay as rent based on his/her income level. For the calculation of this income rent see page 39.

**Mark-up:** Development fee

**NHG:** Nationale Hypotheek Garantie. A Dutch guarantee system for mortgages up to 350,000 euro.

**Quality of the dwelling:** This represents a numerous qualities, the physical quality of the dwelling (the choice of materials, the building period, the state of maintenance), the architectural design quality (the size, the floor plan, the type of architecture, building method) and the urban design quality (the type of dwellings, the density level).

**RBTT:** RBTT Bank Aruba N.V. (The RBTT Financial Group)

**Rent price:** This is the asked rent price. For the calculation method of the rent price see page 38. The rent price = the income price + the rent subsidy.

**Rent subsidy:** This is a financial help from the government to help the clients of FCCA pay their dwelling. The rent subsidy = the rent price – the income rent.

**ROP:** Ruimtelijk Ontwikkeling Plan van Aruba. The spatial development plan of Aruba.

**SIAD:** Servicio di Impuesto Aruba. Belastingkantoor van Aruba.

**Social housing:** is an umbrella term referring to rental housing which may be owned and managed by the state, by not-for-profit organizations, or by a combination of the two, usually with the aim of providing affordable housing.

**Support:** To aid the cause, policy, or interests of and to argue in favour of; to advocate (www.dictionary.com). In this thesis, an alternative has the support from the actors, when the actors believe in the cause, share the goals, approve of the idea and or believe in the implementation of the alternative.

**USD:** US dollars. The Aruban florin is linked with the US dollar. 1,79 AFL = 1 USD

**WSW:** Waarborgfonds Sociale Woningbouw

**WWI:** Ministerie van Wonen, Werken en Integratie
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NATIONAL INDICATORS OF ARUBA

Capital: Oranjestad
Area: 180 km²
Population: 110,051 (2009)

Figure 1: Urbanized areas of Aruba

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<tr>
<td>Currency</td>
<td>Aruban Florins (AFL 1.79= USD 1)</td>
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<tr>
<td>Nominal GDP per capita</td>
<td>AFL 45.164 (2007)</td>
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<td>Real GDP per capita</td>
<td>AFL 35.210 (2007)</td>
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<tr>
<td>Minimum loan</td>
<td>AFL 1.505 (2008)</td>
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<td>Rate of unemployment</td>
<td>5.7% (2007)</td>
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<td>Gini coefficient</td>
<td>0.4 (2006)</td>
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<tr>
<td>Number of households</td>
<td>29.011 (2009)</td>
</tr>
<tr>
<td>Property occupancy</td>
<td>3,8 (2009)</td>
</tr>
<tr>
<td>Supply of social housing</td>
<td>1.509 (2009)</td>
</tr>
<tr>
<td>Waiting list for social housing</td>
<td>2067 (2009)</td>
</tr>
</tbody>
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**Building costs per m² for social housing in Aruba**

- USD 854,94/ AFL 1530,35 (FCCA; J.Poppen, 2010)

**Building costs per m² for social housing in the Netherlands**

- USD 841,20- USD 1015,50 / €695- € 839 (Bouwkostenkompas, 2010)

**Human development index**

- 1,81% (2008)

**Natural growth**

- 0,75% (2008)

**Net migration**

- 1,06% (2008)

**Marriages (of residents)**

- 531 (2007)

**Divorces (of residents)**

- 417 (2007)
INTRODUCTION

FRAMING THE PROBLEM

In 2009 ‘Fundacion Cas pa Comunidad Arubano’ (FCCA) celebrated its 30th anniversary operating in the interest of improving housing and the neighbourhood facilities in Aruba. This foundation was founded by the Aruban Government, in early 1979, to work towards solving the shortage of social housing and to offer proper housing to the Aruban families, especially those of less financial means.

The main activities of the foundation are to:
- Finance and provide technical guidance to the construction, maintenance and renovation of houses to individuals in Aruba
- Develop housing construction projects and provide management, supervision and projects. Administrative guidance to those housing construction.
- Operate the rental houses owned by the Land Aruba (government dwellings) at the expense and risk for Land Aruba
- Operate the rental houses owned by FCCA for social and commercial purposes
- Manage the registration of applicants and the allocation of the (social) dwellings.
- Calculate the rent subsidies for the social tenants.

The foundation works autonomously under the private law and since the 1st of July 2009, it has implemented a formal code of good governance. Corporate governance, a term used to indicate a company conduct, which provide some guidelines to run a company efficiently and responsibly. In the FCCA Governance Code standards are established for Governance, Transparency, External accountability and Financial control. The core of good governance is the way the internal control is regulated and this has to do with good management (see annex 6 for the organizational chart of FCCA).

Since the beginning FCCA has always been a hybrid organization; it is a combination of a mortgage bank, a housing association and a project developer. Serving both the low and the middle income groups for their housing needs is necessary in order to meet its social responsibilities and to maintain its financial health. However, is not sufficient to cross-subsidized the building costs of new social dwellings. FCCA needs to borrow money for its building activities.
From 1981 up till 2006, a total of 2,235 social dwellings have been build (FCCA; C.Oduber, 2009). About 735 of these dwelling have been sold to low-income groups. As of December 31, 2009 FCCA owned a total of 750 rental dwellings and managed 759 rental dwellings of the Land Aruba. (FCCA; M.de Mey, 2010) The total rental dwellings sum up to 1,509 rental dwellings.

The development of a great share of these dwellings was possible because special funding was received through the ‘Meerjarenplanfonds’ of the Netherlands. This fund was destined for general development in Aruba. For the development of housing FCCA received 50% as gifts and 50% as soft loans with an interest rate of 2.5% for a period of 30 years with a deferment of amortization of eight years in which only interest is due. In 1992, the government of Aruba chose for a more liberal approach and it was decided that FCCA would no longer continue to receive financial support from this fund, because FCCA was considered self sufficient and should get investments capital through the local financial market.

The current supply of social rental dwellings cannot meet the increasing demand for social housing on Aruba. Three important impulses have catalyzed the growing demand for social housing in the last years. First, the population of Aruba has grown rapidly, mostly due to the surplus of immigrants. (DIP, 2009) In the 90’s, Aruba was popular for the immigrants because of the booming tourism industry on the island. At the start of the nineties there were 61,000 inhabitants and by the year 2000 there were 90,000. Most migrants came from the Latin America (Colombia and Venezuela) and the Caribbean (Dominican Republic). In 2005 the population of Aruba reached 100,000 inhabitants. These migrants often have a low income and are eligible for social rental dwellings.

Secondly, the high number of divorces; of all the marriages in the last ten years, 40 % ends up in a divorce. And this has its impact on the housing market (DIP, 2009). There are more, smaller households, single parent households, in need of a smaller dwelling, especially an affordable rental dwelling because of a setback of the total income.

Thirdly, the rising population of the elderly in Aruba is also a reason for a growing demand for housing social. This group often has special needs for housing, sometimes in combination with care, either in the rental sector or homeownership.
THE CHALLENGES

The development of new social housing lags behind in the face of the big demand for new social housing. The reason is that the financial feasibility of new social housing is a big challenge for FCCA. Here, an outline is given of what FCCA faces when developing new social housing projects.

- The building costs have increased considerably in the last ten years and keep increasing with the market developments on the island.

- In order to keep the initial investment cost low FCCA builds their social dwellings on lease land provided by the government. In the meanwhile the availability of land is diminishing as land is getting scarce. An attempt has been made to secure enough land for housing with the Spatial Development plan (DIP, 2009).

- Adequate financing, for the realization of social housing, is missing as local banks and other financial institutions are unwilling or unable to provide cheap loans to FCCA. The consequence of this is that building social housing becomes less affordable because of the high capital costs involved.

- The Central Bank of Aruba (CBA) considers FCCA a bank-like organization, because they offer mortgage loans. FCCA as a mortgage bank has to comply with the state ordinance on the supervision of the credit system. Some requirements are exempted because FCCA is not a normal bank. For instance they provide mortgage loans but they do not have the services of deposits. But even so, FCCA has to comply with the regulation to maintain a certain level of liquidity and solvency. FCCA must always ask permission of the CBA when pursuing financing possibilities abroad. As a result these restrictions oblige FCCA to become a more commercially driven organization in order to generate more internal capital for the development of social housing.

- The clients of FCCA can get rent subsidy if they are unable to pay the rent because of low income. Only dwellings with a rent price under AFL 1000 (USD 559) are eligible for rent subsidy. A lot of FCCA clients depend on this rent subsidy to be able to afford a dwelling. This rent subsidy is the responsibility of the government and is paid directly to FCCA instead of the clients of FCCA, to make sure that the money is specifically used for their
housing expenses. This rent subsidy is agreed upon in the ‘Huursubsidie Regeling’ but it is not stated by the law. The payments of this rent subsidies have been paid by settlements with liabilities (debts FCCA had with the government) in the past. Ever since the debts of FCCA were fully paid back to the government, FCCA has not yet received the outstanding amount calculated on a yearly basis for the rent subsidy.

- The Rent Regulation dating from 1938 stipulates that the rent price (including rent subsidy) should not be more than 12% of the building costs plus land costs on a yearly basis (annex 7, article 2.7). This rent regulation is applicable for all dwellings that cost no more than AFL 100.000 (annex 7, article 2.9), as this sum is considered to be the maximum costs to realize a social dwelling. But here must be noted that this sum was set in 1938. Nonetheless FCCA calculates 1% of the investments cost when determining the monthly rent price for their social dwelling. This rent price is equal to the maximum rent price stated by law and therefore remains unchanged over the years. And as the building costs rises this directly effects the rent prices of new social dwellings. The rent prices are becoming less and less affordable for the low-income group, making them more and more dependable on rent subsidy.

- There are two important issues that need to be resolved between the government of Aruba and the FCCA in order to secure more developments of social housing in the future. One is the fact that the government of Aruba acknowledges the importance of the rent subsidies and be consistent with their payments to the FCCA. The second issue is to clarify the difference of opinion concerning who should take the financial responsibility for the construction of the infrastructure.

To sum up, FCCA cannot keep up with the high demand for social housing as they face several challenges when developing social dwellings. FCCA acknowledges its responsibility to provide affordable housing and so they are looking out for new ideas on how to deal with the feasibility of these projects.
THE AIM OF THIS THESIS
The aim of this thesis is to find an adequate housing finance system that can work within the context of Aruba and which allows FCCA to continue to build affordable social housing in the future.

Also to provide a strategy or mix of strategies for the transformation of the social housing system. A strategy that will be effective, efficient, and with support of the actors involved. And an implementation plan to illustrate how to get the actors involved to carry out this plan and what possible pitfalls are to be expected in the implementation process.

And finally to make it clear for all actors in the (social) housing market how the social system works and to help them understand the challenges better. This will make actors understand each other better and this will provide them a basis for discussion to come up with possible solutions how to transform the current social housing system.

THE RESEARCH QUESTIONS
To build more social housing FCCA has to have access to adequate and suitable finance for housing and availability of land. In this research the availability of land to build more social housing is disregarded, as this is elaborated in the Spatial Planning of Aruba. (DIP, 2009) The focus of this research will be on the strategies for the financing of social housing.

THE MAIN RESEARCH QUESTION
In order to promote future developments of social housing in Aruba, which strategy or mix of strategies influences the feasibility positively and should to that end be implemented, taking into consideration the effectiveness and efficiency of the strategies and the support of the actors?

THE SUB QUESTIONS
In order to respond to the main question, first some sub questions needs to be addressed. These sub questions also form the structure of the thesis, as each sub question forms a chapter. There are in total seven sub questions and sub question 6 is the answer to the main research question.
1. **Sub questions for the formation of a theoretical framework for Housing Finance**
   1.1 What is the definition of housing finance?
   1.2 How do the developing countries and the developed countries deal with the financing of social dwellings?
   1.3 What are the main challenges of housing finance for social housing in the developing countries?

2. **Sub questions with the purpose of understanding the social housing system of Aruba**
   2.1 What is the history background of Aruba?
   2.2 What is housing culture on Aruba?
   2.3 What are the characteristics of the housing market of Aruba?
   2.4 What are the housing policies of Aruba, concerning homeownership and social rent?

3. **Sub questions to analyze the current social housing system and possible strategies**
   3.1 Why is social housing in Aruba not affordable? And how does Aruba relate to the other countries regarding its challenges?
   3.2 How do other countries deal with this?
   3.3 What kind of strategies is thinkable that can help the affordability of social housing in Aruba?

4. **Sub questions for the effectiveness assessment of strategies**
   4.1 How can a reference project be used as a measuring tool for effectiveness?
   4.2 What is the reference project?
   4.3 What is the result of the first assessment?
   4.4 Which three alternatives are most effective?

5. **Sub questions for the efficiency and support assessment of strategies**
   5.1 How can efficiency and support be measured?
   5.2 What is the result of this?
   5.3 Which is the best strategy or mix of strategies?
6  Sub questions for the conclusion

6.1 What is the best way to transform the current social housing system to make social housing feasible and more affordable based on own assessment and external assessment?

6.2 What is the best way to implement this? And what is expected from the actors?

6.3 How can possible pitfalls be avoided?

RESEARCH DESIGN

STRATEGY AND TACTICS
In this research two strategies are used, the case study strategy and the interpretivist strategy. In the case study, a recent social housing project is used to explore the effects of the proposed strategies.

The interpretivist approach is used (during interviews with the actors) to examine the support for the proposed strategies. A definition of interpretivist strategy is given by Orlikowski and Baroudi (1991):

*Interpretive studies assume that people create and associate their own subjective and intersubjective meanings as they interact with the world around them. Interpretive researchers thus attempt to understand phenomena through accessing the meanings participants assign to them.*

The methods used in this research are;

- Literature study about housing finance. The documents of FCCA are also thoroughly studied.
- Simulation of costs using a reference project. An Excel model is constructed as a measuring tool for the effectiveness of the different strategies proposed, by comparing the strategies with the reference project.
- Interviews with the different actors to measure the support for the different strategies proposed.
The social relevance of this study is high because the problem directly concerns the lower income groups and their chances for an affordable dwelling. The aim of this thesis is therefore to improve the chances for the less fortunate ones in the society of Aruba. It can lead to an improvement in the housing market of Aruba, a more balanced housing market; more addition of dwellings in the rental stock, which on its turn can lead to more stabilized rent prices in the rental sector.

It can also contribute to a better understanding, among all actors involved in housing, why there are problems in the housing market of Aruba. The different systems of housing finance and housing policy in the developed and the developing countries can ultimately serve as an inspiration for Aruba.
This thesis will add some knowledge about the challenges for housing in the Caribbean. This could be relevant, as three Caribbean islands will become a municipality of the Netherlands in the near future. The nature of financial challenges of housing for these islands might be of the same order.

There is no connection with an ongoing research program of the Real Estate and Housing department at TU Delft.
In this chapter the following questions will be answered; what is the definition of housing finance? How do the developing and developed countries deal with the financing of social dwellings? What are the main challenges of housing finance for social housing in developing countries?

**DEFINITION OF HOUSING FINANCE**

Housing finance is a broad topic, the concept of which can vary across continents, regions and countries, particularly in terms of the areas it covers. Looking at definitions from the mid-1980s, housing finance was defined primarily in terms of residential mortgage finance. Mark Boleat (1985) gave the following definition:

> “The purpose of a housing finance system is to provide the funds which home-buyers need to purchase their homes. This is a simple objective, and the number of ways in which it can be achieved is limited. Notwithstanding this basic simplicity, in a number of countries, largely as a result of government action, very complicated housing finance systems have been developed. However, the essential feature of any system, that is, the ability to channel the funds of investors to those purchasing their homes, must remain.”

The concept of housing finance and housing finance system has been evolving over time. In more recent years, a number other much wider definitions have appeared. The first definition has been given by Peter King (2009) and the second one by Loïc Chiquier and Michael Lea (2009);

> “Put simply, housing finance is what allows for the production and consumption of housing. It refers to the money we use to build and maintain the nation’s housing stock. But it also refers to the money we need to pay for it, in the form of rents, mortgage loans and repayments.”

> “There is recognition of other relevant forms of housing finance [apart from residential mortgage finance] such as developer finance, rental finance, or microfinance applied to housing. Developer finance is often in the form of unregulated advance payments by buyers, and developers sometimes provide long-term finance to buyers through...
installments sales when mortgages markets are not accessible. Microfinance for housing is typically used for home improvement or progressive housing purposes. Loans are typically granted without pledging properties. Although the overall impact of microfinance in housing remains limited, this activity can represent an important source of funding for those in the informal sector.”

The last two definitions of housing finance describe the term better for the context of this thesis, than the first definition. As mentioned by Peter King; it is the money for the production of housing, the money to build and maintain the nation’s stock. And in the last definition by Loïc Chiquier and Michael Lea; it is the developer finance.

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<th>THE IMPORTANCE OF HOUSING FINANCE FOR A COUNTRY</th>
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<td>One of the main reasons why housing finance is important is that, the assets it finances, is a significant part of national wealth and the fixed capital stock. And the way that it is financed clearly has a significant effect on the economy; housing finance activities stimulate expansion in financial and capital markets.</td>
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Housing also represents a large portion of most household’s consumption, and therefore at the macro level, housing finance generates economic growth via job creation, entrepreneurship, and economic linkages.

And at the individual level, it makes it possible both for people to have shelter and a real estate, which might be the largest investment a family makes in a lifetime.

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<th>HOUSING FINANCE SYSTEMS IN DEVELOPED AND DEVELOPING COUNTRIES</th>
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<td>The housing finance for the low income group is difficult in a developed country but it is even more difficult in developing countries. Aruba is not easily categorized as a typical developing country or as a typical developed country. It lingers somewhere in between and therefore it is essential to take a look at both sides.</td>
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Housing finance systems not only vary from developed countries to developing countries but they also vary from country to country, because each housing finance system represent the unique local features of each country, such as a country’s legal environment or culture, its economic composition, its regulatory environment, or its political system.
Here an overview is given about the different housing finance systems used by various developing and developed countries for the financing of low-income housing, as discussed in UN-HABITAT (2008).

INDIVIDUAL INITIATIVES

THE SITE-AND-SERVICES APPROACH TO LOW-INCOME HOUSING
The services include clean water, sewerage, roads, drainage, electricity and individual connections to the services. Beneficiaries built their own dwelling on the serviced lots through self help, community/co-operatives or by other means. In 1984 a program was set for the provision of 2900 serviced plots of 100m² in Costa Rica. Most beneficiaries completed their houses through self-help rather than by community-help.

SELF-BUILD HOUSING
Self-build in China has been developed under a variety of forms over the last decades. It can be categorized in three main types: Full, subsidized and co-operative self-build.

Full self-build refers to dwellings built by households themselves without any help from public authorities in terms of finance, materials, design and construction. Subsidized self-build relies on the initiative and labour of individuals. Local authorities provide limited financial support to these individuals. Co-operative self-build is when different households come together and provide mutual labour support for construction of their respective dwellings.

CO-OPERATIVE HOUSING APPROACH
The Limited Equity Housing Co-operative (LEHC) is a form of group home ownership that provides benefits for the individual home ownership. Members enjoy property tax exemption for homeowners and they can deduct their share of mortgage interest and property tax from their income tax returns. All legal documents of the project remain on the name of the co-operative. The co-operative is responsible for the payment of any loans and all expenses. Members have to buy a share in the co-operative to obtain the right to occupy an individual dwelling. Typically they pay 5% up to 10% of the market value of the dwelling. The co-operative would borrow the rest of the investment money using the project as collateral for the loans. The members pay a monthly mortgage interest and property taxes for their share. A member can sell his/her membership in the co-operative and transfer their dwelling to an
eligible buyer on the terms stated by the co-operative. Countries with experiences with co-operatives are to name a few China and Kenya.

**FINANCING SCHEMES**

**MICRO FINANCE FOR HOUSING**

The size of the housing micro credit loans is small ranging between USD 300 up to USD 5,000. In Asia the sizes are smaller than in South America. The period of the loan varies according to the purpose, for home improvement loans it varies between 2 months and two years and for land purchase or construction loans from two to five years. Many housing micro loans are not secured or collateralized. That is why the interest rates are usually higher than those charged by the commercial banks, because of the higher risks. However many providers try to reduce the risks by using savings as a security of repayment or demand co-signers for a loan as an alternative type of security. Countries which have implemented micro finance for housing are: Bangladesh, Bolivia, Indonesia, Uganda, Ghana, Kenya, Colombia, Mali, El Salvador and Mongolia.

**COMMUNITY-BASED SAVING SCHEMES**

Small savings deposits of the members of a community-led organization are brought together. Over time these savings builds up a capital resource from which members can take a low interest loan for housing improvements. These schemes provide credit to the poor that is otherwise denied to them by the formal finance system. Examples of these schemes are the compulsory saving scheme of Singapore and the contractual savings schemes of Epargne-Logement of France and the Bauspar of Germany.

**GUARANTEE STRUCTURE**

This is an example of the Netherlands, when housing associations wish to borrow money to construct or improve its property; it can apply to a bank for a loan. Almost all housing associations make use of the guarantee structure provided by the WSW and CFV. This guarantee structure diminishes the financial risks for the sector collectively, making credit risk virtually absent (Ouweland, 2002). This guarantee, allows the housing associations to borrow money on the capital market at a lower interest rate than that for ordinary capital market loans. This lower interest rate has a considerable effect on the determination of the rents; they can be 10% lower than they would be if there was no guarantee structure.
RENT-TO-MORTGAGE HOUSING SCHEMES

The UK’s rent-to-mortgage scheme is derived from the right-to-buy scheme. The rent-to-mortgage makes home buying more affordable for public housing tenants as it allows them to buy a public dwelling for only a portion of the right-to-buy price. Since the price is lower than the right-to-buy price, the landlord retains a share in the value of the property. There is a minimum and a maximum payment.

The minimum payment is the amount the bank is willing to lend the buyer on a standard 25-year mortgage, considering the same monthly repayment as the current rent price of the buyer. The maximum payment is 80% of the right-to-buy price.

SUBSIDIES

These housing subsidies are subsidies that were given in the past and that are given nowadays in the Netherlands.

DEDUCTION OF TAXES FOR HOMEOWNERSHIP

In the Netherlands housing is subsidized in the owner occupied sector, which accounts for roughly 55% of all housing. All households are allowed to deduct mortgage interest payments paid for the main house from income taxes.

OBJECT VERSUS SUBJECT SUBSIDY IN THE RENTAL SECTOR

In the past object subsidy was granted in the Netherlands. Object subsidy is when subsidies are granted to the housing association, therefore contributing directly with the building costs. Charging lower land costs is also a form of object subsidy, this still occurs in the Netherlands. Nowadays in the rental sector housing there is an explicit subject subsidy. The subject, the renter, is subsidized explicitly on an individual basis with subsidies being tied to income; low income households receive housing allowances, higher income households receive no allowances.

PUBLIC FINANCIER

HOUSING BANKS

The government of Thailand opened the Government Housing Bank (GHB) in 1953. The primary objective of this housing bank was to provide mortgage loans for low- and medium-income households. A borrower can take a loan up to 80% of the total property value and can
choose between a fixed and an adjustable interest rate. The maximum period of the loan is 25 years.

**SPECIAL HOUSING FUNDS**

The money of this fund is accessible to the low income groups in the form of a soft loan, micro financing or grants. The money is used for housing-related purposes such as the purchase of a dwelling, repair and self-build. There is a lot of variation of this type and on how the funds are funded and distributed. For example these funds can be both privately or publicly funded, often the latter is the case.

**CHALLENGES OF HOUSING FINANCE FOR THE LOW INCOME GROUP IN DEVELOPING COUNTRIES**

Here a summation is presented of the different challenges standing in the way of the housing finance in the developing countries. These challenges were discussed in a report of UN Habitat that was named Housing for All (UN Habitat, 2008).

**INFORMAL DWELLINGS**

Cities in developing countries, which are dealing with rapid urbanization, often cannot cope with its housing tasks and fail to supply affordable shelter to the poor. As a result of this many informal settlements are formed, which is the response of the poor to their social and economic circumstances. An informal dwelling is in fact an illegal dwelling that is built to standards that do not conform to the established legislation or that is built on land that the occupier has no title of. The occupier has no legal rights on its properties and this informal dwelling cannot serve as collateral for loans.

**THE RELUCTANCE OF THE FORMAL FINANCIAL SECTOR TO SERVE THE LOW-INCOME HOUSEHOLDS**

Basically the formal financial sector (the commercial banks) is unable and unwilling to serve to the low-income group. There are several reasons why this is the case; the poor are required to have bank accounts with minimum deposits, they are often charged higher fees, often the poor does not have formal legal titles to provide collateral security as required by formal financial institutions, the poor does not have the capacity to make monthly repayment for a long period of time and the poor does not often have a formal employment.
LACK OF PROPERTY MARKET TO FACILITATE A HOUSING FINANCE SYSTEM

Many developing countries have no clear property rights, making a functioning and effective property market impossible. As informal dwellings exist outside the law, they therefore lack the legal titles for formal legal transactions. Because the delivery and transfer of legal titles is not possible, it is also not possible to use land and housing properties as collateral for loans.

POOR CREDIT CULTURE

Credit is not granted unless the bank is certain that the borrower can pay its debt for the entire period of repayment. An important point in conducting the credit activity is a thorough analysis of the financial situation of the loan applicant. Often this is found to be humiliating by the poor and scares them away as they do not have a stable income or a regular employment.

At the other extreme, in some countries with a poor credit culture, banks often do not review their borrower’s repayment capacity and the borrowers do not take their loans seriously; some even treat loans as grants or income. This results in significant banking risks, as the bad loan rate increases.

LACK OF LONG TERM CREDIT

In many of the developing countries loans must be repaid in a very short time period. This makes it impossible for most low-income families to generate enough income to meet the repayment requirements. This is mostly due to high risks for the mortgage finance sector in developing countries such as the economic instability, fluctuations in inflation and foreign exchange rate.

HIGH COLLATERAL

Often high collateral is required for loans. Sometimes a collateral of double or triple the value of the loans is asked. This makes it impossible for low income group to meet the requirements needed for a loan, as these groups often do not have enough collateral.

POOR MANAGEMENT OF FINANCIAL ASSETS

Banks in developing countries are often too careful with their capital. In Tanzania for example, bank holds over 60% of total deposits, but lends only 30 %. So banking in Tanzania is characterized by very high liquidity and very low credit. And this is a failure in the financial world to allocate capital to the most productive uses.
**HIGH BORROW COSTS**
Lending rates are often very high making loans unaffordable for the vast majority of households and impossible for the low-income group.

**INEFFECTIVE LEGAL AND JUDICIAL SYSTEM**
Effective legal and judicial systems are essential for any financial system. The willingness of lenders to make loans available will increase, if the lenders trust the system to enforce contracts and law in general.

**HIGH LENDING COSTS**
Transaction costs are higher when lending to the poor as more time is needed of a bank to invest in a client. The bank has to manage the repayments of the customers, instead of relying on the customers to pay on time. Often field agents collect payments from the homes of the customers. This contributes to a high lending cost for the bank and this makes financing the poor less attractive to the formal banking sector.

**END OF CHAPTER ONE**
This chapter formed the theoretical background for this thesis. The next chapter will specifically focus on the social housing of Aruba, how it started, where it is now and what the policies are. Then in chapter 3, chapter one and two will be used to analyze the current situation of social housing on Aruba and possible strategies to deal with these problems are proposed.
CHAPTER 2: THE SOCIAL HOUSING SYSTEM OF ARUBA

In this chapter, first a brief history background will be given of Aruba, followed by a clarification of the housing culture of Aruba and then an overview is presented of the housing market of Aruba. And finally an outline will be given of the housing policies of Aruba.

HISTORY BACKGROUND

Aruba was discovered in 1499 by the Spanish explorer, Alonso de Ojeda. The Spanish thought that the island was a useless land, as no gold or treasures were found. They enslaved the Indians, the first settlers of Aruba, and took them to Hispaniola (now the Dominican Republic and Haiti) to work on the plantations. It wasn’t until 1636, during the peak of the Eighty Years War between the Netherlands and Spain, that the Netherlands conquered Aruba. The Dutch rulers used Aruba for farming cattle, to provide food for Curacao where the W.I.C. had plantations. During the 18th and 19th century the island changed hands among the British, the French and the Dutch several times. In 1816 stable Dutch rule returned when the Napoleonic wars had ended. Since then Aruba has been a dependency of the Dutch kingdom. In 1986, Aruba became an independent country within the Kingdom of the Netherlands with full autonomy in internal affairs, while the Dutch government kept the responsibility for the defence and foreign affairs.

Today, Aruba is still a member of the Dutch Kingdom and the queen of the Netherlands is still the head of State of Aruba. Just like the Netherlands and the Antilles, Aruba has a parliamentary democracy. This parliament represents the nation and controls the government through its 21 elected members. The government of Aruba consists of an administration of 8 ministers and a governor. One of the eight ministers is a representative of Aruba in the Netherlands. The governor is the representative of the queen in Aruba.

The first economic boost of Aruba was in 1824, with the discovery of gold, making mining the leading industry. When the gold mines were tapped out, the gold mine industry weakened and so did the economy. In 1850 Aloe Vera was introduced on the island. Thanks to the climate of Aruba and a strong demand for aloe products, it became an important part of Aruba’s economy. In fact, for many years Aruba was a top exporter of aloe. But over the years as demand declined so did the exports.
The true prosperity came to Aruba in 1924 when the oil refinery, Exxon, established in Aruba. The island was a good location for oil refineries, because of its close proximity to Venezuela and the fact that Aruba was a safe haven to transport oil. In 1928 Royal Dutch Shell built the second oil refinery in Aruba that would be in business until 1953 when it was dismantled. Since 1955 the main sectors of the economy was the oil refinery, Exxon and the tourism industry that was starting to grow. When in 1985, Exxon decided to close the refinery because it has become less profitable; Aruba had to change its strategy for its economic development and Aruba switch its complete focus on the tourism industry. This was seen as the most practical solution for the high unemployment at that time.

Today, the tourist industry is the primary source of income for the economy of Aruba. The economy has flourished due to the expansion of the tourism industry in the last two decades, which resulted in a substantial employment growth over the full spectrum of the labour market.

The employment growth could not only be met with the local labour market; consequently, employers recruited labour migrants. Many young migrants came from Latin America (Colombia and Venezuela) and the Caribbean (Dominican Republic). As a result Aruba’s population has grown rapidly in the last two decades. At the start of the nineties there were 61.000 inhabitants and by the year 2000 there were 90.000. In 2005 the population of Aruba reached 100.000 inhabitants. This rapid growth of population had a great impact on housing and social housing in particular as these migrants are paid low wages.

THE CULTURE OF HOUSING
When it comes to the housing there is a long tradition of self-building, the initiative part of self-building and the physically part of self-building with limited help from the government.

The initiative part of self-building is the planning of the construction, choosing the location (a piece of land) for the dwelling and the design of the dwelling. The effects of this tradition are clearly visible on the island; the different styles, colours and use of materials. Because of the freedom of the inhabitants and the lack of a clear spatial planning there is also no logic in the positions of dwellings.
In the beginning of the 20th century, self-building was also self-financed through own savings or incremental construction. This is also referred in the previous chapter as full self-build housing. This later changed when formal financial institutions started doing business on Aruba.

Then only the physically part of self-building was done with the help (labour force) of family and friends. In the previous chapter this was referred as the co-operative self-build housing. Up until 30 years ago it was normal when a member of the family, mostly when married and wanting to build a dwelling, can count on family and friends to help him build his house.

Nowadays, only the initiative part of the tradition of self-building prevails. Even though there are still some families who help each other out, the tradition of physically self-building, has been replaced by building contractors.

THE HOUSING MARKET ON ARUBA

HOUSEHOLD TYPE, THEIR INCOME AND HOUSING OPPORTUNITIES
The average housing costs (including electricity, water and gas) is about 40% of the total income of the households (CBS Aruba, 2006). See figure 3.

Figure 3: Expenditures by sector in AFL, for 1998 and 2006

Source: Income and Expenditure Survey 2006, page 7
In table 1, the average household’s income is given in AFL for six different types of households based on a survey among 2,294 households. (CBS Aruba, 2006) The different type of household are:
- A person living alone (a one-person household)
- A father or mother with one or more children (man/ woman with children)
- A family consisting of a married couple (married couple without child(ren))
- A family consisting of a father, a mother and one or more children (married couple with child(ren))
- A man and a woman with their child(ren) living together with the parents of the woman/man, they are all related to each other (extended family)
- A man and a woman with their child(ren) living together with a sister of the woman/man and at least one unrelated person (boyfriend/girlfriend), (composite household)

Table 1: Households by type, average and median income in AFL, number of contributors and average household size

<table>
<thead>
<tr>
<th>Type of household</th>
<th>Average household income</th>
<th>Median household income</th>
<th>Average number of contributors</th>
<th>Average household size</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>One person household</td>
<td>2135</td>
<td>1495</td>
<td>1.0</td>
<td>1.0</td>
<td>151</td>
</tr>
<tr>
<td>Single parent household</td>
<td>3046</td>
<td>2901</td>
<td>1.6</td>
<td>2.5</td>
<td>237</td>
</tr>
<tr>
<td>Married couple w/o child(ren)</td>
<td>3890</td>
<td>3320</td>
<td>1.5</td>
<td>2.0</td>
<td>276</td>
</tr>
<tr>
<td>Married couple w child(ren)</td>
<td>5747</td>
<td>1910</td>
<td>2.0</td>
<td>3.8</td>
<td>913</td>
</tr>
<tr>
<td>Extended household</td>
<td>5056</td>
<td>4400</td>
<td>2.5</td>
<td>4.1</td>
<td>500</td>
</tr>
<tr>
<td>Composite household</td>
<td>4439</td>
<td>3675</td>
<td>2.1</td>
<td>3.1</td>
<td>217</td>
</tr>
<tr>
<td>Total</td>
<td>4227</td>
<td>3500</td>
<td>1.8</td>
<td>2.8</td>
<td>2294</td>
</tr>
</tbody>
</table>

Source: Income and Expenditure Survey 2006, page 12
The housing opportunities depend on the income level of the households. The income levels are categorized in the following four categories, the same categories are used as the income categories according to the World Bank. See table 2. They all have the possibility to either rent a dwelling or buy one (if they can meet the requirements). See the table 3 to get an impression about the housing opportunities for the different income levels.

Table 2: Income categories per month

<table>
<thead>
<tr>
<th>Income level</th>
<th>In AFL</th>
<th>In USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income</td>
<td>21.191 or more</td>
<td>11.906 or more</td>
</tr>
<tr>
<td>Low middle income</td>
<td>1.737 – 6.861</td>
<td>976 - 3.855</td>
</tr>
<tr>
<td>Low income</td>
<td>1.736 or less</td>
<td>975 or less</td>
</tr>
</tbody>
</table>

Source: The World Bank

Table 3: Income categories and housing opportunities

<table>
<thead>
<tr>
<th>Income level</th>
<th>Home ownership</th>
<th>Mortgage loan</th>
<th>Rent</th>
<th>Rental aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income</td>
<td>Private self building</td>
<td>Local banks</td>
<td>Private sector</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Turn key projects of private project developer</td>
<td>FCCA</td>
<td>Commercial rent of FCCA</td>
<td></td>
</tr>
<tr>
<td>Upper middle income</td>
<td>Private self building</td>
<td>Local banks</td>
<td>Private sector</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FCCA</td>
<td>Commercial rent of FCCA</td>
<td></td>
</tr>
<tr>
<td>Low middle income</td>
<td>Private self building and self building through FCCA</td>
<td>Local banks</td>
<td>Private sector</td>
<td>Rental subsidy when renting a social dwelling of FCCA</td>
</tr>
<tr>
<td></td>
<td>Turn Key projects of FCCA</td>
<td>(very often not possible)</td>
<td>Commercial rent of FCCA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FCCA</td>
<td>Social Rent of FCCA</td>
<td></td>
</tr>
<tr>
<td>Low income</td>
<td>Sporadic sale of the social rental stock</td>
<td>FCCA</td>
<td>Social Rent of FCCA</td>
<td>Rental subsidy when renting a social dwelling of FCCA</td>
</tr>
</tbody>
</table>

Source: Own construction
TENURE
Two third of the total housing stock are homeownership and one third is rental dwellings (DIP, 2009). The density level of 595,2 persons/km² makes Aruba the second most densely populated island in the Caribbean after Barbados.

HOMEOWNERSHIP
Self building
Homeownership on Aruba is usually realized by self building. An individual asks the government to lease a land or buys a piece of land to build a dwelling. It very common to build a dwelling on a lease land because buying a piece of land increases the investment costs. For the financing of construction there are two options, based on their own financial capacities, a mortgage loan at a local commercial bank or a mortgage loans at FCCA.

The difference between a mortgage loan at the local commercial banks and FCCA is that FCCA can offer their clients a more social rate based on their annual income whereas the local banks have a set rate for all mortgage loans. The lower the annual income the lower his interest rate will be at FCCA. This is stated in an interest rate table. See annex 8 for the current interest table. FCCA makes homeownership also accessible for the low income group and low middle income group.

When entering into a mortgage loan at FCCA, the interest rates table at that time remains applicable for the entire duration of the mortgage loan. The income of the client is reviewed after each period of two years and if there is a change in income, then the interest rate changes according the interest rate table of the mortgage contract.

The interest rate of the mortgages offered by FCCA has been lower than the interest rates of the local commercial banks. However the mortgage rate offered by the local banks on Aruba has been lowered in the last two decades closing in the gaps between FCCA and the local commercial banks. See the development of the mortgage rate of the last two decades in figure 4. In 1986, the mortgage rate offered by local banks was 12% and in 2008 this was 9,2%. The competitive gap between FCCA and the local banks has been getting smaller. The current rates that FCCA offers ranges between 7,5% and 10,75%, this was adjusted for the last time in June 2004.
**Turn key projects**

The last ten years commercial project developments have become very popular on Aruba. There are two main developments; allotment plans for dwellings and condominiums. When developing these projects there are no minimum requirements concerning affordable dwellings. And often project developers focus on the upper middle income group and the high income group making these projects expensive and not accessible to the low middle income group and low income group.

The allotment plans is when project developers buy a big piece of land and divides this land in smaller plots in order to build roads and dwellings. However to reduce risk they do not build until they have sold the plot. And they sell the plots with or without a construction contract. The design of the dwellings is either set or they have some esthetics conditions. See figure 5 for an example of an allotment plan.

The condominiums focus only on the high end market. They are mostly built for the tourists as a second home and or for the real estate agents for their commercial rent with tourists. See figure 6 for an example.
Sale of the social rental stock

The sale of a social dwelling makes it possible for an existing tenant to buy their social rental dwelling. This makes homeownership also accessible to the low income groups, however this does not happen so often. The selling price of these dwellings is calculated after the construction. This price is strongly related to the project investments rather than the market prices on the housing market. (FCCA; J.Poppen, 2010)

The rental sector is strongly dominated by the private sector with an 86% share of the total rental dwellings. The public sector is basically the housing stock of FCCA, the only public party in Aruba, with a housing stock of approximately 1.500.
The Private rental sector

The suppliers of the private rental sector are the commercial real estate agents and private individuals. In the private sector you can rent a room, a studio, an apartment or a house. The Rent Regulation of 1938 also applies here but again only for dwellings with a maximum investment costs of AFL 100.000 (USD 55.866), including land costs. The rent prices for dwellings with an investments costs higher than AFL 100.000 (USD 55.866) are based on the market price. The rent prices of large dwellings are stable but the rent prices of apartments are usually very high due to the high demand of apartments in the last years. (DIP , 2009) Unlike in the Netherlands, it is not possible in the private sector to receive rent subsidy from the government.

The Public Rental sector: FCCA

FCCA can provide both commercial rental dwellings and social rental dwellings. But they do not have a lot of commercial rental dwellings. Their primary focus is to provide social rental dwellings to the vulnerable and disadvantaged groups, as well as people living in poverty and low-income people.

To be eligible for a social rented accommodation, the following guidelines are enforced concerning the maximum combined income of the household. See the table 4. 45% of all the clients of FCCA have a monthly income of less than AFL 1.199 (USD 673) and 81% of all the clients have a monthly income of less than AFL 1.984 (USD 1.114). All the clients of FCCA have an income or they receive social benefit from the government. Special groups like the recovering addicts, homeless people, mentally disabled or physically disabled also depend on FCCA for their housing needs. Other foundations and/or the government pay FCCA their rent.

<table>
<thead>
<tr>
<th>Type of household</th>
<th>Maximum monthly income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AFL</td>
</tr>
<tr>
<td>Single or married couple</td>
<td>1.700</td>
</tr>
<tr>
<td>Single or married couple with 1 child</td>
<td>1.900</td>
</tr>
<tr>
<td>Single or married couple with 2 children</td>
<td>2.100</td>
</tr>
<tr>
<td>Single or married couple with 3 children</td>
<td>2.500</td>
</tr>
<tr>
<td>Single or married couple with 4 children</td>
<td>3.125</td>
</tr>
</tbody>
</table>

FCCA

SUPPLY AND DEMAND FOR SOCIAL HOUSING
FCCA has been in charge of the operation and management of the rental dwellings owned by Land Aruba since 1979. For its services and to cover the costs of maintenance, an annual fee is received from Land Aruba per housing unit. The 2009 fee is AFL3.734 (USD 2097.75) per housing unit. This fee is based on a cost-based calculation method used for many years by the FCCA and agreed to by Land Aruba. As of December 31, 2009 FCCA was in charge of 759 rental dwellings owned by Land Aruba. Besides these rental dwellings owned by Land Aruba, FCCA owns a total of 750 units of their own. These sums up to a total of 1509 rental dwellings in the social sector on Aruba. There is no difference in the management of the dwellings of FCCA and the dwellings of Land Aruba, the same allocation policy and rent price policy is used for both type of dwellings.

This supply of social dwellings cannot meet the high demand for social housing on Aruba. In the first half of the year 2009 alone, FCCA listed 165 new applicants, making the waiting list for a social dwelling 2.067 applicants long. The demand for social housing in Aruba has long exceeded the total stock of social dwellings. See the table here below for the waiting list from 2004 up to the 1st half of 2009.

Table 5: The increasing demand for social rental dwellings in the last five years

<table>
<thead>
<tr>
<th>Year</th>
<th>Waiting list of people seeking a social rental dwelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1438</td>
</tr>
<tr>
<td>2005</td>
<td>1589</td>
</tr>
<tr>
<td>2006</td>
<td>1710</td>
</tr>
<tr>
<td>2007</td>
<td>1886</td>
</tr>
<tr>
<td>2008</td>
<td>1946</td>
</tr>
<tr>
<td>1st half of 2009</td>
<td>2067</td>
</tr>
</tbody>
</table>

Source: Halfjaar Activiteitenverslag 2009 FCCA, page 38

Of these 2.067 applications for a rental dwelling 588 applicants have the need for a dwelling with one bedroom, 475 applicants have the need for a two bedroom dwelling and 377 applicants wants a dwelling with three bedrooms. The needs of the remaining 626 registered are not known, due to the fact that it has been difficult to contact them. This is also the reason...
why FCCA considers their waiting list to be 1441 long, as these represents the active applicants. Nonetheless there is still a great demand that cannot be met by the supply.

**FINANCIAL POSITION**

In the annual report of 2008, the KPMG Accountants found that the foundation FCCA had a positive results, a sound financial position and a positive cash flow from operating activities. (KPMG, 2009) The balance sheet of FCCA for the years 2005 till 2008 can be seen in annex 9. (FCCA, 2009) An estimation of the results is given for the year 2009 in this document, as it was dated June 30, 2009. In table 6, here below some figures can be seen.

Table 6: Financial information of FCCA, the estimation of the year 2009

<table>
<thead>
<tr>
<th></th>
<th>In AFL</th>
<th>In USD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The total asset</strong></td>
<td>361.058.000</td>
<td>201.708.380</td>
</tr>
<tr>
<td><strong>Receivable from mortgage portfolio</strong></td>
<td>237.639.000</td>
<td>132.759.218</td>
</tr>
<tr>
<td><strong>Equity/own capital</strong></td>
<td>177.775.000</td>
<td>99.315.642</td>
</tr>
<tr>
<td><strong>Debt to funders</strong></td>
<td>175.193.000</td>
<td>97.873.184</td>
</tr>
<tr>
<td><strong>Net results</strong></td>
<td>5.163.000</td>
<td>2.884.358</td>
</tr>
</tbody>
</table>

Source: FCCA, Tweede kwartaalverslag 2009, page 1

Looking at the estimation for the year 2009, the following can be said about the financial position of FCCA;

- The mortgages account for approximately 2/3 of their total activities.
- Looking at the equity and debt to funders, it can be noticed that this is 50:50, which can be interpreted as a financially healthy organization
- Their solvency rate is estimated to be 49 %, which is far above the required minimum of 30%

Investments are only allowed in term deposits and Government Bonds that are favourably marketable and negotiable. Investments in time deposits are only performed with local banks that are under the supervision of the Central Bank of Aruba.

For the liquidity risk, FCCA maintains a minimum amount of AFL 15.000.000 (USD 8.379.888) to AFL 20.000.000 (USD 11.173.184). This amount is enough for an institution as FCCA, where
there is no obligation to make payments instantly, but taking into consideration its repayment obligations on outstanding loan amounts and payments depending on building projects.

THE HOUSING POLICIES

THE HOMEOWNERSHIP SECTOR
Because of the long tradition of self-building, the government of Aruba stimulates the homeownership economically through deduction of taxes (hypotheekrenteaftrek). All households are allowed to deduct mortgage interest payments paid for the main house from income taxes.

POSSIBILITIES FOR A MORTGAGE LOAN FOR THE LOW INCOME GROUP
The mortgage loans are for the construction of houses (through self building), the purchase of private turnkey houses as well as for the renovation/addition to houses and other purposes. FCCA makes credit available to the low and low middle class, especially to give a chance to the lower income group to own their own dwelling. FCCA also provide loans to buyers of the FCCA rental dwellings and or buyers of the Land Aruba rental houses.

As of December 31, 2008 32% of the number of debtors has an monthly income up to AFL 2.500 (USD 1.405), 49% has an income ranging between AFL 2.500 (USD 1.405) to AFL 3.500 (USD 1.966) and 19% has an income higher than AFL 3.750 (USD 2.107). The maximum loan amount granted is AFL 300.000 (USD 168.539). The interest rate varied between 1% and 10% in the 80’s. Presently, the interest rate ranges from 7.5% up to 10.75%. To compare the average rates offered by local banks were 9,2% in the year 2008. See figure 4 on page 33. The interest percentage is related to the yearly income of the applicant and is revised every two year and modified if there is a rise in income.

PURCHASE AND CONSTRUCTION SUBSIDY
At the end of 2003, a new subsidy regulation was introduced by the Aruban Government, the Purchase & Construction Subsidy. This new subsidy would make it possible for more FCCA’s clients, who otherwise would not be creditworthy for a loan, to purchase or build their home with a FCCA mortgage loan. The amount granted was to help the buyer during the first 5 years of the repayment period, while the buyer should be able to continue full repayment of the annuity after these 5 years.
FCCA was in charge to grant this subsidy to its clients. In 2004 and 2005, AFL 1,000,000 (USD 561,798) was approved on the National Budget. In 2004 FCCA requested the AFL1,000,000 (USD 561,798) but received only half of it, AFL 500,000 (USD 280,899). In 2005, FCCA has granted a total amount of AFL 745,750 (USD 418,961) to its clients but no amount was received from the government.

This subsidy failed to endure due to issues in its operation. There is a difference of opinion between the government and FCCA on how to operate this subsidy. FCCA calculates the subsidy at the start for the whole period of five years while the government considers this subsidy a one year subsidy, that can possibly be lengthened for a period of five years. These different approaches for the operation, impacts directly the affordability of the mortgage loan subsidy for the recipient. So after 2005 no new purchase/construction subsidy has been granted under this regulation even though it still exists today.

THE RENTAL SECTOR

RENT PRICE REGULATION

There is a rent regulation dating from 1938 that stipulates, that the year rent price is not allowed to be more than 12% of the historic building costs including land costs. This regulation is applicable for all dwellings with a maximum value (building costs plus land costs) of AFL 100,000 (USD 56,180).

FCCA has always used this method to determine the rent prices for the rental dwellings. They calculate the monthly rent price by taking 1% of the total investment cost of each dwelling. This is the maximum rent price allowed by the law and thus this rent price remains unchanged over time and are not even corrected with inflation.

Building costs directly effects the rent prices and as the building costs are rising, it has become very difficult and in most cases even impossible to build a dwelling under AFL 100,000 (USD 56,180). And when the building costs surpass this maximum value, FCCA is legally not obliged to use this method. However they use this method anyway to calculate the rent prices and they often have to adjust their rent price to a lower price in order for this dwelling to be eligible for rent subsidy.
The renters with a yearly income lower than AFL 37.500 (USD 20..950) have the right to receive rent subsidies if renting a dwelling of FCCA or Land Aruba with a maximum rent price of AFL 1000 (USD 562). The government pays the rent subsidy directly to FCCA to make sure that the money is spend on the payment of rent. It is feared that if the government pays the rent subsidy directly to the tenants, they would probably use it for other things.

The method for calculation is different if you compare it with the system of the Netherlands for instance. In Aruba, the rent subsidy is calculated by subtracting the income rent from the asked rent price.

**The income rent**

The income rent is the amount of rent someone can pay based on their income. This income rent is set in table 7 and the sum the tenant should pay for rent ranges between 8% up to 30% of the his/her monthly salary.

<table>
<thead>
<tr>
<th>Share of clients of FCCA</th>
<th>Year income in AFL From</th>
<th>Till</th>
<th>Year income in USD From</th>
<th>Till</th>
<th>Rent as % of income From</th>
<th>Till</th>
<th>Affordable rent price in AFL From</th>
<th>Till</th>
<th>Affordable rent price in USD From</th>
<th>Till</th>
</tr>
</thead>
<tbody>
<tr>
<td>45%</td>
<td>2900</td>
<td>1629</td>
<td>9</td>
<td>19</td>
<td>35</td>
<td>11</td>
<td>20</td>
<td>11</td>
<td>66</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>2900</td>
<td>1629</td>
<td>1629</td>
<td>2584</td>
<td>9</td>
<td>19</td>
<td>35</td>
<td>11</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>4600</td>
<td>6100</td>
<td>3427</td>
<td>10</td>
<td>35</td>
<td>51</td>
<td>20</td>
<td>29</td>
<td>119</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>6100</td>
<td>7800</td>
<td>4382</td>
<td>11</td>
<td>51</td>
<td>72</td>
<td>29</td>
<td>119</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>7800</td>
<td>9300</td>
<td>5225</td>
<td>12</td>
<td>72</td>
<td>93</td>
<td>40</td>
<td>52</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>9300</td>
<td>10900</td>
<td>6124</td>
<td>13</td>
<td>93</td>
<td>118</td>
<td>66</td>
<td>66</td>
<td>119</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>10900</td>
<td>12500</td>
<td>7022</td>
<td>14</td>
<td>118</td>
<td>178</td>
<td>82</td>
<td>100</td>
<td>119</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>12500</td>
<td>14200</td>
<td>7978</td>
<td>15</td>
<td>146</td>
<td>178</td>
<td>82</td>
<td>100</td>
<td>119</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>14200</td>
<td>15850</td>
<td>8904</td>
<td>16</td>
<td>178</td>
<td>211</td>
<td>100</td>
<td>119</td>
<td>139</td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>15850</td>
<td>17500</td>
<td>9831</td>
<td>17</td>
<td>211</td>
<td>248</td>
<td>119</td>
<td>139</td>
<td>139</td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>17500</td>
<td>19150</td>
<td>10758</td>
<td>18</td>
<td>248</td>
<td>287</td>
<td>139</td>
<td>161</td>
<td>139</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>19150</td>
<td>20800</td>
<td>11685</td>
<td>19</td>
<td>287</td>
<td>329</td>
<td>161</td>
<td>185</td>
<td>139</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>20800</td>
<td>22450</td>
<td>12612</td>
<td>20</td>
<td>329</td>
<td>374</td>
<td>185</td>
<td>210</td>
<td>139</td>
<td>185</td>
</tr>
<tr>
<td></td>
<td>22450</td>
<td>24000</td>
<td>13483</td>
<td>21</td>
<td>374</td>
<td>420</td>
<td>210</td>
<td>236</td>
<td>139</td>
<td>236</td>
</tr>
</tbody>
</table>
As can be seen in table 7, in the rent subsidy table dating from 2006, a very big share of the clients of FCCA is eligible for rent subsidy. A total of 81% of all clients of FCCA depends on the rent subsidy to afford their dwelling.

The rent subsidy = the rent price – the income rent

Here is an example for the calculation of the rent subsidy for client A. Client A lives in a rental dwelling with a monthly (asked) rent of AFL 550 (USD 309) and he has a yearly income of AFL 17,499 (USD 9,831). The rent subsidy, which he is entitled to:

His monthly rent (1% of total investments): AFL 550 (USD 309)
His income rent (17% of his monthly income): AFL 248 (USD 139) –
Rent subsidy for client A: AFL 302 (USD 170)

The importance of the rent subsidy for the clients of FCCA is again underlined in figure 7. This figure shows the clients of FCCA in income rent categories for the month of March 2010. There were in total 1509 dwellings rented, 758 owned by Land Aruba and 751 owned by FCCA. The first thing that can be noticed is that the biggest group is the group with an income rent ranging between AFL 101 (USD 56) and AFL 200 (USD 112), which accounts for 31% of all the clients of FCCA. The group with an income ranging between AFL 0 and AFL 200 (USD 112) accounts for 47% of all the tenants. And the group between AFL 0 and AFL 400 (USD 223) accounts for a share of 81%.
As the building costs have risen, new social dwellings have higher rent prices while the income rent calculations have remained unchanged. This puts a lot of pressure on the rent subsidy system, making it the essential key in the feasibility of new social housing projects. The share of the rent subsidy is continuously growing with each new social housing project. To see how the total rent subsidy has increased during the last 10 years, let’s take a look at table 8.

![Figure 7: Income rent in AFL of all rented dwellings as at March 2010](image)

Source: FCCA, M.C. Jones

<table>
<thead>
<tr>
<th>Year</th>
<th>Land Aruba</th>
<th>FCCA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2.437.549,00</td>
<td>884.095,00</td>
<td>3.321.644,00</td>
</tr>
<tr>
<td>2001</td>
<td>2.484.416,56</td>
<td>1.163.232,00</td>
<td>3.647.648,56</td>
</tr>
<tr>
<td>2002</td>
<td>2.527.780,00</td>
<td>1.469.321,00</td>
<td>3.997.101,00</td>
</tr>
<tr>
<td>2003</td>
<td>2.520.188,00</td>
<td>1.782.725,00</td>
<td>4.302.913,00</td>
</tr>
<tr>
<td>2004</td>
<td>2.384.667,00</td>
<td>2.133.042,00</td>
<td>4.517.709,00</td>
</tr>
<tr>
<td>2005</td>
<td>2.380.588,00</td>
<td>2.680.565,00</td>
<td>5.061.153,00</td>
</tr>
<tr>
<td>2006</td>
<td>2.164.477,00</td>
<td>3.165.018,00</td>
<td>5.329.495,00</td>
</tr>
<tr>
<td>2007</td>
<td>2.132.989,00</td>
<td>3.445.278,00</td>
<td>5.578.267,00</td>
</tr>
<tr>
<td>2008</td>
<td>2.094.138,00</td>
<td>3.512.757,00</td>
<td>5.606.895,00</td>
</tr>
<tr>
<td>2009</td>
<td>2.017.612,00</td>
<td>3.476.169,00</td>
<td>5.493.781,00</td>
</tr>
</tbody>
</table>

Source: FCCA, Controle & Rapportage
LAND POLICIES
The government of Aruba rarely sells land, instead they choose to lease ground, for both housing and commercial purposes. Beside public lease land there is also privately owned land on Aruba. However only 34% of all homeowners have built their dwelling on a privately owned land. (DIP, 2009)

LAND PRICE DEVELOPMENT
The value development of privately owned land differs significantly from the value development of the public lease land. The value of privately owned land is set by the market price for the land on Aruba and ranges from AFL50 (USD 28) per m² to AFL 1000 (USD 559) per m².

The land value of lease land is not set by the market value of land, the land value is estimated every 5 years by the government and for the duration of 5 years it remains unchanged. The prices of lease ground ranges from AFL 10 (USD 6) per m² to AFL 40 (USD 22) per m². The land values for lease ground were increased for the last time in 2007, so the land values will be adjusted again in 2011. (SIAD, 2010)

GROUND LEASE

FOR HOUSING
For the purpose of housing, land is leased for a period of 60 years, because 60 years is the expected lifespan of a dwelling. During this 60 years, a fixed rent lease must be paid to the government on a yearly basis. The calculation of the lease price is as following, the price per m² is multiplied by 16. The land value per m² for housing ranges between AFL 10 (USD 6)/m² and AFL 40 (USD 22)/m². So for example if you have a plot size of 500m² with a land value of AFL 20 (USD 11) per m², the lease rent is 16 x AFL 20, is a total of AFL 320 (USD 179. (Tromp, 2010) As can be noted here, there is no relation between the lease rent and the plot size.

After the lease period of 60 years, Tromp explains, the government reinstates as the owner of the land and the superficies. Near the end of the lease period, owners of dwellings on a lease ground can submit an application to prolonging the lease period. The lease contract can be extended for another lease period of 60 years if the technical condition of the dwelling is in
good state, if the land has no mortgage registration for its superficies and if there has not been a change in the Spatial Planning.

The lease price is recalculated when the government extend the lease period. In recent recalculation of the lease prices, these are tripled for the next lease period. If the government has change their spatial planning and opt not to extend the lease period, then they are required by law to compensate the owner for the remaining value of the superficies.

**FOR COMMERCIAL PURPOSES**

The same laws are applicable for the land with commercial purposes as land for housing. The lease period is also 60 years. The yearly lease price for land with commercial purposes is 3% of the total land value. In addition to the lease price, an investment must be made in a social organization in Aruba when applying for a lease ground. The investments must be at least 0.5% of the total investments of the project. (DIP, 2010)

**TAX REVENUE FOR GROUND LEASE**

The total revenues for the government of Aruba on ground lease in the year 2008 was AFL 15.597,000 (USD 8,713,000). See table 9.

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long lease property rights</td>
<td>14.598</td>
<td>16.007</td>
<td>20.952</td>
<td>15.597</td>
</tr>
</tbody>
</table>


**LAND OWNERSHIP**

The government receives 3% of the total land value, as a transfer tax, when land is bought. For land values that are higher than AFL 250,000 (USD 139,665) a transfer tax of 6% is asked.

**LAND TAX**

In addition to land lease or transfer tax, a yearly land tax must be paid to the government, whether you own or lease the land and whether you own the dwelling or rent the dwelling. (SIAD, 2010) The total revenues of the government for this land tax in the year 2008 can be seen in table 9.
FOR HOMEOWNERS
The land tax is 0,4% of the total value of the dwelling and land minus an exemption sum of AFL 60.000 (USD 33.520). An example; Person A has a combined value of AFL 200.000 (USD 111.732) for his dwelling and land. His land tax is then, 0,4% of AFL 140.000 (USD 78.212) (because 200.000-60.000=140.000), which is AFL 560 (USD 313) per year.

FOR RENTAL DWELLINGS
The owners of the rental dwellings pay the land tax, not the renters. The land tax is 0,4% of 8⅓ times the year rent. An example: A dwelling with a monthly rent of AFL 1000 (USD 559) and a year rent of AFL 12.000 (USD 6.704). His land tax is 0,4% of AFL 100.000 (USD 22.346) (because 8⅓ x AFL 12.000 = AFL 100.000), which sums up to AFL 400 (USD 223) per year.

END OF CHAPTER TWO
In this chapter the focus was on Aruba and on the social housing of Aruba in particular. In this chapter was explained how social housing started on Aruba, what the current situation is now and what the policies are for housing and land use. In the next chapter, chapter three, chapter one and two will be used to analyze the current situation of social housing on Aruba and to identify possible strategies to deal with the current problems.
CHAPTER 3: ANALYSIS OF CURRENT SITUATION AND POSSIBLE STRATEGIES

In this chapter it will become clear why new social housing projects are not feasible on Aruba. First, the similarities are highlighted between Aruba and other countries; the same challenges in housing the low-income groups and the same approaches for housing. Followed by a critical assessment of the current housing policies, concerning the social housing on Aruba. At the end of this chapter some strategies are presented, which can contribute to stimulate more development of social housing on Aruba if implemented.

SIMILARITIES OF THE HOUSING SYSTEM OF ARUBA AND OTHER COUNTRIES

SIMILAR CHALLENGES AS OTHER DEVELOPING COUNTRIES IN HOUSING THE LOW INCOME GROUP

Aruba has to deal with some of the same challenges that other developing countries also encounter, as discussed in chapter 1. Aruba is similar to other developing countries on the following three aspects; the unwillingness of the formal financial sector, the lack of long term credit for commercial lending and the high borrow costs.

THE RELUCTANCE OF THE FORMAL FINANCIAL SECTOR

To serve the low income households

There is the unwillingness of the formal financial sector to serve the low income group and most of the low middle income groups. They do not want to lend their capital in untrustworthy mortgages and high borrow costs.

To serve the non-profit social organization

Currently, there is an over liquidity in the banks of Aruba but still these banks are not motivated to offer FCCA attractive loans for their social building tasks. The banks prefer to have loans with a high return rate, they are driven to make profit and not interested in a social, less profitable loans.

THE LACK OF LONG TERM CREDIT FOR COMMERCIAL LENDINGS

As developer of social housing, FCCA has to lend money from local banks. But the commercial banks are not accustomed to give long term commercial credit loans. Often commercial loans
must be fully paid within 12 to 15 years. This results in a higher annual lending costs and a higher initial costs for the cash flow of the exploitation period.

HIGH BORROW COSTS
The lending rates at the local commercial banks are too high for some households in the low income group and low middle income group, making credit and housing unaffordable for certain group on the market of Aruba.

SIMILAR APPROACHES FOR HOUSING FINANCE AS OTHER COUNTRIES
There are three approaches discussed in chapter 1 that are also relevant on Aruba. These are the Self-build housing, the government bank and the special housing fund.

SELF BUILD HOUSING
Self-build housing is part of a long tradition of Aruba. Originally it was full self-build and this later evolved into co-operation self-help. But co-operation was not formal through an organization but it was rather the friends and family who helped each other out with the labour. Today it is still an approach for housing but in a smaller scale.

GOVERNMENT BANK
In 1979, it was the government who founded FCCA to be a mortgage bank, which would make mortgage for the low-income group possible. The organization has evolved during time to be a more independent public party, which still makes it possible for low-income households to have access to a mortgage loan. So the approach of a government bank is no longer applicable for Aruba.

SPECIAL FUND
There was also a special housing fund that was available to FCCA to develop social dwellings in the early 80’s. This was the ‘Meerjarenplan’. This fund was provided by the Netherlands. At that time Aruba still formed a part of the Dutch Antilles and this fund was granted to Aruba under that context. Financing of social housing, through grants (object subsidies) or soft loans of this fund, was possible until 1992. Then the government of Aruba decided that FCCA should be able to access its financing through the local market.

Since 2000, there is another fund available for the development of Aruba. This fund is called the Fundacion Desaroyo Aruba (FDA). This fund was originally set up for a period of 10 years,
in which both the Netherlands and Aruba had agreed to invest in the fund. In the beginning the Netherlands would put more money and slowly diminishing their support, to the point where they would no longer give development money after 2010. After 2010, Aruba should be able to continue to invest in this funds on her own. The fund is managed by an independent organization, the Aruba Investment Bank (AIB). They have to approve the projects that are eligible to receive funds, based on the rules and guidelines set by the two governments, who put the money in this fund.

This fund was set up for the development in the following four categories; education, environment, quality of government and health. As can be noted here, housing is not one of the four categories that have access to this funds. So after 1992, FCCA could no longer benefit from a special fund but had to look for funding on the local or foreign capital market which can offer only commercial rates to FCCA.

**CRITICAL ASSESSMENT OF THE CURRENT HOUSING POLICIES**

The deduction of taxes on the mortgage interest promotes homeownership as tenure. The low income groups can get a mortgage loan at FCCA if they can meet with their requirements, which are less strict than the commercial banks. However there are still a group of people, which are not creditworthy and are unable to receive a mortgage. The purchase and construction subsidy which was approved end of 2003 by the government and failed to endure during operation could have help tackle this problem.

There is an unclear understanding between the government and FCCA concerning the infrastructural cost. The government is supposed to pay for these costs, but often during building of projects, due to the lack of commitment or lack of money of the government, FCCA still ends up paying for the infrastructure. This has a negative impact on the total investments costs and thus the rent prices.

Another growing problem is to build social dwelling that are eligible for rent subsidies. In order to be entitled for rent subsidy the monthly rent price of the dwelling is not allowed to be more than AFL 1.000 (USD 559). But it has become very difficult to build a good and qualitative dwelling that has a rent price that is lower than AFL 1000 (USD 559), due to the method used to calculate the rent price and the increasing building costs.
FCCA heavily depends on the local government for a great deal of their rental income. The rent subsidy as mentioned in chapter 2 is very important for clients of FCCA as they often have a low income rent. These rent subsidies are paid directly to FCCA. So there is a real risk for FCCA when no funds are received from the government.

**POSSIBLE STRATEGIES**

The strategies that are presented here are ideas that can help new social housing projects in the future become more feasible. These ideas are based on the analysis of the current housing policies as discussed in the previous paragraph and the different approaches of other countries as addressed in chapter 1. The possible strategies will later be put to test in chapter 4 for their effectiveness and in chapter 5 for their efficiency and support among different actors.

The strategies should strive to accomplish the following results:
- A positive financial impact on the exploitation for a social project for FCCA.
  At least one strategy should provide a solution how future social housing projects can be more feasible.
- A positive effect for FCCA within a reasonable time lapse.
  At least one strategy should present a quick solution, which can be implemented within a year to benefit from rapid gains.
- A sustainable approach for the future.
  At least one strategy should not only prove right for the long term, in order to ensure and guarantee the continuity of the social building activities of FCCA in the future.
- A strategy should take the government costs into account.
  At least one strategy should take the costs of the government into consideration, this would make it easier to persuade the Aruban government to agree to the strategy.

**SUBSIDIES**

This strategy provides real positive financial results for FCCA and this can contribute to a continuity of the organization on the long run. As mentioned in chapter one there are two types of subsidies, object subsidy and subject subsidy. In chapter 2 it was illustrated in figure 7 that the rent subsidies are essential for the affordability of the social dwellings, but so is the infrastructural cost. If the infrastructure becomes a standard object subsidy, then the initial costs of the social housing projects would not be so high, which directly effects the rent prices.
The government should therefore provide both subsidies, the rent subsidy and the infrastructural costs, when developing new social housing.

This would mean extra expenses for the government which can be compensated by making some policies changes. There are two options, first the government can consider changing the rent subsidy policy by reducing the share of rent subsidy per dwelling and increasing the share of income rent. Or a second option is to use future land price development to create an extra financial buffer to invest in infrastructure.

**MINIMUM INCOME RENT**

The strategy proposed here is a strategy which takes the governments costs into consideration. The government should consider introducing a minimum income rent of for example AFL 150 (USD 84). This will bring down the share of rent subsidy per dwelling and therefore the total rent subsidy that the government should pay FCCA. This automatically creates an extra buffer that can be used to invest in infrastructural works when building a new social project.

The negative aspect of this is that some low income groups would not be able to afford their dwelling anymore due to the increase of the income rent, considering that 47% of all tenants have an income rent of under AFL 200 (USD 112), see figure 7.

**LAND PRICE DEVELOPMENT OF LEASE LAND AND LAND TAX LINKED WITH THE MARKET PRICE**

The current price development for lease land is not linked with the price developments on the market but they are estimated by the government each 5 years, as explained on in chapter 2, page 42. The lease rent changes every 60 years and the land tax every 5 years.

A possible strategy to make more funds available for housing and infrastructure, is to use the price development of the land, by linking the lease land value with the market price. The strategy proposed here is a strategy which takes the governments costs into consideration. Doing so it creates an extra buffer that can be put to use by the government to the sole purpose of social housing and infrastructure. For this strategy to work, the government must commit to her task and not use the extra revenues for other purposes.
The downside of this strategy is that the lease rent and land tax will significantly increase, due to the high market prices of land. Consequently, this will make the housing costs unaffordable for a big share of households on Aruba, as 60% of all households have built their dwelling on a lease land. (DIP, 2009) The market prices of land on Aruba have risen drastically in the last years due to the foreign purchasing power; the willingness of foreign investors to pay high prices for land for the developments of commercial turn-key projects and condominium projects. These market prices do not truly represent the purchasing power of the locals. The owners of privately owned land prefer to sell their land with a big profit in Euro or Dollars to a foreign investors than to a local person at a much lower price in Aruban Florins. (DIP, 2009)

**ANOTHER CALCULATION METHOD**

This strategy will provide a sustainable accounting system, which will contribute to the financial continuity of the organization, but it does not result in real financial effect for FCCA. By introducing this new calculation method, the rent price will lower, making new social housing more affordable for the clients of FCCA and eligible for rent subsidy in case the client is still unable to pay the rent. Another calculation method for calculating the rent price as followed:

- An important change should be to calculate the rent prices as a result of a zero net present value of the cash flow.
- The use of a rate of return in the cash flow. This should be at least the yearly inflation rate.
- There should also be an exit value in the cash flow, as exit values are commonly used in exploitation calculation of real estate properties. This exit value is calculated by subtracting the depreciation of exit value and adding the yearly rise of exit value during the exploitation period of the total investments. The lease contract for land is for a period of 60 years. At the end of the lease period, if the contract is not extended due to changes in the Spatial Planning, the government has to compensate the owner of the dwelling for the remaining residual value.
- And FCCA should also consider calculating their exploitation for a longer period than 20 years, for example to 25 years or 30 years. Looking at the reference project, it can be noticed that the quality of the social dwellings are good. Adding a proper maintenance schedule in the exploitation period should guarantee that that the dwellings are suitable for exploitation for a period longer than 20 years.
A MORE COMMERCIAL APPROACH
The cross-subsidization that FCCA is currently implementing is only within the mortgages. The rate of the mortgages they offer range between 7% and 10.75%, depending on the income of the applicant. The Central Bank of Aruba (CBA) set some strict rules for FCCA to maintain a certain level for their reserves and they are not allowed to invest their profits from their mortgage activities for the development of their social tasks, without their permission.

EXPANDING THE MIDDLE INCOME GROUP IN THE RENTAL STOCK
This strategy provides real positive financial results for FCCA and this can contribute to a continuity of the organization on the long run. An alternative for FCCA is to become more commercially active in general to generate even more money to be able to increase their reserve capital in order to be allowed by the CBA to invest in new social dwellings. FCCA can do this by expanding their target group in the rental sector. They can enlarge their rental stock to accommodate more middle income group.

YEARLY RENT INCREASE
This strategy provides real positive financial results for FCCA and this can contribute to a continuity of the organization on the long run. This strategy is to introduce a yearly increase in rent price of 1% or 2%. When calculating in a net present value cash flow, the prices are worth much less over a few years than they are worth now. By increasing the rent prices you can compensate this loss of value, due to inflation.

ATTRACTING CHEAP BORROW MONEY FROM PUBLIC, LOCAL OR FOREIGN FINANCIAL INSTITUTIONS
The more attractive the loans, the more affordable the social dwellings will be, as rent prices are directly affected by the investment costs. To access cheap money the following strategies are possible.

PUBLIC
This strategy provides real positive financial results for FCCA and this can contribute to a continuity of the organization on the long run. Changing the policies in order to be able to lend money from the FDA Fund, a special fund for the development of Aruba.
This strategy provides real positive financial results for FCCA and this can contribute to a continuity of the organization on the long run. The government can introduce an incentive to stimulate the local financial institutions (the commercial banks) to provide more attractive loans to FCCA. For example, an exemption of the 28% profit tax of these social loans. This incentive reduces the costs for the banks for those specific loans, allowing them to offer FCCA a loan at a more attractive rate.

To borrow capital from the Netherlands there are two possible options; through the organization DIGH or by starting the process to become an authorized institution ‘een toegelaten instelling’ in order to access loans at a more attractive rate with the guarantee structure of the Netherlands. The process to become an authorized institution will be elaborated in chapter 5 in the paragraph of efficiency.

Besides the Netherlands, Curacao can also offer loans to FCCA at a better rate than on the local market of Aruba. The rate on that island is approximately 2% lower than on the market of Aruba. This is because the market of Curacao is different from the market on Aruba, there is more money as there are more people living on Curacao, but the share of creditworthy clients is lower than is the case for Aruba due to a more unstable economy. Since the world crisis more people are saving their money more and lending less, because of job insecurities. This makes it difficult for banks to expand their credit portfolio and that is the reason why they offer a loan at a better rate than Aruba.

END OF CHAPTER THREE
Here a short summary will be given of this chapter and an idea will be given what will happen in the chapter 4.

1. **Subsidies**
   - Infrastructure
     - Introducing a minimum income rent
2. **Another calculation method**
   - All prices in Net present value
   - Rate of return
   - Exit value
   - Longer exploitation term, 25 years and 30 years

3. **More commercial active**
   - Enlarging the share of the middle income group in the rental stock of FCCA
   - Introducing yearly rise of rent

4. **Cheap money**
   - From special funds FDA
   - Introducing a incentive for the local financial institutions
   - Through foreign organizations
     - In the Netherlands
       - DIGH
       - WSW
     - Curacao
       - Commercial banks

In chapter 4, a calculation of the effectiveness of the following strategies are measured with the constructed model in Excel:
   - Infrastructure as an object subsidy
   - Introducing Exit Value in cash flow
   - Extending the exploitation period
   - Rise of rent
   - Rise of Exit Value
   - Debt financing at an interest rate of 4,5%, 5,0%, 5,5%, 6,0% and 7%

The financial effectiveness of some strategies cannot be measured in the constructed model, such as the minimum income rent, using the price development of land lease to develop social housing and enlarging the share of the middle income group. However an attempt will be made to illustrate their impact in chapter 4.
CHAPTER 4: EFFECTIVENESS OF THE STRATEGIES

In this chapter the following question will be answered. From the alternatives proposed in chapter 3, which ones are the three most effective?

Before addressing the question an elaboration will be given on the reference project and how this is used as a measuring tool, followed by the result of the effectiveness of the alternatives. Alternatives that cannot be measured with the model are discussed afterwards and subsequently the best three alternatives will be chosen based on their financial impact.

THE REFERENCE PROJECT AS A MEASURING TOOL

The method that will be used to measure the effectiveness of the alternatives is comparison. The financial results of each alternative will be calculated and then compared to the reference project. The two alternatives which offer the best financial results will then be the best two alternatives that can make social housing more affordable on Aruba.

The financial information (FCCA; J.Poppen, 2010) of the reference project has been used to make a cash flow model, which in turn will be used to compare the different alternatives proposed. This cash flow model is constructed in Excel, making it easy to adjust the different conditions of the proposed alternatives. To make sure to measure only direct effects, only one condition is altered at the same time.

THE REFERENCE PROJECT

The reference project is a project consisting out of 50 dwellings, 15 are one-bedroom dwellings, 18 are two-bedroom dwellings and 17 are three-bedroom dwellings. The construction of these dwellings was finished in April 2010 and FCCA is currently building the infrastructural works (laying pipes and building roads).

The rent prices as calculated in calculation of FCCA, in which the infrastructural works were included, are: (FCCA; J.Poppen, 2010)

- AFL 1.010 (USD 564) for the one bedroom dwelling
- AFL 1.360 (USD 760) for the two bedroom dwelling
- AFL 1.590 (USD 888) for the three bedroom dwelling
As can be noticed, all these dwellings are above the maximum rent price of AFL 1000 (USD 559), which makes these dwellings unaffordable as they are not eligible for rent subsidy unless the rent prices are lowered. In this case FCCA will adjust these prices in order to be eligible for rent subsidy.

**TOTAL INVESTMENTS**
The total investment with the infrastructural costs is AFL 6.643.482 (USD 3.711.442), including a mark-up of 4%. The building contract price was AFL 4.263.555,10 (USD 2.381.874) and the total building cost was AFL 5.059.550,53 (USD 2.826.565).

**FINANCE COSTS**
To finance this project FCCA received a DIGH loan of AFL 3.221.589,13 (USD 1.799.770) at an annual interest rate of 6,67% and a total of AFL 3.421.892,87 (USD 1.911.672) of their own capital was used. For this loan an exemption has been given of the foreign exchange rate fee of 1,3% by the Minister of Finances. This foreign exchange fee is required when a foreign loan sum surpasses the amount of AFL 750.000 (USD 418.994). Other costs are the transfer commission of the bank, which are 0,125% of the yearly payment and an additional Swift charge of AFL 35 (USD 20) per transaction.

**GROUND COSTS**
This project like all other social housing projects is built on lease ground of the government. There is a yearly lease rent for the ground and this is AFL 0,75 (USD 0,42)/m². Each dwelling has a plot size of 260 m², as a result the total plot size of the project is 13.000 m² and the lease rent is AFL 9.750 (USD 5.447) on a yearly basis. That is AFL 195 (USD 109) per dwelling per year. It is a fixed price and it is not to be increased during the lease period. Besides the lease rent for the ground, there is another ground cost that is paid by FCCA, the ground tax. This is 7,5% of the asked yearly rent. In case there is an increase in rent price there will also be an increase in ground tax.

**MAINTENANCE COSTS**
The yearly maintenance is 1.5% of the building contract price (AFL 4.263.555,10/ USD 2.381.874) and there is an annual increase of 2%. For the scheduled big repairs every five years, 5% of the building contract price (AFL 4.263.555,10/ USD 2.381.874) is reserved and it increases yearly with 4%.
Figure 8: A picture during the construction of the reference project in 2009

Source: www.fcca.com

ADMINISTRATIVE AND OTHER COSTS
The yearly administrative and other costs are 1.25% of the building contract price (AFL 4.263.555,10/ USD 2.381.874) and it increases on yearly basis with 4%.

INSURANCE
The insurance is AFL4.760,69 (USD 2.660) in the first year and it increases with 5% each year.

VACANCY AND UNCOLLECTABLE RENT
The costs due to vacancy or uncollectable rent are calculated as followed by FCCA. For the vacancy 2% of the asked rent price is reserved and for the uncollectable rent 5% of the income rent. In the cash flow model these costs are simplified as 2.2% of the asked rent price. If there is an increase in rent price there will also be an increase for the vacancy and uncollectable costs.
Table 10: Overview of the financial information of the reference project in AFL (AFL 1,79=USD 1)

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own investment money</td>
<td>3.421.892,87</td>
<td>AFL</td>
</tr>
<tr>
<td>Debt financing</td>
<td>3.221.589,13</td>
<td>AFL</td>
</tr>
<tr>
<td>Total investment</td>
<td>6.643.482</td>
<td>AFL</td>
</tr>
<tr>
<td>Investment per dwelling</td>
<td>132.869,64</td>
<td>AFL</td>
</tr>
<tr>
<td>Maintenance costs</td>
<td>63.953,33</td>
<td>AFL/year</td>
</tr>
<tr>
<td>Big repairs</td>
<td>213.177,76</td>
<td>AFL/5 years</td>
</tr>
<tr>
<td>Amortization</td>
<td>296.339,99</td>
<td>AFL/year</td>
</tr>
<tr>
<td>Bank costs</td>
<td>405,42</td>
<td>AFL/year</td>
</tr>
<tr>
<td>Fire insurance</td>
<td>4.760,69</td>
<td>AFL/year</td>
</tr>
<tr>
<td>Ground lease</td>
<td>9.750,00</td>
<td>AFL/year</td>
</tr>
<tr>
<td>Ground tax</td>
<td>46.839,89</td>
<td>AFL/year</td>
</tr>
<tr>
<td>Vacancy and uncollectable</td>
<td>13.739,70</td>
<td>AFL/year</td>
</tr>
<tr>
<td>Admin. and other costs</td>
<td>53.294,44</td>
<td>AFL/year</td>
</tr>
<tr>
<td>Rise of rent</td>
<td>0,0%</td>
<td>Yearly</td>
</tr>
<tr>
<td>Increase maintenance costs</td>
<td>2,0%</td>
<td>Yearly</td>
</tr>
<tr>
<td>Increase big repair costs</td>
<td>4,0%</td>
<td>Yearly</td>
</tr>
<tr>
<td>Increase insurance</td>
<td>5,0%</td>
<td>Yearly</td>
</tr>
<tr>
<td>Increase admin. costs</td>
<td>4,0%</td>
<td>Yearly</td>
</tr>
<tr>
<td>Time of operation</td>
<td>21</td>
<td>Years</td>
</tr>
</tbody>
</table>

Source: FCCA, J. Poppen, Investeringsproject DIGH 50 woningen te Palislaweg

THE EXCEL MODEL

The cash flow model constructed here is completely different compared with the way FCCA calculate its cash flows. Here are the main differences:

- This Excel model is a net present value calculation. The rate of return used here is 4%.
- The method used here to determine the rent price is to calculate the rent price when there is a zero net result of the cash flow, by using the goal-seek function in Excel. The calculation method of FCCA to determine the monthly rent prices, by taking 1% of the total investment costs is ignored here.
When calculating the reference project in this model it clearly shows, that high rents are necessary in order for this project to be feasible.

Source: Own construction
In table 11 the effects can be seen of each alteration of a specific variable in the cash flow model. For each measurement, only one variable is changed at a time to make sure to measure only the direct effects of that specific variable. Each alteration of a variable result in an average (asked) rent price which is then compared with the average asked rent price of the reference project. A (+) sign will be given if the asked rent price results in a higher price and a (–) sign will be given if this results in a lower price. The baseline for the average asked rent price, the 0% is AFL 1403,24 (USD 784), as seen in the first row of table 11. To consult the cash flow calculations of each alteration see annex 10.
Table 11: List of variables put to test to measure their effect

<table>
<thead>
<tr>
<th>Variable subject to change</th>
<th>How this is changed</th>
<th>Effect on average rent price in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference project</td>
<td></td>
<td>0% (AFL 1403,24)</td>
</tr>
<tr>
<td>Infrastructural costs</td>
<td>Excl. in the total investments</td>
<td>-11,0% (AFL 1248,26)</td>
</tr>
<tr>
<td>Exploitation period</td>
<td>25 years</td>
<td>-7,4% (AFL 1298,88)</td>
</tr>
<tr>
<td>Exploitation period</td>
<td>30 years</td>
<td>-11,7% (AFL 1238,71)</td>
</tr>
<tr>
<td>Rent price</td>
<td>Rise of rent + 1% yearly</td>
<td>-8,9% (AFL 1277,62)</td>
</tr>
<tr>
<td>Rent price</td>
<td>Rise of rent + 2% yearly</td>
<td>-17,3% (AFL 1160,66)</td>
</tr>
<tr>
<td>Exit Value</td>
<td>Exit value in incl. in cash flow</td>
<td>-8,4% (AFL 1285,56)</td>
</tr>
<tr>
<td>Exit Value</td>
<td>Rise of exit value + 1% yearly</td>
<td>-10,3% (AFL 1254,21)</td>
</tr>
<tr>
<td>Exit Value</td>
<td>Rise of exit value + 2% yearly</td>
<td>-12,7% (AFL 1224,87)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 7%</td>
<td>+0,9% (AFL 1416,01)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 6%</td>
<td>-2,0% (AFL 1374,68)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 5,5%</td>
<td>-3,5% (AFL 1353,74)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 5%</td>
<td>-5,0% (AFL 1333,24)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 4,5%</td>
<td>-6,4% (AFL 1313,22)</td>
</tr>
</tbody>
</table>

Source: Own construction

**EFFECTS OF OTHER ALTERNATIVES**

As mentioned in the end of chapter 3, there are three alternatives that cannot be measured in the excel model. The minimum income rent, the price development of land lease and enlarging the middle income group. Here the impact of these three alternatives will be discussed.

The first two alternatives, the minimum income rent and the development of land lease are alternatives which can generate (extra) money for the government. They can redistribute their subsidy system and afford to pay for the infrastructural costs in a social housing project. It requires true commitment of the government for these alternatives to have financial impact on FCCA.

The third alternative, enlarging the middle income group, have direct financial benefit for FCCA. And this last alternative is therefore the most interesting out of these three options for FCCA.
Table 12: Other variables and their effect

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Positive effect for</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum income rent</td>
<td>The government. Financial effect for FCCA depends on the commitment of the government.</td>
<td>(+) The share of rent subsidy diminishes which can then be reinvested in infrastructure for example.</td>
</tr>
<tr>
<td>Price development of lease land</td>
<td>The government. Financial effect for FCCA depends on the commitment of the government.</td>
<td>(+) The money that the government can receive from this can be reinvested in infrastructure.</td>
</tr>
<tr>
<td>Enlarging middle income group</td>
<td>FCCA. No intermediate.</td>
<td>(+++) Because this alternative directly effects FCCA’s rental income.</td>
</tr>
</tbody>
</table>

Source: Own construction

THE BEST ALTERNATIVES

The aim of the effectiveness test is to determine which variables make the biggest difference in lowering the average asked rent prices. The ones measured with the Excel model give a clear answer to this question and they are easier to rank.

Even though enlarging the middle income group is considered an interesting alternative, it will not be ranked in the best five alternatives due to the lack of real figures to compare. FCCA has tried numerous times to attract more middle income groups among their clients. But this is difficult as many middle income groups do not wish to rent but prefer to own their own dwelling, as this is strongly rooted in the culture of Aruba. Realizing more commercial rent remains thus a challenge, but they keep trying.

THE BEST FIVE

The first two variables that have made the biggest differences are the annual rise of rent prices and calculating with an exit value with a yearly increase of 2%.

An annual rise of rent prices is a more commercial approach that FCCA can engage into. If the rent is yearly increased by 2%, then the average rent will be 17.3% lower than the reference project. If the exit value is increased with 2% on yearly basis, just like the maintenance costs, this result in an average asked rent price that is 12.7% lower than the reference project.
Table 13: List of variables put to test to measure their effect in order of their effectiveness

<table>
<thead>
<tr>
<th>Variable subject to change</th>
<th>How this is changed</th>
<th>Effect on average rent price in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent price</td>
<td>Rise of rent + 2% yearly</td>
<td>-17,3% (AFL 1160,66)</td>
</tr>
<tr>
<td>Exit Value</td>
<td>Rise of exit value + 2% yearly</td>
<td>-12,7% (AFL 1224,87)</td>
</tr>
<tr>
<td>Exploitation period</td>
<td>30 years</td>
<td>-11,7% (AFL 1238,71)</td>
</tr>
<tr>
<td>Infrastructural costs</td>
<td>Excl.in the total investments</td>
<td>-11,0% (AFL 1248,26)</td>
</tr>
<tr>
<td>Rent price</td>
<td>Rise of rent + 1% yearly</td>
<td>-8,9% (AFL 1277,62)</td>
</tr>
<tr>
<td>Exit Value</td>
<td>Exit value in incl. in cash flow</td>
<td>-8,4% (AFL 1285,56)</td>
</tr>
<tr>
<td>Exploitation period</td>
<td>25 years</td>
<td>-7,4% (AFL 1298,88)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 4,5%</td>
<td>-6,4% (AFL 1313,22)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 5%</td>
<td>-5,0% (AFL 1333,24)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 5,5%</td>
<td>-3,5% (AFL 1353,74)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 6%</td>
<td>-2,0% (AFL 1374,68)</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Interest rate at 7%</td>
<td>+0,9% (AFL 1416,01)</td>
</tr>
</tbody>
</table>

*Source: Own construction*

Three other very important elements in the cash flow is, whether the exploitation period is increased or not whether the infrastructure is subsidized or not and whether there is an attractive rate or not.

- To calculate a project for a longer period than 20 years would also make a big difference in the affordability of these dwellings. By adding 5 more years to the exploitation period, the average rent would be 7,4% lower than the reference project and when adding 10 extra years the average rent would be 11,7% lower than the reference project.

- If the infrastructure is excluded from the investments the average asked rent price would be 11% lower than the reference project.

- If there is a more attractive loan rate at 4,5% or 5%, this would result in an average asked rent price that is respectively 6,4% and 5,0% lower than the reference project.
END OF CHAPTER FOUR

The strategies, to lengthen the exploitation period and to introduce an exit value with a yearly increase of 2% are two good strategies to lower the rent prices, however they do not result in real extra money, as they are only an accounting profit. In chapter 5, only the best three strategies will be analyzed, that result in real positive financial impact for FCCA.

THE BEST THREE

- Yearly rise of rent

Here the tenant has to pay more income rent and the government has to pay more rent subsidy each year.

- Infrastructure as a subsidy

The government has to pay

- Attractive rate for credit loans

It can be achieved by lowering the risks for the banks. And the government has to pay the incentives that are designed to stimulate money lenders to provide attractive credit. Or the government can function as a guarantor of the loan to eliminate the risks.
CHAPTER 5: EFFICIENCY AND SUPPORT OF STRATEGIES

In this chapter a more in depth look will be taken at the best three strategies chosen in chapter 4, to see how efficient each strategy is and whether these strategies have the support of the actors involved. Both the efficiency and the support are measured through interviews taken with the different actors. Unfortunately the Minister of Infrastructure and Planning was unavailable to answer questions, so the point of view of the government is based on latest developments, see annexes 1-5.

EFFICIENCY

For the evaluation of efficiency the following questions will be answered for the best three strategies. Here the more formal steps are summed up for the implementation of each strategy; the actions, the actors and the time needed. Then the potential benefit can be considered against the efforts necessary for implementation.

Table 14: Five strategies and the efficiency questions

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Questions for efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yearly rise of rent</td>
<td>1. What is the potential benefit?</td>
</tr>
<tr>
<td>2. Infrastructure costs as object subsidy</td>
<td>2. What efforts are needed?</td>
</tr>
<tr>
<td>3. Attractive rate for credit loan</td>
<td>2.1 What needs to be done to implement this strategy? The actions.</td>
</tr>
<tr>
<td></td>
<td>2.2 Who needs to be involved? The actors</td>
</tr>
<tr>
<td></td>
<td>2.3 How long will it take? Time</td>
</tr>
</tbody>
</table>

Source: Own construction

YEARLY RISE OF RENT

POTENTIAL BENEFIT

The potential benefit for a yearly rent increase, as measured in chapter 4, is shown again in table 15.
Table 15: Potential benefit of a yearly rent increase

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Benefit: total reduction of average rent price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A yearly rent increase of 2%</td>
<td>-17,3%</td>
</tr>
<tr>
<td>A yearly rent increase of 1%</td>
<td>-8,9%</td>
</tr>
</tbody>
</table>

Source: Own construction

EFFORTS NECESSARY

The actions

The rent regulation needs to be revised. The procedure to change a law is as following, at least three members of parliament are needed that supports this new law, then the concept of this new law must be approved by all concerning departments (of government) and finally this needs to be approved by the parliament.

Then this new method has to be implemented by the employees of FCCA, as their new method of calculation of the cash flow. This may require some adjustments in their system, for example, alternation may be required for the standard working sheet of Excel and/or other computer programs.

The actors

The rise of rent primarily concerns:
- FCCA
- The renters
- Government (The Minister of Infrastructure and Planning and the Minister of Finances)
- The Rent commission (‘De Huurcommissie’)
- Tenants committee

Time

The time that is needed to enforce this new strategy can take several months, even longer than a year. It all depends on the urgency that this new law receives from the Minister of Infrastructure and Planning, the Minister in charge of FCCA and what the support is of the other actors.
The potential benefit if infrastructure becomes an official form of subsidy, as measured in chapter 4, is shown again in table 16.

### Table 16: Potential benefit of a yearly rent increase

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Benefit: total reduction of average rent price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructural costs as subsidies</td>
<td>-11.0%</td>
</tr>
</tbody>
</table>

Source: Own construction

### EFFORTS NECESSARY

#### The actions
An official agreement has to be reached in order for it to be legally binding. In chapter 3, an elaboration was given how the subsidy system could be transformed with minimal increase of the total subsidy contribution by the government. All parties must agree on the following themes for this revision of the subsidy system to take place: the rent regulation (especially how rent prices are determined, plus possible rent increases), the rent subsidy, the income rent and making infrastructure an official object subsidy for the benefit of FCCA.

#### The actors
To following actors are needed in this process:
- FCCA
- Government (The Minister of Infrastructure and Planning and the Minister of Finances)
- The Department of Social Affairs
- The Department of Public Works (DOW)

#### Time
The willingness of the government here determines the time this will take to implement. If the government is willing, the negotiations about the operations can take up a few months. But if the government is unwilling it can take much longer to try to convince the government of the benefits and the necessity of this subsidy.
ATTRACTIVE RATE FOR CREDIT LOAN

POTENTIAL BENEFIT

The potential benefit when there is access to a more attractive loan, as measured in chapter 4, is shown again in table 17.

Table 17: Potential benefit of a yearly rent increase

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Benefit: total reduction of average rent price</th>
</tr>
</thead>
<tbody>
<tr>
<td>An interest loan of 5%</td>
<td>-5,0%</td>
</tr>
<tr>
<td>An interest loan of 5,5%</td>
<td>-3,5%</td>
</tr>
<tr>
<td>An interest loan of 6%</td>
<td>-2,0%</td>
</tr>
</tbody>
</table>

Source: Own construction

EFFORTS NECESSARY

The actions

On the local market with the help of an incentive:

The government needs to be persuaded that this would benefit social housing on Aruba. And in order to have a real effect this must become a law, otherwise commercial banks would still feel insecure about it. So the first step is to persuade both the Minister of Infrastructure and Planning and the Minister of Finances. Then the normal procedure must start when making a new law. At least three members of parliament are needed that supports this new law, the concept of this new law must be approved by all concerning departments (of government) and finally this needs to be approved by the parliament.

From the special fund FDA:

In order for FCCA to be able to access attractive loans from this fund, both the government of Aruba and the government of the Netherlands have to officially agree. FCCA probably has to convince the local government first and then together ask the permission of the Dutch government. After both governments consent to allow use this fund for housing, FCCA would have to deal with AIB, the manager of this fund in Aruba, to formalize a loan.

Access to loans from DIGH:

DIGH has already approved a loan before with FCCA, for the realization of the reference project used in this thesis. If another loan is to be made between the two parties the same procedures has to be repeated. Both DIGH and CBA have to check the financial state of FCCA.
and approve the project before formalizing the loan. DIGH will also evaluate the management of the organization.

An important aspect to make this loan attractive is to get an official exemption of the foreign exchange fee of 1.3%, from the government. This foreign exchange fee is required when the total loan sum surpasses the amount of AFL 750,000 (USD 418,994). There is already a list of organizations that are excused from paying this fee. The Minister of Finance has to agree to allow FCCA to get on that list as well. When the Minister of Finances consents, then CBA can change its policy, making it then officially binding.

*Access to loans with the guarantee of WSW:*

Currently, this is not allowed by law. But there is an option to make this possible, a ‘Rijkswetvoorstel’, a change of the law, can make it possible for organization in Aruba to become a ‘toegelaten instelling’, an authorized institution, if they can comply with the rules set by CFV. So there are two steps here, first the law has to be adapted and secondly the organization has to comply with certain rules.

**Procedure to change the law through a ‘Rijkswetvoorstel’**

When the Dutch government, WSW, CFV and Aedes consent to this ‘Rijkswetvoorstel’, then the department of WWI will prepare a bill, which is send to the ‘Raad van State van het Koninkrijk’ for approval. After receiving comments from the ‘Raad van State van het Koninkrijk’ the bill is adjusted if necessary. Afterward the bill is sent to the parliament of the Netherlands, the parliament of Dutch Antilles and the parliament of Aruba. These parliaments will then continue to process this bill.

**Procedure to become an authorized institution**

When the law is functioning, a request must be sent to CFV. CFV has a specific system to examine the applicants. The applicants must comply with the rules concerning Bbsh. The organization is scanned on its financial health, its independent functioning (corporate governance), its role as contributor to housing in the city and its bonding with the city. A clear motivation must clarify the effectiveness for the applicant, of being an authorized institution. The key subjects during the assessments are the financial assessment of the applicant, the importance of social housing and the tie between the applicant and the local community.
Access to loans in Curacao:
This strategy is already possible. But FCCA still needs to ask for foreign exchange permission from the CBA if the total loan sum surpasses the amount of AFL 750,000 (USD 418,994). FCCA should realize this loan in Netherlands Antillean Guilder (ANG), in order to get an exemption of the foreign exchange fee of 1.3%. The action in this case is mere a formality check of CBA on the financial state of FCCA before approving this loan.
### The actors

Table 18: The list of actors needed in the five different strategies to access a more attractive loan

<table>
<thead>
<tr>
<th>Actor</th>
<th>On the local market with the help of an incentive</th>
<th>From the special fund FDA</th>
<th>Access to loans from DIGH</th>
<th>Access to loans with the guarantee of WSW</th>
<th>Access to loans in Curacao</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCCA</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The Aruban Government</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CBA</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SIAD</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIGH</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The Dutch Government</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bank in Curacao</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Central Bank Curacao</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>WSW</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CFV</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Aedes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WWI</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Parliament of NA</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Parliament of Aruba</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Dutch Parliament</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Raad van State van het Koninkrijk</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Source: Own construction
Time

In the following table it is assumed that the actors are willing to realize the proposed strategies.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Less than 6 months</th>
<th>More than 6 months but less than a year</th>
<th>More than a year</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the local market with the help of an incentive</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From the special fund FDA</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to loans from DIGH</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to loans with the guarantee of WSW</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to loans in Curacao</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own construction

SUPPORT

YEARLY RISE OF RENT

FCCA (Laclé, 2010):
The increase of rent is something that FCCA had wish for years now, so they do support this alternative.

Government:
The government is expected to oppose a yearly rent increase as this automatically means an increase in of the rent subsidy. Only if the rent prices are low they may agree to a yearly increase in the rent prices.
The tenants:
The tenants will agree to a rent increase as long as it is compensated with extra rent subsidy. If their income rent is increased as well, then they will not agree with this strategy. The clients of FCCA are used to a fixed price so some time is needed for them to adjust to the idea of a price increase.

INFRASTRUCTURE AS AN OBJECT SUBSIDY
FCCA (Laclé, 2010):
FCCA wants infrastructure as a subsidy when developing new social housing. However they think that a minimum income rent is not a reasonable approach for the government to generate more for infrastructure, because many of their clients have a very low income and would not be able to pay this minimum income rent of for example AFL150 (USD 84).

FCCA does not think that the other method proposed, to use the developments of land value of the lease land, to generate more money to invest in housing and infrastructure is a great idea. This method will increase the housing costs of many households in Aruba, making homeownership unaffordable for a much larger group than it is the case now. It may help with the social housing but it will create more problems for the homeownership market.

In the opinion of FCCA, they do not see the need to change the way the rent prices are calculated, for both the determination of the rent prices and the determination of the income rent. The affordability of the dwellings for the lower income group is in their opinion the responsibility of the government and they should provide the rent subsidy necessary.

Government:
The Minister of Infrastructure and Planning acknowledges the fact that rent subsidies and the infrastructure as subsidies are needed but due to the current bad relation between FCCA and the government this problem can take a while to resolve. See annex 1-5.

The current government is not pro more taxes, as of January 2010 they reduced the sales tax on Aruba from 3% to 1,5%. So neither the idea to increase the income rent price or the idea to link lease land value to market value will be supported by the current government.
CHEAP BORROW MONEY

FUNDS OF FDA

FCCA (Laclé, 2010):
They support this and think that this could really help them realize more social dwellings if they could have access to this fund.

AIB (Solagnier, 2010):
As manager of this fund they cannot decide whether or not FCCA should be allowed to this fund. It would be the decisions of the two countries, Aruba and The Netherlands.

Government of Aruba:
It is expected that the current government would not oppose to this idea, however due to the current relation between FCCA and the government, it may take a longer period for the current government to agree to let FCCA borrow money from the funds of FDA.

Government of The Netherlands:
If the government of Aruba has agreed to allow FCCA borrow money from this fund, they would not oppose to the idea and allow housing as one of the investments opportunities.

ON THE LOCAL MARKET WITH THE HELP OF INCENTIVES

FCCA (Laclé, 2010):
They think this could help to get better rate on the local market.

CMB (Xina Tromp-Giel, 2010):
This bank is also under the impression that this would make a difference in stimulating the commercial banks to offer a more attractive loan.
ArubaBank (Veen, 2010):
This bank is not sure if this incentive would make a lot of difference in the rate that can be offered to FCCA.

RBTT (Rafini, 2010):
This bank is not primarily interested in providing social loans, a low rate loan. However this incentive could influence their way of doing business, it could change their willingness.

The government:
It is expected that the government will agree to this because there are no direct costs for the government. This profit tax that is exempted, would not be received by the government if the incentive were not there. As many local banks are not willing to provide an attractive loan, FCCA will not take a loan with them at a higher rate.

CBA (Ginny Croes-Fleming, 2010):
They are of the opinion that this could work, but some careful calculations are needed to measure the effectiveness of this incentive, to determine what a fair reduction in the rate could be.

DIGH (Nieuwenhof, 2010):
This organization is willing to continue to offer FCCA more loans in the future if they are able to offer a more affordable loan. FCCA is at the moment a client of them and therefore they can monitor their financial state. Nonetheless they will still evaluate again the financial state, project information and management (corporate governance) before formalizing the next loan. They will not continue to work with FCCA if there is a lot of political interference within the organization.

Government:
The current government wants more saying on how FCCA should be managed, they want more political interference. This will badly influence the possibility for future loans with DIGH.
LOANS WITH A GUARANTEE OF WSW

FCCA (Laclé, 2010):
FCCA wants to proceed and keep trying to persuade the government to start the process to change the law. FCCA is willing to adapt in order to be found qualified to become an authorized institution.

Dutch members of Parliaments: (Jan Bas Bochove, 2010):
They think that the law needed, a ‘Rijkswetvoorstel’, can be achieved. However they are of the opinion that Aruba should take the initiative in this matter.

WSW (Post, 2009):
If the government approves the ‘Rijkswetvoorstel’, they would not object, they will think of a way how the guarantee structure can function for applicants like FCCA. Maybe a subsystem can be created for countries outside of the Netherlands.

CFV (Moolen, 2010):
If the government approves the ‘Rijkswetvoorstel’, they would not object to it. They are willing to offer FCCA guidance prior and during the application phase.

Government:
The current government wants more saying on how FCCA should be managed, they want more political interference. This will badly influence the possibility to ever become an authorized institution.

LOANS WITH COMMERCIAL BANKS IN CURACAO

FCCA (Laclé, 2010):
They have tried before to lend some money from Curacao is USD, now they will try in ANG.

CBA (Ginny Croes-Fleming, 2010):
Legally this is possible; however FCCA is still required to ask permission for a sum larger than AFL 750.000 (USD 418.994). If the financial state of FCCA is good, they can borrow money from Curacao.
In this chapter the efficiency and support was measured for the three best strategies, namely:

- A yearly increase of the rent prices
- Infrastructure as a subsidy
- Cheap money

Under the current political conditions it is expected that the negotiations will be hard between the government and FCCA. In the table 19, an idea is given how hard it will be to implement a certain strategy. And for a normal political climate between FCCA and the government of Aruba see table 20.

**Figure 12: The probability of success of the strategies under the current political conditions.**

<table>
<thead>
<tr>
<th>Easy to realize</th>
<th>Hard to realize</th>
<th>Very hard to realize</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Lending capital from Curacao</td>
<td>- Infrastructure as formal object subsidy</td>
<td>- To become an authorized institution (Guarantee of WSW)</td>
</tr>
<tr>
<td>- Lending capital from DIGH</td>
<td>- Lending capital from FDA</td>
<td>- Increase the rent prices</td>
</tr>
<tr>
<td>- Create incentive for local banks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 13: The probability of success of the strategies under the normal political conditions.**

<table>
<thead>
<tr>
<th>Easy to realize</th>
<th>Hard to realize</th>
<th>Very hard to realize</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Lending capital from Curacao</td>
<td>- Lending capital from FDA</td>
<td>- To become an authorized institution (Guarantee of WSW)</td>
</tr>
<tr>
<td>- Infrastructure as formal object subsidy</td>
<td>- Increase the rent prices</td>
<td></td>
</tr>
<tr>
<td>- Lending capital from DIGH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Create incentive for local banks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Own construction*
CHAPTER 6: CONCLUSIONS

In this chapter the research question will be answered based on all the previous chapters. Then an implementation plan is formulated for the chosen strategy, after that a list of the actors needed to implement this strategy is given and also how these actors can be engaged. After that possible pitfalls will be discussed and some suggestions will be given for future research.

THE BEST STRATEGY OR MIX OF STRATEGIES

The research question:
In order to promote future developments of social housing on Aruba, which strategy or mix of strategies influences the feasibility positively and should to that end be implemented, taking into consideration the effectiveness and efficiency of the strategies and the support of the actors?

The best strategies:
In chapter 4 it became clear that more than one strategy is needed in order to lower the rent prices below the maximum rent level of AFL 1000 (USD 558) per month. Based on the test in chapter 4 these are the four strategies to proved to more effective.

1. Infrastructure as a formal object subsidy
2. Capital lending 6% (either through Curacao or DIGH or trough incentives for the local commercial banks)
3. Increase of rent prices yearly of 2%
4. Exit value with a yearly increase of 2%

Strategies 1 to 3, results in a real financial benefit for FCCA.

1. Infrastructure as a formal object subsidy
The feasibility of the social dwellings is strongly influenced by the infrastructural costs, as was measured in the simulation in chapter 4. If the infrastructural costs is not covered by the government, the rent prices increases with 11%. The government of Aruba should assume her responsibility and pay for the infrastructure of each housing project, as any other country does.
2. Capital lending at 6% possible trough:
   a. Curacao; FCCA should try to access capital lending from Curacao. The interest rates are considerably lower than in Aruba. This loan should be set up in NAG in order to be exempted from the foreign exchange fee, stipulated by the CBA.
   b. DIGH; FCCA must maintain a good relation with DIGH in order to get access to more capital lending in the future. They should strive to keep their independency from the government and continue managing their organization under the code of good governance. FCCA should try to be more transparent in all their activities, but especially the social housing part. They can then gain the trust of more actors, that they are working hard for the general benefit of Aruba.
   c. Local banks; The government should ask CBA to conduct a study how to implement this strategy on the local market. All legal affairs must be in order before the commercial banks can offers such a loan to FCCA. The commercial banks on Aruba want a law that guarantees that the special conditions are legally binding before formalizing loan. The strategy can offer FCCA a good loan on the market of Aruba and is thus very important for the continuity of their tasks.

3. Yearly rent increase of 2%:
   The most difficult strategy that should be implemented is the yearly rent increase but this is very important for the continuity of FCCA. The prices should be increased yearly by at least the inflation rate for a project to have positive results. One of the problems why this cannot be easily done is the difficult construction of the rent income and rent subsidy. Most probably these regulations must also be revised in order to accomplish a consensus between the actors.

4. Exit value with increase of 2% yearly:
   Even though it does not result into real money it should be considered because real estate is an asset that can maintain its value for a long period of time when regular maintenance is carried out. The increase of 2% is logical as this is also the yearly increase of the maintenance cost.
Capital lending from Curacao can deliver quick financial results for FCCA. The infrastructure as a formal object subsidy, the capital lending from DIGH, the increase of rent prices and the creation of incentives for the local banks, which will result in attractive rates for FCCA, all ensure the continuity of the organization in the long run.

When this mix of strategies is calculated in the model used in chapter 4, this results in an average rent price of AFL 851.78 (USD 476), see figure 13 her below.

When comparing these results with the reference project, a rent price is realized that is 39.3% lower than the reference project, see table here below.

The support for these strategies is not great under the current political situation, see table 21. However a real effort must be done to work towards this new strategy for the general benefit of social housing in Aruba. These strategies combined can offer a significant difference in the financial cash flow making social housing feasible in Aruba.
Table 21: Support for the advised mix of strategies under current political conditions

<table>
<thead>
<tr>
<th>Easy to realize</th>
<th>Hard to realize</th>
<th>Very hard to realize</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Lending capital from Curacao</td>
<td>- Infrastructure as formal object subsidy</td>
<td>- Increase rent prices</td>
</tr>
<tr>
<td>- Exit value +2% yearly increase</td>
<td>- Lending capital from DIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Create incentive for local banks</td>
<td></td>
</tr>
</tbody>
</table>

Source: Own construction

THE IMPLEMENTATION PLAN

The implementation plan needed consist out of several phases. Here an overview.

1. Consensus with all the parties

The government plays a key role during this phase. If the government can reach a consensus with FCCA than the other parties will not be a problem to deal with. All parties have different interest, with different goals. For each party it must be clear what he wishes to realize with the new strategy.

2. Change of policies if needed

The policies that is referred here may be laws that need to be changed or policy papers, but also policies of the organization of FCCA.

3. Training of employees (of FCCA)

Prior introducing a new working method, training and communication among employees are essential. A clear division of labor must be agreed on before operation starts.

4. Implementing new strategies

Operation of new strategies

5. Evaluation of strategies

After the operation is completed, an evaluation can take place to assess if the goals that were stated in phase one is realized.

6. Improving 1-4 if needed

If the aimed goals were not realized than the procedure starts again from phase 1 to 4.
### ACTORS NEEDED

Table 21: Actors needed to implement the advised mix of strategies under current political conditions

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Actors needed</th>
<th>How to get them involved</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infrastructure</strong></td>
<td>&gt;Government</td>
<td>&gt;By showing the government that FCCA share common goals. By being more transparent towards the public in general to gain more trust.</td>
</tr>
<tr>
<td><strong>Borrow capital from Curacao</strong></td>
<td>&gt;CBA</td>
<td>&gt;They are already involved as supervisors of FCCA. CBA has to approve loans sums higher than AFL 750.000 (USD 418.994)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;Banks in Curacao &gt; Showing the banks that FCCA is credit worthy</td>
</tr>
<tr>
<td><strong>Borrow capital from DIGH</strong></td>
<td>&gt;CBA</td>
<td>&gt;Approving loans sums higher than AFL 750.000 (USD 418.994)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;DIGH &gt;Important is no meddling of the government in the organization.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;Government By showing the government that FCCA share common goals. By being more transparent towards the public in general to gain more trust.</td>
</tr>
<tr>
<td><strong>Borrow capital from local banks</strong></td>
<td>&gt;CBA</td>
<td>&gt;Approving loans sums higher than AFL 750.000 (USD 418.994)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;Government &gt;By showing the government that FCCA share common goals. By being more transparent towards the public in general to gain more trust.</td>
</tr>
</tbody>
</table>
### POSSIBLE PITFALLS

The biggest risks remain the unwillingness of the government to cooperate with FCCA. This can have serious consequences for the continuity to serve the low income group in Aruba. If the government does not change its attitude, FCCA will have no other choice to serve the middle income group who can afford these dwellings without rent subsidy.
The current relation that FCCA has with DIGH, which is very important for the continuity of FCCA in the long run, can also be disturbed if there is case of more political interference.

**FUTURE RESEARCH**

The information available about the housing market on Aruba is very limited. Researchers interested in addressing this theme may consider the following suggestions for a research:

- A more in depth housing market research, addressing the complete market, homeownership sector and rental sector, public and private. Type of dwelling, size of dwelling, year of construction of the dwelling, technical state of the dwelling, the current market price of the dwelling, wish to move to another dwellings, etc.
- Neighbourhoods and their characteristics.
- Affordability of housing on Aruba; the development of the rent prices and the selling prices. Why are the building costs so high? And is it the reason for the rapidly increase in rent prices and selling prices or are these the result of the tourists demand.
- How can Aruba practice an active land policy and how can the development of the land value contribute to development of housing and infrastructure in Aruba?
- What new building technique can be used in order to built dwellings that are cheaper, while maintaining a high quality level? What has been tried in the past and why has this failed?
DUTCH SUMMARY

Aruba bezit één woningstichting, de Fundashon Cas pa Comunidad Arubano (FCCA). In 1979 werd deze organisatie opgericht met als primaire doelen het bouwen van sociale huur- en koopwoningen, het verstrekken van kredieten voor de bouw of koop van een woning, de verhuur en het onderhouden van overheidswoonhuizen en de directievoering bij nieuwbouw- en onderhoudsprojecten van de overheid.

PROBLEEM

De stichting beheert en onderhoudt in totaal 1.509 sociale huurwoningen. Van deze woningen zijn er 759 eigendom van het Land Aruba en 750 eigen bezit. In de laatste jaren is de vraag naar sociale woningen flink gestegen onder andere door de volgende drie punten:
- De groei van de bevolking
- Veel meer echtscheidingen en éénouderhuishoudens
- De vergrijzing met de daar gewenste zorg

De wachtlijst is gegroeid tot 2.067 huishoudens, waarvan 1.441 actief bezig zijn met zoeken. FCCA kan niet voldoen aan deze toenemende vraag naar sociale woningen. De sociale woningbouw projecten worden steeds minder haalbaar door de volgende punten:
- De hoge bouwkosten
- Steeds minder bouwgrond beschikbaarheid
- Hoge leenkosten voor FCCA op de lokale financiële markt
- Streng controle op FCCA door de CBA
- De huursubsidie zijn voor huurwoningen met een maximale huurprijs van AFL 1.000 (USD 559).
- In de huurprijs regeling gedateerd uit 1938, staat dat de huurprijs per maand niet hoger mag zijn dan 1% van de bouwkosten en landkosten.
- Vaak moet FCCA tijdens het bouwen van haar projecten de kosten voor de infrastructuur ‘voorschieten’.

DOEL VAN DIT ONDERZOEK

- Een nieuw financiële systeem voor de sociale woningbouw van Aruba dat projecten in de toekomst haalbaar maakt.
ONDERZOEKSVRAAG
Welke strategie of mix van strategieën, gebaseerd op zijn (hun) effectiviteit, efficiëntie en draagvlak, zou geïmplementeerd moeten worden om toekomstige ontwikkelingen van sociale woningbouw op Aruba haalbaar te maken?

Streven voor de strategie(en) zijn dat deze:
- Een positief financieel resultaat opleveren voor FCCA
- Een positief resultaat binnen een aannemelijke tijd
- Een duurzame oplossing, ook voor ontwikkelingen op de lange termijn
- De strategieën dienen rekening te houden met de kosten van de overheid

ONDERZOEKSOPZET
Deel 1: Literatuurstudie en interview
  o Hoe wordt sociale huisvesting in andere landen georganiseerd?
  o Wat zijn de karakteristieken van de woningmarkt en woonbeleid van Aruba?
Resultaat: Wat zijn mogelijke strategieën voor Aruba?

Deel 2: Simulatie met een Excel model
  o Hoe effectief zijn deze strategieën?
Resultaat: Wat zijn de beste drie strategieën?

Deel 3: Interview
  o Hoe efficiënt zijn deze drie strategieën?
  o Wat is de draagvlak van deze strategieën?
Resultaat: Welke strategieën zijn het meest haalbaar?

Conclusies
RESULTATEN

Deel 1

De mogelijke strategieën voor Aruba zijn:
- Subsidie, infrastructuur officieel een subsidie maken (opvangen van de kosten voor de overheid door middel van verhoging inkomenshuur of door prijsontwikkelingen van de land)
- Netto contante waarde berekeningen voor de FCCA met een restwaarde en eventueel een langer exploitatie termijn.
- Meer commercieel actief zijn (Meer midden inkomens bedienen of huurprijsverhoging introduceren)
- Goedkope geldlening (via speciale fonds, op de lokale markt met behulp van een beloning voor de financiële markt of op de buitenlandse kapitaalmarkt)

Deel 2

De beste drie strategieën en hun effect op de gemiddelde huurprijs:
- Huurverhoging van 2% op jaartal levert een huurprijs vermindering van 17,3%
- Infrastructuur als officiële subsidie zorgt voor een huurprijs vermindering van 11%
- Goedkope geldlening met een rente van 5% levert een huurprijs vermindering van 5%

Deel 3

De strategieën met de bijhorende steun onder een normale politieke situatie zijn:
- Veel steun:
  o Kapitaalleningen via Curacao
  o Infrastructuur als officiële subsidie
  o Kapitaalleningen via DIGH
  o Beloning voor de lokale financiële markt introduceren
- Weinig steun
  o Kapitaalleningen via speciale fonds
  o Jaarlijkse huurprijsverhogingen
- Nauwelijks steun
  o FCCA als toegelaten instelling onder de garantie van WSW
CONCLUSIE
Gebaseerd op de vorige deelresultaten in het onderzoek is gekozen voor een mix van strategieën.
- Introduceren op korte termijn
  o Infrastructuur als officiële subsidie
  o Kapitaal leningen via Curaçao
  o Kapitaal leningen via DIGH (dit is al mogelijk maar moet vastgehouden worden)
  o Introduceren van een residuele waarde bij berekening van de huurprijzen
- Introduceren binnen aannemelijke tijd
  o Beloning creëren voor de lokale financiële markt op Aruba
- Introduceren op de lange termijn
  o Huurprijssverhoging

De draagvlak voor al deze strategieën kunnen wat minimaal zijn in verband met de huidige relatie tussen de overheid en FCCA. Maar desalniettemin moet FCCA alles proberen en zich blijven inzetten om de nodige steun van de overheid te krijgen.
BIBLIOGRAPHY


