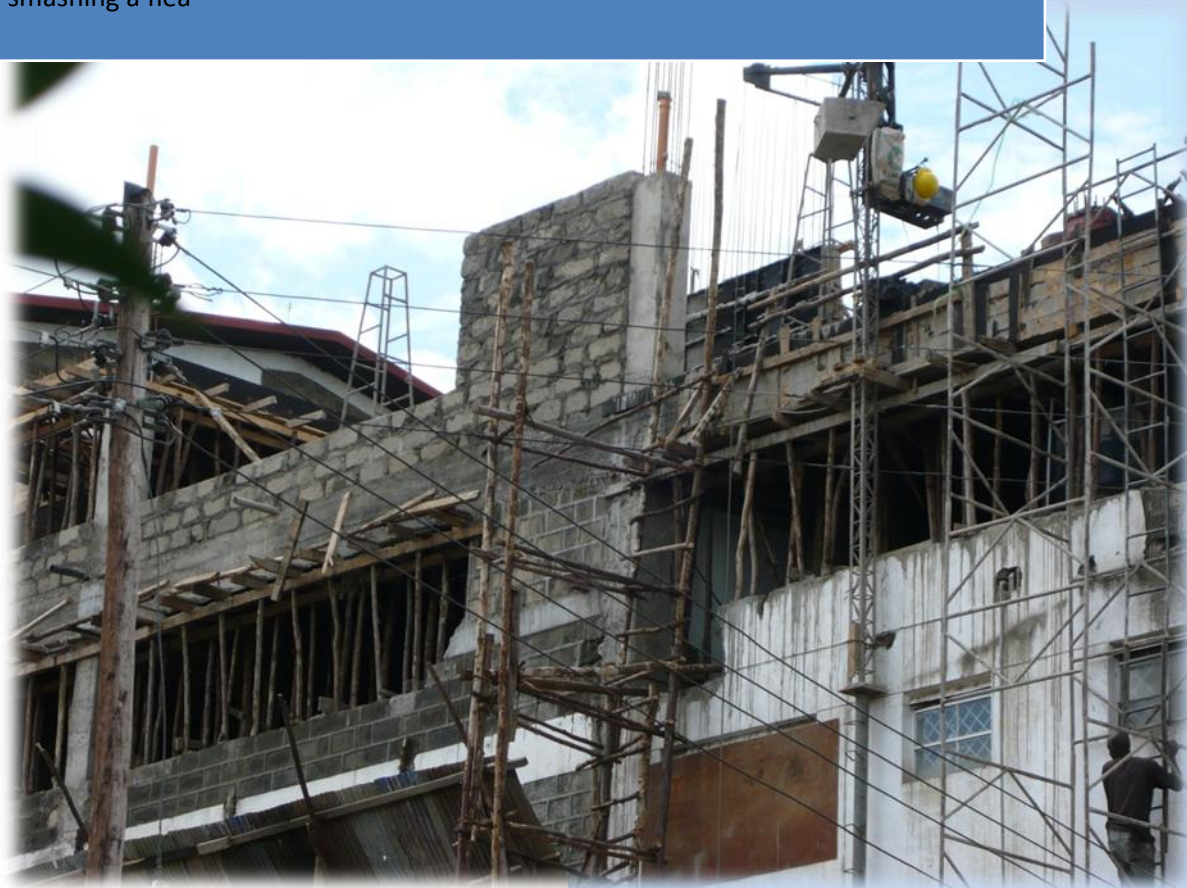


Public-private partnerships in low-cost housing, a case study in Nakuru, Kenya: Kidole kimoja hakivunji chawa*

*One finger is not capable of smashing a flea



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Public-private partnerships in low-cost housing, a case study in Nakuru, Kenya: Kidole kimoja hakivunji chawa*

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Introduction

The UN (2008) reports that more than one third of the growing urban population in developing countries is living in slum conditions. Lizarralde and Root (2008) show that urban low-cost housing policies in developing countries are often inefficient and could even lead to further market distortions. Their case studies in South Africa prove that the informal construction sector, the only sector that is able to meet the needs of low-cost housing, is often prevented from being involved. To realise greater participation of the informal construction sector and thus better meet the needs in low-cost housing, public-private partnerships (PPPs) are often mentioned in literature as a more promising way than present methods (Ha (2001), Browning (2000)). However, there is a gap in literature in how to realise these partnerships. Literature describes several types of partnerships but it is unclear on what grounds a certain type should be chosen. This article will describe how to select the right type of partnership.

For the realization of sufficient housing for the urban poor, Otiso (2003) also indicates that partnerships can help. Using a case study of an ongoing slum upgrading project in Nairobi, Kenya, he argues that new approaches are required to meet the needs of housing and service of settlements in Third World countries. He considers tri-sector partnerships (involving the state, voluntary and private sectors) as a solution to these problems. The selection of proper partners is crucial in such partnerships (Kumaraswamy and Anvuur (2008), Zhang (2005c)) and the success of these projects are highly depending on it. To be able to deliver successful low-cost housing projects, knowledge is needed about how to select the right type of partnership and how to select suitable partners. To fill this gap in literature, a research is carried out on the key actors and factors in choosing the type of public-private partnership in low-cost housing and selecting a suitable partner within the chosen type.

In theory the potential of public-private partnerships is high, practice proves however that value adding PPPs are rare and actors with opposite interests and characteristics make urban renewal and low-cost housing hard to realize. Marrewijk, Clegg et al. (2008) point out that project cultures play a central role in influencing successful cooperation between partners, therefore project culture is also measured in this study.

Given that partnerships occur in multiple forms and several criteria can be distinguished to predict the success of a partnership, the different forms of partnerships and the key factors need to be distinguished in order to select the partnership(s) which will contribute most to a project. After a literature review on both PPP and low-cost housing and a qualitative case-study in Nakuru, Kenya, three forms of partnerships and the most important criteria for selecting a partner are distinguished. Subsequently a model is created to select a partnership form in different situations and a partner within the chosen form. Finally this model is applied to the case of Nakuru and findings are discussed.

Developing a model of PPP in low-cost housing

PPP

Since many definitions of a Public-Private Partnership are used in literature, a clear definition is needed in the continuation of this study. This is taken from Bult-Spiering (2003): *A Public-Private Partnership is a cooperation of one or more public actors and one or more private actors, to realize a mutually agreed upon goal in an organizational structure that provides the means, accepts the risks and shares revenues.*

Three sectors of society distinguished in literature will be used to specify possible forms of PPP: *“Nowadays, planning and establishing construction projects is a challenge for the public sector, the private sector and civil society. These three sectors each have their own (economic) identity and characteristics: the public sector is orientated towards public interest, social responsibility and environmental awareness; the private sector is thought to be creative and dynamic; civil society (the ‘third sector’) is strong in areas that require compassion and commitment of individuals (Rosenau, 1999 in Bult-Spiering and Dewulf (2008)).*

Phumpiu and Gustafsson (2009) use these three sectors to describe three different kinds of PPPs: tri-sector partnerships, bi-sector partnerships and cross-sector partnerships:

“Tri-sector Partnerships concern the collaboration of three sectors: government, business and civil society. This type seems problematic for public service cases, because the definition is not clear about the inclusion of important stakeholders such as trade unions, the informal sector, the academia, the donor organizations, and the media (Rein et al. 2005). Thus, tri-sector partnerships might depart from non-included stakeholder’s assumptions, and thus the feasibility for not clearly discussed or analyzed outcomes when building the partnership.

Bi-sector partnerships have been common in WSS [water and sanitation service] and include only two sectors: the public and the private sector. In some cases, what began as a tri-sector partnership has ended up as a bi-sector partnership, because of the exclusion of one of the sectors, most commonly the civil society. Informal bi-sector partnerships refer to non-formalized partnerships, which are quite common within the WSS.

Cross-sector Partnerships: All sectors can join the partnership; they do not exclude partners from any sector willing to participate.” (Phumpiu and Gustafsson, 2009, pp 23)

Phumpiu and Gustafsson (2009) further clarify their definition of tri-sector partnerships by comparing a tri-sector and a cross-sector partnership in Latin America: *“The attitude of local governments in the two previous cases makes the difference in the partnership. While Cartagena Municipality [tri-sector] undertook the duties from the community, in Porto Alegre [cross-sector], the municipality delegated responsibilities among the partners and allowed partners participation in overall decision-making” (pp 27)*

Ergo, the characteristics of a tri-sector partnership compared to a cross-sector partnership are the following: it has a limited number of participants and several participants have limited power of decision.

Added value

Bult-Spiering and Dewulf (2008) describe that through cooperation between sectors, public and private actors expect to create added value. The cooperation leads to results that could not be achieved by the parties acting alone. To realise this they conclude that insight is needed into the economic and sociological essentials of the creation and functioning of temporary inter-organizational relationships, together with knowledge of the actors, network and other elements of the project to describe the characteristics of the ideal model PPP. Those elements will be used to describe the desirable type of partnership in low-cost housing.

Added value appears in several forms:

- (1) *Added value in content* This is accomplished at the project level by an integrated approach to problem solving and the realization of different, coherent functions. PPP improves the quality and innovation of the solution, e.g. the actual project
- (2) *Added value in process* This is effected by the early combination of complementary knowledge and experience, and by adjusting goals and interests. Private actors are expected to react more effectively and efficiently than can public actors, they have greater financial strength and knowledge of the relevant markets. Likewise, private actors can use the public actor's knowledge and competences concerning political procedures and decision-making processes.
- (3) *Financial added value* This is achieved by the division of risks and making adjustments to give an improved price/quality ratio. For example, public spaces or infrastructure becomes affordable by returns on real estate developments, while returns on real estate developments are increased by high quality public spaces and increased accessibility. Through co-operation, risks can be spread and therefore reduced per actor.
- (4) *External added value* This is affected by the co-ordination of different projects and initiatives. Developments in a certain area are often threatened by developments in adjacent areas. Through co-operation in PPPs, private actors can influence public activities in these developments and different initiatives can be harmonized." (Bult-Spiering and Dewulf, 2008, pp 28)

Critical success factors (CSFs)

Several studies regarding critical success factors and other key factors leading to success in PPPs in construction projects have been carried out. Because this study is focused on the selection of the type of partnership, the most frequently occurring factors with regard to selection have been gathered, using Jacobson and Choi (2008), Sanginga, Chitsike et al. (2007), Seitanidi and Crane (2009), Trafford and Proctor (2006), Jamali and Keshishian (2009), Bult-Spiering and Dewulf (2008), Zhang (2005a); (2005b); (2005c); (2009) and a study by Mwangi (2000) applied to the situation of Nakuru, where the case-study takes place. These studies together give an overview of the present knowledge about PPPs and partner selection in construction projects. Summarized, the following factors are mentioned most, divided by the author in two categories:

- I. Reliable concessionaire consortium with strong technical strength, sound financial package and appropriate risk allocation via reliable contractual arrangements.
- II. Interdependence, commitment/willingness to cooperate, common goal/shared vision, open communication/trust, converging working cultures.

With regard to the economic aspects, category I will be considered as key in realizing added value in content and financial added value, while the latter (II) will be considered as key in realizing added value in process.

Low cost housing

Critical success factors

Because this study is applied to low-cost housing, also literature considering this topic has been used to find critical success factors and other key factors in low-cost housing projects that are important in the phase of partner-selection. Ahadzie, Proverbs et al. (2008), Choguill (2007), Jayaratne and Sohail (2005), Lizarralde and Root (2008) and Lizarralde and Massyn (2008) show that at least three factors are considered as key in realizing a successful low-cost housing project: community involvement, an affordable loan and the integration of economic activities.

Further, Gulyani and Bassett (2007) argue for "an upgrading approach that is citywide, programmatic, channelled through and managed by government, and combines a community

demand orientation with supply-side rules of access. More importantly, the explicit longer-term goal of such an infrastructure upgrading strategy should be to integrate the slums into the city.”

Project types

In order to identify key actors in low-cost housing projects, there is the need to first identify the different types of low-cost housing projects. Choguill (2007) and Muraya (2006) give an overview of low-cost housing policies of the past centuries in developing countries and identify three different phases and types of low-cost housing: the public housing approach, where a contractor builds government owned low-cost rental houses, the self-help or ‘do-it-yourself’ projects, with site and service schemes where residents buy a plot and build their own house with for example a micro-mortgage and assistance of an NGO, and tenant-purchase, where tenants are able to buy their house from the government while renting it. Total private low-cost housing construction projects is a fourth form, but this will be left out of consideration as this research is concentrated on public-private partnerships and therefore public contribution to a project is necessary.

Because of this necessity, the conclusion of Gulyani and Bassett (2007) that these projects should be channelled through the government and the strong statement that PPP is a promising way in low-cost housing, the key actors will be determined from the following three main types of low-cost housing projects: the public housing approach, self help and tenant-purchase.

Literature and practice show two other factors as key in choosing the type of a low-cost housing project: the amount payable by the target group and planned duration of stay of the target group.

The amount payable by the target group

As shown in studies from a.o. Muraya (2006) and Huchzermeyer (2007), several low-cost housing projects failed to be successful, partly because the rent asked was too high for the target group, resulting in unoccupied buildings and rooms let out to middle-income groups instead of low-income groups. Swan et al (1983) and Kearne and Pariss (1982), both in Choguill (2007), show that low-cost houses built by the government tend to be still too expensive for the poorest 20 percent. In ‘Enabling affordable housing’, Makoba (2008) cites an estimation of the National Construction Council of Tanzania that says that self-construction is estimated to be 70 percent of contractors’ costs. This could be a major reason to choose self-help methods when planning housing for the poorest populations.

Planned duration of stay of the target group

Because two of the three distinguished types of low-cost housing require commitment from the target group for a long time (the payback time of a mortgage is long for someone with a low income) planned duration of stay of the target group is another key factor. Okoth (2009) reports that in a slum-upgrading project in Kibera, Nairobi, a number of residents has moved to other areas during the project and others have come to replace them. When a resident is not sure he is staying for a longer time, rental housing could be the better option.

Model

Since three types of low-cost housing are distinguished and those three types can be modelled in the three types of PPP (Bi-sector, Tri-sector and Cross-sector), the matrix in table 1 will be used. Given that often low-cost housing projects that did not meet expectations and literature research does not show many best practices of PPPs in low-cost housing, it seems useful to identify factors to select the proper type of a low-cost housing project. When this step has been taken, the selection of a suitable partner within a specific sector will be discussed in the developing world using literature and a case-study in Nakuru, Kenya.

Key actors and factors in choosing the type of PPP in low-cost housing

	Bi-sector (Public housing)	Tri-Sector (a.o. Tenant Purchase)	Cross-sector (Self help)
Public Parties	<ul style="list-style-type: none"> • Municipality • National Housing Corporation 	<ul style="list-style-type: none"> • Municipality • National Housing Corporation 	<ul style="list-style-type: none"> • Municipality • National Housing Corporation
Private Parties	<ul style="list-style-type: none"> • Contractor 	<ul style="list-style-type: none"> • Contractor • Bank / micro mortgage distributor 	<ul style="list-style-type: none"> • Contractor • Architect • Bank / micro mortgage distributor • NGOs • ...
Civil Society	-	<ul style="list-style-type: none"> • Tenants • CBOs 	<ul style="list-style-type: none"> • Tenants • CBOs

Table 1 Types and sectors in low-cost housing PPPs

Methodology

Using the information from literature described above, a list is created with key factors for PPPs and low-cost housing (table 2). After that a case study among several important actors in low-cost housing was carried out in Nakuru, Kenya. The following types of business and government were involved: several departments from the Municipal Council of Nakuru (MCN); National Housing (NHC); a bank; the Nakuru Business Association; a contractor; nongovernmental organizations (NGOs) and community based organizations (CBOs).

In a semi-structured interview respondents from the several sectors important for the project area were asked to list the key factors for a PPP in low-cost housing. After that, the list from table 2 was presented and the respondents were asked their opinion about the presented factors. Since Marrewijk, Clegg et al. (2008) point out that project cultures play a central role in influencing successful cooperation between partners, project culture was also measured in this interview. The respondents were asked to fill out the Organizational Culture Assessment Tool (OCAI) of Cameron and Quinn (1999), researching their organizational culture and their preferred working culture in a possible future PPP-team in low-cost housing, consisting of members of the public and private sector and civil society. The use of the OCAI of Cameron and Quinn (1999), being an easy method to measure culture, is justified by the research of Zuo and Zillante (2005) which identified the method of Cameron and Quinn (1999) as appropriate to use for measuring project culture in construction projects.

Key Factors	Sources
added value in content and financial added value	
<ul style="list-style-type: none"> • Reliable concessionaire consortium with strong technical strength 	Zhang (2005a), Kumaraswamy and Anvuur (2008), Jacobson and Choi (2008)
<ul style="list-style-type: none"> • Sound financial package 	Zhang (2005a)
<ul style="list-style-type: none"> • Appropriate risk allocation via reliable contractual arrangements 	Zhang (2005a), Ahadzie, Proverbs et al. (2008), Jacobson and Choi (2008), Kanter (1994)*, Bult-Spiering and Dewulf (2008)
added value in the process	
<ul style="list-style-type: none"> • Interdependence 	Samii et al (2002)*, Kanter (1994)*, Sanginga, Chitsike et al. (2007), Andriessen (1989)**
<ul style="list-style-type: none"> • Commitment/willingness to cooperate 	Samii et al (2002)*, Kanter (1994)*, Hagen (2002)*, Jacobson and Choi (2008), Seitanidi and Crane (2009), Alter & Hage (1993)**, Peters (1997)**, Bult-Spiering and Dewulf (2008)

Key actors and factors in choosing the type of PPP in low-cost housing

<ul style="list-style-type: none"> • Common goal/shared vision 	Samii et al (2002)*, Hagen (2002)*, Leiringer (2006), Jacobson and Choi (2008), Sanginga, Chitsike et al. (2007), Seitanidi and Crane (2009), Trafford and Proctor (2006)
<ul style="list-style-type: none"> • Open communication/trust 	Samii et al (2002)*, Kanter (1994)*, Leiringer (2006), Jacobson and Choi (2008), Seitanidi and Crane (2009), Trafford and Proctor (2006)
<ul style="list-style-type: none"> • Converging working cultures 	Samii et al (2002)*, Sanginga, Chitsike et al. (2007), Andriessen (1989)**, Bruijn et al.(1998)**, Schultz (1994)** Zuo and Zillante (2005)
CSFs from low-cost housing literature	
<ul style="list-style-type: none"> • Community involvement 	Choguill (2007), Jayaratne and Sohail (2005), Lizarralde and Root (2008), Jacobson and Choi (2008), Bult-Spiering and Dewulf (2008)
<ul style="list-style-type: none"> • Affordable loan 	Choguill (2007), Ferguson (1999)
<ul style="list-style-type: none"> • Integration of economic activities. 	Lizarralde and Massyn (2008)
Other relevant success factors	
<ul style="list-style-type: none"> • Experience in low-cost housing projects and PPP 	Kanter (1994)*, Bult-Spiering and Dewulf (2008)
<ul style="list-style-type: none"> • Political support 	Jacobson and Choi (2008)
* in Jamali and Keshishian (2009) ** in Bult-Spiering and Dewulf (2008)	

Table 2 Key factors in choosing the type of partnership

Justification location case study (Nakuru, Kenya)

As the first city in Kenya implementing the Localizing Agenda 21 (Post and Mwangi (2009)) and having an inter-municipal partnership with the municipality of Leuven (Tuts (1998)), the fast growing city of Nakuru is interesting for research. Mwangi (2000) and Post and Mwangi (2009) conducted earlier studies on PPP and community action in services upgrading in Nakuru and identified several points of attention. Further, Nakuru is one of the few cities that developed by-laws, making low-cost housing development easier. Finally, as MCN is currently in the process of developing a strategic housing vision and willing to upgrade their housing stock, most of it being low-cost, the city is a good place to carry out a research in PPP in low-cost housing.

Findings

Nakuru context

Nakuru, the capital city of the Rift Valley, is partly due to migration during the post-election violence the third biggest city of Kenya. It has approximately 750,000 residents and the population rate is rising. Due to migration of people from rural areas, the annual growth of the city is 7%. The current poverty level is 56%, the city has a 45% unemployment rate and the emergence of slums is a serious problem (Olwero (2008)). Tuts (1998) states that lack of investment and maintenance in urban infrastructure since the end of the 1970s has led to a dramatic reduction in the standards of urban services. This situation is aggravated by a lack of municipal autonomy in planning and management of its own affairs and by inadequate human, technical and financial resources. The main urban actors have lost faith in planning. When writing that article in 1998, the last structure plan dated back to 1975 and had never really been followed.

As mentioned before, the city takes part in the Localizing Agenda 21 program (LA21), based on the 1992 UN Conference on Environment and Development Agenda 21. The LA21 supports the use of a broad based environmental action plan, focused on municipal planning and management. It stimulates the integration of the action plans into a strategic structure plan and building cooperation

Key actors and factors in choosing the type of PPP in low-cost housing

between public and private sectors. A new strategic structure plan was written in 1999 but also this has not been followed thoroughly.

Studies from Mwangi (2000) and Post and Mwangi (2009) show that the potential role of partnerships is not easily realized in Nakuru and the latter study speaks of a 'controversial role of MCN' and 'antagonism between local leaders, pervasive influence of patronage and cronyism and chronic weaknesses of local government'. This already shows some difficulties for PPP.

In order to plan properly and create sufficient housing in the future, the city council is in the process of writing a strategic housing vision. In this process, the council is consulted by two NGOs with local presence, one of them being Solid House Foundation (SHF).

Another interesting matter for low-cost housing in Nakuru is a pilot from the Ministry of Housing with interlocking stabilized soil blocks (ISSB) using a hydroform machine.

Actors and Factors

Actors

The most important part of the research concerning actors can be found in the literature review above. For the case of Nakuru, several actors are important for the realization of low-cost housing. Most of them are already mentioned in table 1: MCN, National Housing Corporation (NHC), local contractors, architects, banks and micro-mortgage distributors, NGOs, current and future residents and CBOs. In the fifties and sixties of last century, MCN and NHC did a housing project together, realizing a large amount of one-roomed houses with shared bathroom facilities. Most of these estates are in a bad condition due to lack of maintenance. Because of a dispute and a recent settlement between MCN and NHC, these estates will soon be fully owned by MCN, leaving NHC with some other estates within the municipality.

To get an overview of the situation in Nakuru, the author conducted a preliminary study in several of the low-income estates owned by the MCN. This study showed that there is a considerable wealth disparity among the residents. Currently the residents pay a monthly rent of 500-600 Ksh. for a single room and a shared bathroom facility. Some respondents indicated that they would be able to pay 3000 Ksh. per month for an upgraded house, while others mentioned an amount of 700 Ksh. per month. Moreover, some of the residents within these low-cost areas were renting several houses next to each other, while others have a ten person households in one unit.

In total ten actors from the three different sectors were interviewed. The outcome of the interviews will be presented below.

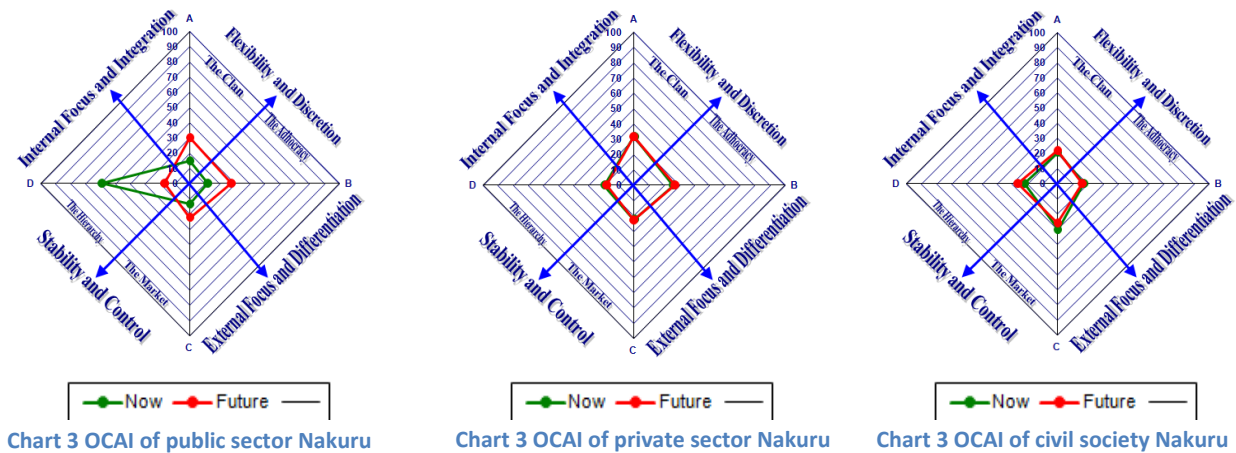
Factors

In the interviews with the different actors, the respondents were first introduced in the field of study and subsequently asked what factors they think are important when starting a PPP-team to realize low-cost housing in Nakuru. Their answers are the following: consciousness about other partners' goals and interests; political support; support from target group and financiers; clearness about benefits to everyone; clear definition of financial matters; sufficient approved technical capability (in low-cost materials); government approval; availability of land; residents must be willing to move; corruption must be minimized by clear definition of cash flows and the start of a consortium to manage the houses; clarity about roles and responsibilities; project must be supported by the highest management levels of each stakeholder; the working framework must be build in a collaborative way.

After this, the list as in table 2 was presented and the respondents were asked what they wanted to add or delete from the list besides the factors they already had mentioned. None of the respondents opted to delete a certain factor and the following new factors were suggested: creation of awareness and understanding and every party should bring in resources in a balanced way.

Key actors and factors in choosing the type of PPP in low-cost housing

Finally, the respondents were asked to fill out the OCAI as formulated by Cameron and Quinn (1999) for their present working situation and the preferred situation in a future PPP team in low-cost housing in Nakuru with parties from the three different sectors. The respondents from public sector were the deputy director of the Social Services and Housing department of MCN, an employee of the Engineering department of MCN and the officer in charge of the South Rift Region of NHC. There respondents from the private sector were: an architect from Interdecor Renovators, the manager of the Nakuru office of the bank Housing Finance, the secretary of the Nakuru Business Association, a consultant from the NGO Practical Action and a consultant from the NGO Solid House Foundation. The respondents from civil society were: a member of the board of the CBO Naheco Sacco and of the CBO Nakuru Tenants Association. Summary for the three sectors are the following (created by Lee (2004)):



The Government OCAI shows as expected a strong emphasis on hierarchy in the present situation, the future situation however shows a small emphasis on the Clan. The private sector OCAI shows about the same situation for present and future, both strongly resembling the future situation of the public sector OCAI, also with a small emphasis on clan culture. The OCAI of Civil Society is almost the same in the present and future situation, both pretty centered and with a small emphasis on the market culture.

Actors and Factors

The foregoing is interesting because of two reasons: the gained knowledge about actors and factors can be combined in a matrix that can be used to choose between the different types of partnerships on the basis of the distinguished factors. Furthermore, the gained knowledge about the factors can be used to choose a partner within the chosen sector, using the list of factors to rate the possibilities. A matrix is drawn up, using a summary of the factors derived from literature and the interviews. It is not helpful to use all the factors because that will result in a long list of factors to rate, making it necessary to weigh all the factors which is not possible with the gathered data since this research is qualitative. The list of factors used in the questionnaire can be redesigned using the following three categories: added value in content, financial added value and added value in the process. This list can be extended with the two factors important for choosing between types of low-cost housing: the amount payable by the target group and planned duration of stay of the target group.

The following factors are part of 'added value in content': Technical strength, community involvement and appropriate risk allocation via reliable contractual arrangements. 'Financial added value' contains the factors sound financial package, affordable loan and integration of economic activities. The factors interdependence, commitment/willingness to cooperate, common goal/shared vision, open communication/trust, converging working cultures and political support will contribute to added value in the process. Using a matrix, this can be summarized as follows:

Key actors and factors in choosing the type of PPP in low-cost housing

Type of PPP Factor	<i>Bi-sector (Public housing)</i>	<i>Tri-sector (a.o. Tenant Purchase)</i>	<i>Cross-sector (Self help)</i>
1. Added value in content			
2. Financial added value			
3. Added value in process			
4. Amount payable by t.g.			
5. Duration of stay of t.g.			

Table 3 Actors and Factors Matrix

After a certain type of partnership is chosen, the list below can be used to select partners. This list differs slightly from the matrix because some factors are not important when choosing a type of partnership, but are when choosing a certain partner and vice versa. (New factors are derived from Zhang (2005c) and input from respondents)

Added value in content	Financial added value	Added value in process
Technical strength	Sound financial package	Interdependence
Appropriate risk allocation via reliable contractual arrangements	Affordable loan	Commitment/willingness to cooperate
Experience in low-cost housing projects and PPP	Integration of economic activities	Common goal/shared vision
Minimization of corruption		Open communication/trust
		Converging working cultures
		Highest management support
		No transfer of key government personnel

Table 4 Criteria for selecting a suitable partner

Suitable types

As Rein and Stott (2008) conclude, there is not a partnership-model that can be applied to each and every situation, partnerships need to be build both on established good practice and on the constraints of local conditions. With the formulated matrix, the suitable type of partnership for a certain situation can be selected by applying the factors to that certain situation.

To demonstrate this, the matrix is filled in for the situation of the poorest long-staying residents of Nakuru. A simple multi-criteria analysis method is used where each possibility can score +, 0 or – at every factor, showing that a cross-sector partnership realizing self help housing would be the better option.

The allocated scores will be motivated below, discussing the scores for bi-, tri- and cross-sector. It is very important to note that these scores are only valid for the poorest long-staying residents of Nakuru. As indicated earlier, even in Nakuru's lowest income quarters a considerable wealth disparity is found. Therefore it is important to map all possible beneficiaries and divide them into groups of people with similar situations before using the formulated matrix.

Bi-sector

Bi-sector partnerships realising projects in accordance with the public housing approach usually consist of a public party like a municipal council and a private contractor. These projects can realize mass rental housing projects. Civil society is left out in these projects and this has its pros and cons. For the situation of the poorest-long staying residents of Nakuru, setting up a bi-sector partnership has not much added value in content (0) because there will not be any community involvement since Civil Society is not involved and it has no advantages in technical strength. It could be argued that risk allocation is easier with only two parties involved because practice in Nakuru shows some difficulties in this area in a MCN/NHC project that was visited by the author.

Key actors and factors in choosing the type of PPP in low-cost housing

Financial added value of a bi-sector project scores low (-) because no loans are involved and economic activities are not integrated, factors that are interesting for people from low-income groups.

In brief, more complex projects with more parties involved are more likely to take more time. Public and private parties can both bring in their expertise and create added value but when this is combined with more parties from for example civil society the situation could get more complex. Therefore, added value in the process could be highest (+) in a bi-sector partnership.

An already cited study from Makoba (2008) showed that hiring a contractor is more expensive than self-help projects and since civil society is not involved as a partner in a bi-sector project at all, a bi-sector project can be considered as the most expensive one and thus scores the lowest (-).

A bi-sector rental housing project gives customers the flexibility to stay a longer or shorter period in their rented house. But since a group of long-staying residents is considered and study of the author showed that people prefer to own a house, the score here is not the highest (0).

Tri-sector

This kind of partnerships includes all three sectors but compared to a cross-sector partnership (as concluded earlier), a tri-sector PPP has a limited number of participants and several participants have limited power of decision. Given these characteristics, it is likely that added value in content is reached (+) in a tri-sector partnership because parties from all three sectors are involved which can enable technical strength. Compared to a cross-sector project, risk allocation should be easier because only a limited number of parties is involved.

It is less likely that financial added value will be reached fully (0) since there is a limited number of partners. Tri-sector partnerships, realising tenant-purchase projects for example, often include the possibility of an affordable loan for the beneficiaries but since parties are limited they are not likely to integrate economic activities.

As discussed earlier, complexity of a project determines highly the possible added value in the process. Since a tri-sector project only has a limited number of parties and not all parties have full power of decision, added value in the process still can be reached (+).

Using the same argument as with the bi-sector PPP, the tri-sector PPP is not the optimum when it comes to the amount payable by the target group. Although community involvement is higher, it is still likely that a contractor is hired and this will raise costs for the owners of the new houses. Since this group is part of the poorest of Nakuru this will not be the most desirable situation (0).

Finally, a tri-sector project is suitable (+) for the target group when it comes to the duration of stay of the target group. A possible tenant-purchase project requires a long duration of stay because it comes with a long-time payment and the target group consists of Nakuru's long-staying residents.

Cross-sector

A cross-sector partnership does not exclude partners from any sector, all parties can join. In this way, added value in content is reached (+) because technical strength is created by the expertise of the different sectors and the community is involved to the fullest. During interviews Civil Society also indicated that the involvement of the community is crucial. Risk allocation will be more complex because of the high number of parties and this makes the added value in content comparable to a tri-sector PPP.

The cross-sector partnership scores the highest when it comes to financial added value (+) because parties can be involved for an affordable loan and economic activities can be integrated in corporation with the target group. By inviting suitable partners a sound financial package can be reached.

The complexity of a cross-sector partnership (0) can cause difficulties because many parties are involved with as many opinions. This will complicate the process rather than add value to it so a cross-sector partnership needs good leadership to succeed.

Since the matrix is filled in for the poorest long-staying residents of Nakuru the scores for both the amount payable by the target group and the duration of stay of the target group are high (+).

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Realizing a self-help project requires a long time period but cuts the costs for the target group so it is very suitable for Nakuru's poorest long-staying residents.

The discussion above leads to the following filled in matrix:

Type of PPP Factor	Bi-sector (Public housing)	Tri-sector (a.o. Tenant Purchase)	Cross-sector (Self help)
1. Added value in content	0	+	+
2. Financial added value	-	0	+
3. Added value in process	+	+	0
4. Amount payable by t.g.	-	0	+
5. Duration of stay of t.g.	0	+	+

Table 5 Actors and Factors Matrix filled out

The matrix shows that a cross-sector partnership realizing self help housing would be the better option. It scores the best on several parts of the distinguished factors: community involvement (1) and income generation (2), and the amount payable and duration of stay by the target group will fit best with self-help. It can be argued though that the process will be complicated by the many actors within the partnership.

Discussion

Striking issues

In the research process

While conducting interviews within several estates owned by the municipal council, criticism of residents was striking and ubiquitous. Especially residents living in the estates for several decades recalled several other projects from the last decades to upgrade their houses, none of which were entirely executed. Some respondents were only comfortable with new houses when they would be build just next to their present house.

Furthermore, the cooperation of the municipal council was poor and the reputation of government in general is alarming. Many interested private parties suggested private-private partnerships or asked for addition of factors to minimize corruption when working with the government. A long history of land-grabbing by government officials was recalled to demonstrate the problem of land availability en security.

In the findings

A striking issue in the findings was the poor condition of many estates within the municipality of Nakuru. The availability of water in the communal toilets was poor, in some areas only 2 times per week and in the worst cases the pressure was not sufficient to actually have working taps. Also maintenance of the houses is poor or entirely absent. Residents were complaining about these issues but even the CBOs within the areas were not taking practical action to solve their problems. Even though the municipal council did not offer a solution for these problems in a long time, people still see it as the councils responsibility and do not take action themselves.

Moreover, within the researched low-income areas is a considerable wealth disparity. Wealthier residents are not willing or able to move because of insufficient supply of better houses. This wealth disparity has of course consequences for the choice of a type of PPP.

Subsequently, respondents from both public and private parties showed in their OCAI that they would prefer a working culture with an emphasis on Clan Culture as defined by Cameron and Quinn (1999). Zuo and Zillante (2005) recall a study of Thomas et al. (2002) that shows that Clan type cultures correlate with better quality outcomes.

Finally, the model that is created to select the most suitable type of partnership for a certain situation is currently filled in without any weigh of factors. The outcome of the filled in matrix therefore should not be considered as the only right solution, but at least creates a useful framework for further discussion.

relating findings to context

Utilization of the formulated matrix requires a preliminary actors analysis, especially in the target group (residents). The situation in Nakuru shows that within the target group, the residents of the low-income areas, a considerable wealth disparity exists. This results in a variety of desires and possibilities of the residents for their future living situation. This wealth disparity calls for a range of solutions and thus different types of PPP. So will, as shown in the filled out matrix above, a cross-sector PPP be the better solution for the residents with the lowest incomes, while people who are renting several units within one estate could be better off with a tenant purchase project, that will be tri-sector. Finally, there are residents which are planning to move to another area within several years. This group will not benefit from a micro-mortgage so rental housing constructed trough a bi-sector PPP could be the most desirable situation here.

Previous researches in the city of Nakuru about public-private partnerships concluded that MCN is one of the main constraints in the realization of a good-working PPP (Mwangi (2000) and Post and Mwangi (2009)). In the realization of a strategic housing vision, a project parallel to this research, MCN shows that this is still the case. It seems that there is still no pressure to perform within MCN, which makes processes go even slower. On the other hand, the other public player in housing in Nakuru, National Housing Corporation, seems to be more serious in their desire to perform. MCN is the actor who owns most of the land and the estates that need upgrading the most, though, so it keeps being an important actor in the future.

A third issue in the situation of Nakuru is worth mentioning, being the presence of low-cost construction technology. The Ministry of Housing started a pilot with ISSB and two other projects using ISSB within the area of Nakuru are already in an advanced state, one of them being a boarding school for approximately 500 students. Those projects all claim to save about 48 percent of the costs of walling by using ISSB. The Ministry of Housing is planning to train interested local residents in the technology so that they will be able to use the technology in their self-help construction projects.

Contribution

Literature is extensive about public-private partnerships and claims that PPP could be a promising way forward in realising low-cost housing. However, it does not say how the several types of PPP can be used to reach this goal, nor is it clear about how to choose for a certain type. This research identified and combined the several types of PPP and the several types of low-cost housing and identified the key actors and factors in PPPs in low-cost housing. This has resulted in a matrix with five key factors that can be used to choose between the three identified types of PPP and low-cost housing.

Further, an explorative research was done about the present organizational culture and the preferred working culture in a future PPP-team, using the OCAI of Cameron and Quinn (1999). This contributes to the knowledge about project culture in a developing country setting and shows that there is much to be studied within this area.

Conclusions

There has been written a lot since the start of the partnership boom about its possibilities in low-cost housing. This research gives insight in the key actors and factors in choosing the type of public-private partnership and selecting a partner within the chosen type. Three types of public-private partnerships were identified: bi-sector, tri-sector and cross-sector. These were combined with the three types of low-cost housing: public housing, tenant-purchase and self-help. Through literature research and an explorative questionnaire under 10 actors from the three different sectors (public,

private and civil society) 5 key factors were identified: added value in content, financial added value, added value in process, the amount payable by the target group and the duration of stay of the target group. These factors were combined in a matrix with the different types of PPP/low-cost housing, leading to a model that can be used to select the suitable type of PPP in a certain situation.

In the same questionnaire an explorative study was carried out according to the present organization culture and the preferred culture in a future PPP team in low-cost housing. The results show an expected present situation and among the parties an almost similar preferred working culture with a small emphasis on Clan Culture in the public and private sector. Research of Thomas et al. (2002) (in Zuo and Zillante (2005)) shows that Clan Culture results in better quality outcomes of construction projects.

The researched low-income areas in Nakuru show a considerable wealth disparity that leads to a diversity in desires of and possibilities for the residents. This results in a range of suitable types of low-cost housing projects. Therefore detailed mapping of the situation of all beneficiaries is needed because the suitable type of PPP can differ for every group of residents. Using the formulated matrix for the lowest income groups of Nakuru, it is determined that a cross-sector partnership is the most suitable type of PPP.

As observed in previous studies the Municipal Council of Nakuru causes some constraints in the development of partnerships and low-cost housing projects. More hopeful is the presence of proven low-cost construction technology within the area of Nakuru and the willingness to train communities in this method.

This research combines the types of PPP and low-cost housing derived from literature and lays a foundation for a model in choosing the type of PPP in low-cost housing. It is recommended that this model will be further tested in practice to further develop the list of key factors in both choosing the type of PPP and a suitable partner within the selected type.

Like the Swahili saying says: one finger is not capable of smashing a flea. But in Nakuru a solid foundation still has to be laid for the fingers to partner and effectively work together.

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