A RURAL REPLY



PARTICIPATORY DESIGN OF A RURAL WOMEN CENTER IN KISUMU COUNTY, KENYA

Tilda Kristersson

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Tilda Kristersson 2019

Degree project for a master in Sustainable Urban Design Faculty of Engineering, Department of Architecture Master's programme of Sustainable Urban Design Lund University, Lund, Sweden

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HELGE AX:SON JOHNSONS STIFTELSE





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ABBREVIATIONS

AIDS ART ASA CSW DPI FACES FAO GDP GNI HIV HRW IFAD ILO KNBS KUR MDGs MHK NEPHAK NGO NUA PLHIV PMTCT PWG RUF ROF SDGs SDI SID SIDA SWAP UDHR UN UNAIDS UNDESA UNICEF UN-HABITAT UN Women

Acquired Immune Deficiency Syndrome Antiretroviral therapy Active Social Architecture The UN Commission on the Status of Women Department of Public Information The Family AIDS Care and Education Services Food and agriculture Organization of the United Nations Gross Domestic Product Gross National Income Human Immunodeficiency Virus The Human Rights Watch The International Fund for Agricultural Development International Labour Organization Kenya National Bureau of Statistics Kenya Urbanization Review Millennium Development Goals Ministry of Health of Kenya National Empowerment Network for People with HIV/AIDS Non-Governmental Organization New Urban Agenda People living with HIV Prevention of mother-to-child transmission Power Women Group Rural Urban Framework The Riley Orton Foundation Sustainable Development Goals Slum Dwellers International Society for International Development Swedish International Development Cooperation Agency The Safe Water and AIDS Project The Universal Declaration of Human Rights United Nations Joint United Nations Programme on HIV/AIDS United Nations Department of Economic and Social Affairs United Nations Children's Fund United Nations Human Settlements Programme United Nations Entity for Gender Equality and the Empowerment of Women

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I.0 INTRODUCTION

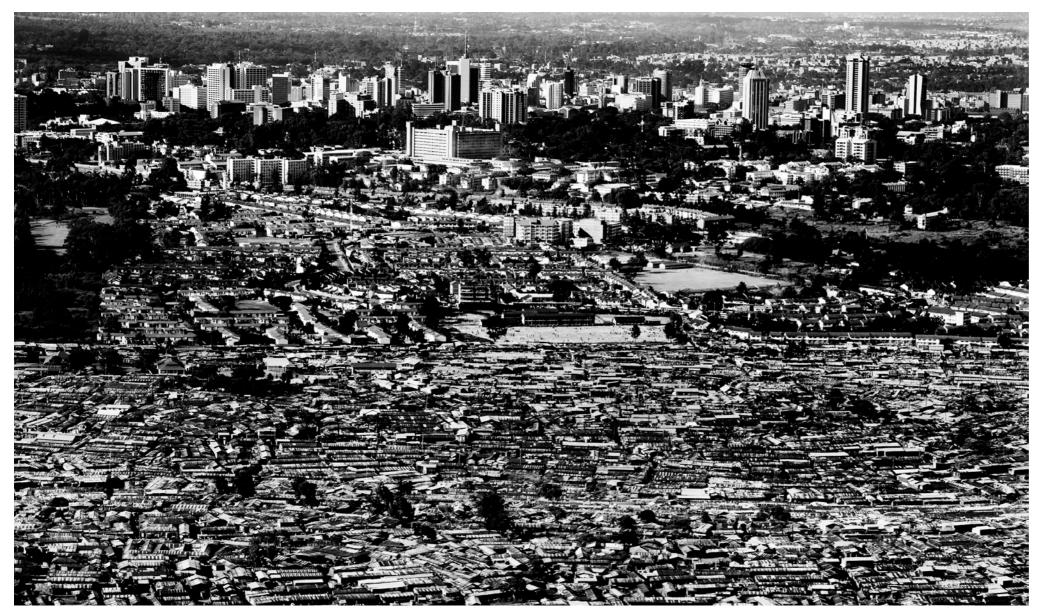


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"The share of Africans living in urban areas is projected to grow from 36 percent in 2010 to 50 percent by 2030. The continent's urbanization rate, the highest in the world, can lead to economic growth, transformation, and poverty reduction. Alternatively, it can lead to increased inequality, urban poverty, and the proliferation of slums" (The World Bank, 2015: Online).



This project works with participatory design with Power Women Group (PWG) in order to design a new rural women center for the group in rural Kenya. PWG is a women organization in Kibera focusing on HIV awareness.

This chapter gives an initial introduction of the project. It starts with a shorter introduction of the context (which is further elaborated in Chapter 4: Background) after which the main guiding document for this project; The New Urban Agenda (NUA) is introduced. The project is presented briefly and a short introduction of the women in PWG follows. Finally, this introductory chapter ends with a presentation of the outline of the project report.

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I.I INTRODUCING THE CONTEXT

Population, economic activities and human interactions are becoming increasingly centered in cities. Urbanization is one of the 21st century's most transformative trends and the urban population of the world is expected to nearly double by 2050 - at this stage, four out of five people could be living in towns and cities. Urbanization has been one of the major drivers of development and poverty reduction throughout modern history. It is both a source and driving force of development with the possibility to improve lives. Urbanization and development are linked and it is vital to find a solution for a sustainable urban development in order to ensure sustainable growth. Since the adoption of the Millennium Development Goals (MDGs) in 2000 there have been improvements regarding quality of life for millions of people living in cities, including informal settlements (Habitat III, 2016:1 § 2-3, Habitat III, 2017: Online).

On the other hand, growing inequalities, social and economic exclusion, segregation as well as environmental degradation are still the reality in most cities and pose some of the major challenges for sustainability. Many cities are facing unequal socio-economic development accompanied by the great population growth. Multiple forms and dimensions of poverty are persistent, inequalities are growing and the number of people living in informal settlements is increasing. In other words, rapid urbanization results in great challenges to sustainability in relation to; housing, infrastructure, basic services, health, education, safety, work opportunities and natural resources. Hence, urbanization poses various and fragmented possible outcomes. It possesses some of the greatest challenges in modern society, as well as some of the greatest opportunities (Habitat III, 2016:1 § 2-3 & 5 § 25, Habitat III, 2017: Online).

The population in Africa is increasing rapidly - 40 % of the world population will live on the continent by the end of this century. Africa is at the same time the continent with the highest urbanization rate. It is estimated that more than 50 % of the population in Africa will be living in cities by 2030 (UNICEF, 2014: Online, The World Bank, 2015: Online). The Kenyan based architecture firm Orkidstudio argues, "if not properly planned for, the huge pressure that this population boom will exert on Africa's cities will lead to a dramatic

rise in public health issues, more pronounced inequalities, and increasing strains on our fragile environment and climate" (Orkidstudio 2018: Online). In line with this statement, World Bank evaluations suggest that the continent's high urbanization rate has two possible outcomes. It can either lead to a positive transformation where the economy grows and poverty is reduced, or, alternatively, it can lead to increased inequality and poverty (The World Bank, 2015: Online).

Among the poor, women are often the poorest. In Kenya, over half of the female population live below the poverty line. Kenyan women are disadvantaged both economically and socially - less than 50 % of girls get education past primary school level (Tannerfeldt & Ljung, 2006:46, Orkidstudio 2018: Online). According to UN Women, the support of women's and girls' rights is of particular urgency in rural areas and the UN Commission on the Status of Women (CSW) has put the challenges and opportunities of rural women and girls as a priority theme for 2018 (UN Women, 2018: Online). During her opening remarks at the CSW's 62nd session in March 2018, Phumzile Mlambo-Ngcuka (head of UN Women) stated that the focus on rural women and girls is an integral part of the global commitment to end poverty, inequality and discrimination against women and girls. The rights of women must be protected and promoted, "no matter where they live, or how they live, so that we 'leave no one behind"' (Mlambo-Ngcuka cited in UN Women, 2018: Online).

1.2 INTRODUCING THE NEW URBAN AGENDA

In 2015, the UN General Assembly adopted the Agenda 2030 for Sustainable Development, replacing the MDGs. The Sustainable Development Goals (SDGs) - a collection of 17 global goals - are part of this new international agenda (Mistra Urban Futures, 2018: Online). SDG 11 has a focus on sustainable cities and communities and aims to "make cities and human settlements inclusive, safe, resilient, and sustainable" (UN, 2015:Online). The New Urban Agenda (NUA) was adopted at the Habitat III Conference in Quito, Ecuador in October 2016. It is an urbanization action-oriented document for UN-Habitat and their partners, relevant stakeholders, urban actors at all levels of government and the private sector. It is a collective vision and global commitment to reach sustainable urban development. The implementation of the NUA contributes to the implementation of the Agenda 2030 for Sustainable Development and supports the achievement of the SDGs, especially SDG 11 (Habitat III, 2016:4 § 22, Habitat III, 2017: Online, UN-Habitat, 2018: Online). In short, the main objectives of the agenda are described as follows:

1. Governance Structures: "The NUA is anchored in participatory urban policies that mainstream sustainable urban and territorial development as part of integrated development strategies and plans, supported by institutional and regulatory frameworks linked to transparent and accountable finance mechanisms" (UN-Habitat, 2018: Online).

2. Social Inclusion: "Development must protect the planet and enable all inhabitants, whether living in formal or informal settlements, to lead decent, dignified, and rewarding lives, and to achieve their full human potential" (UN-Habitat, 2018: Online).

3. Spatial development: "Balanced territorial development that accounts for different scales of cities and human settlements, strengthens their role in food security and nutrition systems, puts housing at the center, builds infrastructure and services, facilitates trade, and connects farmers and fishers across value chains and markets" (UN-Habitat, 2018: Online).

4. Urban prosperity: "Inclusive and sustainable economic growth, with full and productive employment

and decent work for all, is a key element of sustainable urban development where people can live healthy, productive, prosperous, and fulfilling lives" (UN-Habitat, 2018: Online).

5. Environmentally Sustainable: "Unsustainable consumption and production patterns, loss of biodiversity, pressure on ecosystems, pollution, natural and man-made disasters, and climate change and its related risks, undermine efforts to end poverty and to achieve sustainable development" (UN-Habitat, 2018: Online).

The NUA has worked as a guiding principle throughout this project. According to the NUA, the challenges of rapid urbanization are still far from adequately addressed. Poverty is still persistent, informal settlements are expanding and inequalities increasing. The NUA states that the global community needs to mobilize and urban development should include all levels of human settlements - small rural communities, villages, market towns, intermediate cities and mega cities. Everyone's voice and representation must be enhanced (Habitat III, 2016:1 § 4, 5 § 25 & 9 § 59, Habitat III, 2017:Online). The NUA put special attention to "women's full and effective participation and equal rights in all fields and in leadership at all levels of decision-making" (Habitat III, 2016:2 § 13:c).

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1.3 INTRODUCING THE PROJECT

I wrote my bachelor thesis - in human geography about topics such as identity and belonging in the informal settlement Kibera in Nairobi, Kenya. The thesis was built upon a field study and interviews with the 14 women that at the time comprised PWG. The interviews for the bachelor thesis were conducted in 2012 and 2013. While most of the findings from the Bachelor thesis are not directly applicable in the current master project, they established its starting point and foundation. It was during these interviews where the inequalities of the women's life in Kibera were unfolded and their longing for the rural expressed. And it was these findings that formed my interest for the urban-rural relationship.

During the interviews it became clear that none of the women actually wanted to stay in Nairobi. All of them wanted to move back to the rural parts of the country and open up new women centers to help others in their situation. PWG started in order to spread knowledge and awareness about HIV/AIDS, something that is still central for the organization. Their main aim of the new rural center is thus that it will work as a platform where the women can continue to educate people also in rural areas and through this work against the prevailing stigmatization. On PWG's Facebook page you can read:

"Their current goal is to send some of the women back to their rural communities that ostracized them because of their diagnosis, so that they can educate the people there. Eventually new branches of Power Women would exist in many rural communities and the stigma would be decreased all over the country" (PWG, 2018: Online).

The task of this Master project is to design one of these rural women centers. In other words, its task is to present a design proposal for a rural women center focused on HIV positive women.

1.4 INTRODUCING THE POWER WOMEN GROUP

"Women organizing together can claim a full spectrum of economic, political, social and environmental rights" (UN Women, 2018:Online).

PWG was founded in June 2004 by a group of HIV positive women who came together to fight the stigmatization surrounding HIV in Kibera slum. The goal was to spread awareness and change the thinking regarding HIV as well as create lives free of dependency (PWG, 2018: Online).

Today, the group consists of 12 HIV positive women. They have a store in Kibera where they sell handmade jewelry and clothes among other things. They do smallscale export to countries such as the USA and Sweden. PWG has started three other business projects to help other women in the community. These include a tailoring and a hairdressing class, which are directed to young women in the community. Both classes aim to teach skills in order for the participants to be able to support themselves and live lives free of dependency. PWG has also started a daycare to create possibilities for mothers in the community - they now have a place to leave their children during work hours. All of the women work together and the money they make is split evenly between them and helps to cover the costs of rent, food and school fees for their children (PWG, 2018: Online). The women of PWG have various goals they aim to achieve. As mentioned previously, the main goal is that the women will move back to the rural parts of the country and open sub-organizations in order to help others in their situation.

The women in the group agreed that their real names should be used in the thesis and short individual presentations of the women will follow below.



Rose-Mary Adhiambo

Rose-Mary grew up with her parents in Nyanca County, Siava district, in Western Kenya. Her mother was a farmer and her father worked at a university. Rose-Mary moved to Nairobi in 2000 and has been living in Kibera since then. She has three sons. After she gave birth to her second son she got to know her status. Rose-Mary is proud to stay in Kibera, but she does not feel that Nairobi is her home -Siaya is. Rose-Mary has a vision for the future of PWG: in PWG they have widows and single mothers and they want to go back to their rural areas to build houses.



Rhoda Atieno

Rhoda grew up in Nyanca and moved to Nairobi and Kibera in 1991. She got to know her status in 2004 and became a part of PWG the same year. She has seven children. Because Rhoda has been living in Kibera for a long time, she feels that it is her home in one way. But, it is not her real home - she misses her rural area and would like to move back. Since she does not have a house in the rural area, this is not easy for her to achieve. Her hope and vision for the future is that she one day will be able to go back to the rural area with her children and build her own house.



Elizabeth Akinyi

Elizabeth grew up with her parents in Nyanca County, Siava district, in Western Kenya. She is the sister of Rose-Mary Adhiambo. She got married in Kisumu, later she got divorced and was remarried. Her second husband passed away after three years of marriage. After his death Elizabeth moved to Nairobi (in 2004) and settled down in Kibera. She tested positive for HIV the same year. She has two children, one daughter and one son and she has not remarried again. Elizabeth does not see Kibera as her permanent home. She wants to move back to her rural area, build a house there and do farming.



Hellena Moraa

Hellena grew up in Kisi, in Nyanca province with her parents and three siblings - one sister who passed away and two brothers. She moved to Nairobi and Kibera in 1991. In 2001 Hellena she was tested positive for HIV and became a part of PWG in 2004. She is a widow and is living alone with her three children and three grandchildren. She is also taking care of her passed-away sister's child. Hellena partly feels that Kibera is her home. But, this is only temporarily since she does not have any other place to go and settle down. Hellena wants to move back to her rural area and build her home.

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Maria Juma

Maria grew up in southern Tanzania and was married there. She has five children, two of whom are HIV positive. Her husband moved to Kisumu in Kenya before her and she came after with their children in 1995. Maria stayed in Kisumu for two years, after which she moved to Nairobi and Kibera. She got to know her status in 2001 and became a part of PWG in 2004. She is currently living with her husband and children in Kibera. Maria feels that Kibera is her home, but she only moved here to look for casual work and wants to return to her rural area in Tanzania later on when her children are educated.



Mary Auma

Mary was born in Nyanca province, Oyoke district. Her parents died when she was very young and she grew up with her stepmother. She moved to Nairobi and Kibera in 1995. She is married, has six sons, and is taking care of two orphans. Mary got to know her status in 2004 and became a part of PWG in 2005. Besides struggling with HIV, Mary was tested positive for breast cancer in November 2011. Even though Mary has been living in Kibera for more than 20 years she does not feel that it is her home. If she had money she would go back to her rural area and find a place to rebuild her home.



Theresa Atieno

Theresa grew up in Siaya and moved to Nairobi about 30 years ago. She is now living in Kibera. Theresa has three children and is taking care of three orphans. Her last-born daughter is positive and also paralyzed on one side of her body after being sick with meningitis. Theresa got to know her status in 2001 and became a part of PWG when the group was founded in 2004. Theresa feels that Kibera is her home, but at the same time that it is not. If Therese could, she would like to move back to her rural area. She is hoping that she one day will get enough money so that she can go back, buy some land and a house.



Doreena Achieng

Doreena grew up in Kisumu and moved to Nairobi in 1991. She has stayed in Kibera since 1997. Doreena has seven children, three grandchildren and is taking care of one orphan. Doreena got to know her status in 2004. She loves Kibera but does not feel that it is her home - her rural area is where she feels at home. When her children have finished school she wants to move back to Kisumu. She has a hard time visiting her relatives up country and is hoping that she, and the other women, will be able to move back to their rural areas to build permanent homes.



Beatrice Khashima

Beatrice grew up in Kakamega with her parents and moved to Nairobi and Kibera in 1996. She has six children and three grandchildren. She has been married for 16 years. Beatrice got to know her status in 2004 and became a part of PWG in 2006. Two of her children are HIV positive. Beatrice's dream has during a long time been to move back to Kakamega, start a business and for her children to go to school in the rural area. Today, the family still has a place in Kibera and Beatrice is still a part of PWG, but she recently moved to Kakamega where she currently spends most of her time. Beatrice does not feel that Kibera and Nairobi is her home. It is Kakamega that is her home.



Gladys Nyaboke

Gladys grew up with her parents in Kisi, Nyanca province. She moved to Nairobi and Kibera in 1997 to look for casual work. Gladys has known her status since 2004 and became a part of PWG the same year. Her husband left her around this time, he started provoking her and telling people that he was leaving her because she had AIDS. Gladys is today living alone with her three children. She feels that Kibera is her temporary home and that Kisi is her real home. Gladys is hopeful for the future and thinks that she and her family will be able to move back to the rural area.



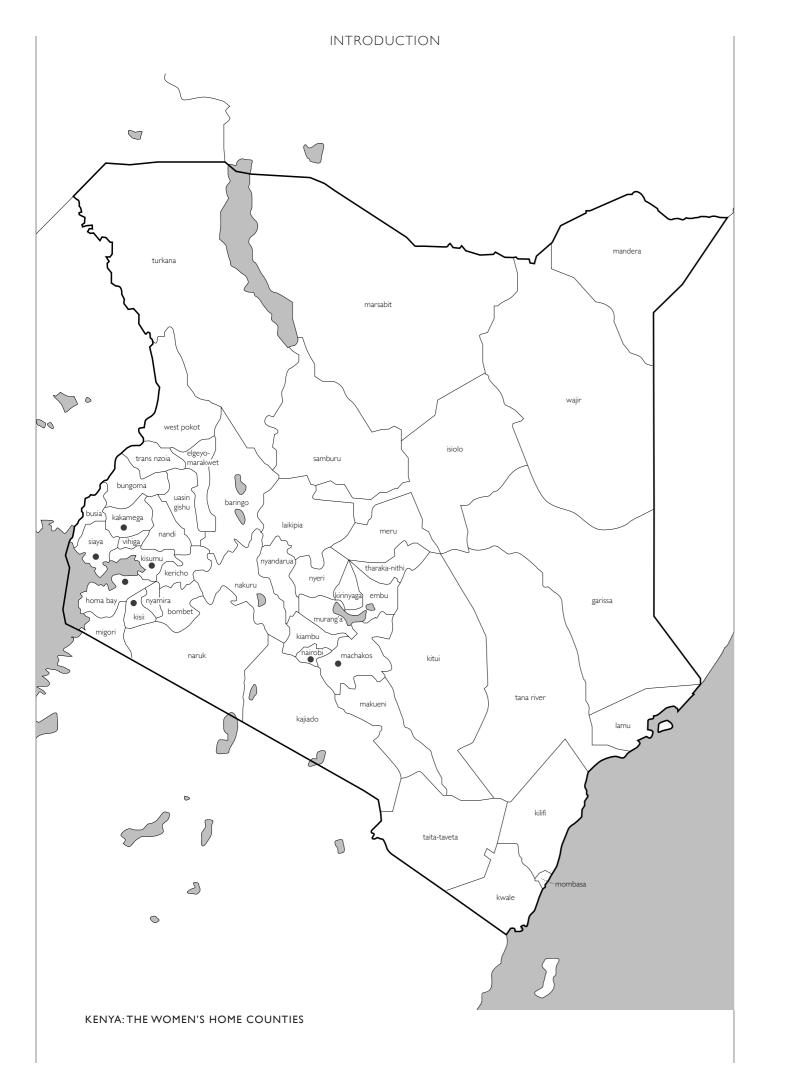
Caroline Awino

Caroline was born in Nyanca province. She grew up with her parents, two brothers and one sister. She moved to Nairobi in 1994. Caroline got pregnant and married in 2000. She stayed with her husband for five years after which he passed away and left her with their children. Caroline has two daughters and one son. She was tested positive for HIV in 2006, and became a part of PWG in 2007. Caroline does not feel that Nairobi is her home. If she had money, she would like to move back up country (to the village where she was married), buy land, build a house, start her business and start her life.



Seline Atieno

Seline grew up in Kisumu in Siava district with her parents. Seline got married in Kisumu and gave birth to three children. After her brother died she has also been taking care of his daughter. Seline tested positive for HIV in 1998 and her husband passed away in 2000. She moved to Nairobi and Kibera in 2002 and became a part of PWG in 2006. Seline feels that Kibera is her home but the memories of her rural area still remains. She is looking for money so that she can buy some land to build a new home for her family. She is hopeful for the future and thinks that she will be able to move back some day.



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1.5 OUTLINE

Following this introductory chapter the project report presents previous research. The problematization chapter (2 Problematization: Kenya's urban paradox) defines the rationale of designing a rural women center in relation to past and current research.

To fulfill the project's task - to design a rural women center - a mission for the design was formulated and is introduced in the third chapter (3 Design mission). The mission has been broken down into three objectives. Chapter 3 also establishes to project's delimitations.

The background chapter (4 Background: Kenya today) investigates the context - the various dilemmas, challenges and possibilities of rapid urbanisation in Kenya with the objectives from the NUA as guiding principles. It examines and presents various issues and provides a wider understanding of the current context in Kenya.

The theory of this project (5 Theory: Designing the rural) relates to the problematization of previous research, but has a focus on how to design the rural. The chapter investigates and discusses various strategies that are applicable for a women center in rural Kenya. It includes theoretical discussions on for example human rights and participation.

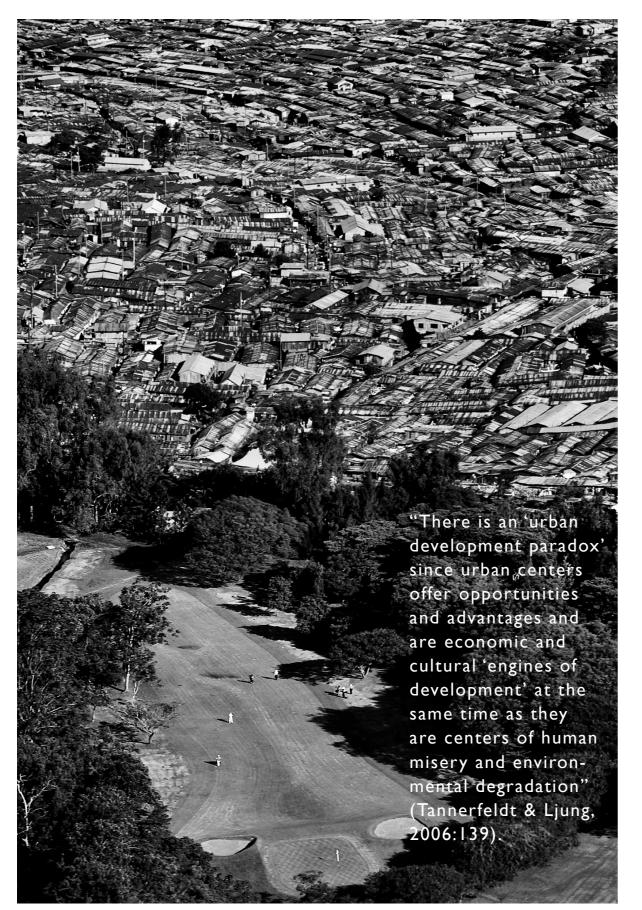
The project is built on comprehensive field studies in Kenya (and Rwanda) and a participatory method extracted from the theory. The method used is presented and discussed in chapter 6 (Method and material). The chapter includes a timeline of the field studies and a discussion on participation. It presents the participatory process with PWG and describes various study visits conducted during the field studies.

The following chapter (7 Result) presents the findings and results from the field studies. It includes a presentation of the site (used as a theoretical example for the project) and its surroundings. The outcomes of the participatory process with PWG are also summarized.

Chapter 8 (Analysis) discusses the results of the study in order to create an understanding of what strategies to apply to achieve the project's mission. It connects the result with the mission and objectives of the project. The analysis is concluded by four strategies, extracted to create a foundation for the design process.

The next chapter (9 Design proposal) presents the final design proposal for the rural women center, which is based on the strategies extracted from the analysis.

The last chapter of the project report (10 The future) discusses the future role of the urban planner and designer. The chapter, and the report, end with a brief conclusion of the project's and PWG's future goals with the center.



NAIROBI: KIBERA MEETING GOLF COURSE Photo: Christian Als (Source: https://christianals.com/photo-stories/the-shadow-city/)

2.0 PROBLEMATIZATION: KENYA'S URBAN PARADOX

This chapter puts the task of designing a rural women center in the contemporary context and defines its rationale in relation to previous research. Is a rural women center a rational solution to some of the challenges brought by rapid urbanization? The chapter explores the urban-rural relationship and investigates if a women center offers the possibilities required to help one of Kenya's most vulnerable groups - HIV positive (rural) women. The aim is not to see whether design interventions in the city could serve more people, rather to investigate if a rural center is appropriate in relation to the issues involved.

The following subchapters presents previous research on various topics and are individually concluded in a short problematization, where I discuss their substance in relation to this project.

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2.1 AN URBAN DEVELOPMENT PARADOX

As described earlier, urbanization and economic growth are closely linked - urbanization is both a requirement for and a consequence of economic development. But, urbanization can, if not properly managed, result in negative outcomes such as increased poverty. The process thus results in opportunities and benefits, but also in great challenges (Tannerfeldt & Ljung, 2006:12 & 29, Brandful Cobbinah, Poku-Boansi & Asomani-Boateng, 2016:416).

Urbanization has often been reported as a source of expanding slums and increased unemployment (Brandful Cobbinah, Poku-Boansi & Asomani-Boateng, 2016:416). Tannerfeldt and Ljung (2006:139) argue that the rapid expansion of unplanned slums and the misery in which the poorest live, have contributed to "a negative image of urbanization in developing countries". There is, according to Tannerfeldt and Ljung, an urban development paradox - urban centers offer opportunities and advantages simultaneously as they are hubs of environmental degradation and human misery. In a similar manner Muggah (2012:iv) argues the prevalence of an urban dilemma, which is exemplified by "the paradoxical effects of urbanization in the 21st century: as a force for unparalleled development on the one hand, and as a risk for insecurity amongst the urban poor on the other".

Managing urbanization is a vital part of promoting growth, but policymakers do not always welcome urbanization. Governments in the developing world are often unable to provide housing, infrastructure and services in line with the massive population growth. The growing slums are not an unavoidable consequence of urbanization. Nor can slums and inadequate infrastructure merely be blamed on poverty and lack of financial resources. The negative consequences often associated with urbanization in developing countries are rather results of failed policies and governments' incapability of meeting the challenges of rapid urban growth (Tannerfeldt & Ljung, 2006:14, 32, 42 & 82, Clarke Annez & Buckley, 2009: 1).

2.1.1 Failed policies

"Rapid and unplanned urban growth threatens sustainable development when the necessary infrastructure is not developed or when policies are not implemented to ensure that the benefits of city life are equitably shared" (UN DESA, 2014:3).

There are according to Clarke Annez and Buckley (2009:19) various inaccurate assumptions about urbanization in development countries. Policies have in general often been based on the wrong assumption that urban growth can be restrained by reducing migration (Tannerfeldt & Ljung, 2006:34) and there is a common belief that rural-urban migration might "deplete rural areas causing them to fall further behind" (Cali & Menon, 2009:29). The political response has thus often been to try to stop or reduce rural-urban migration with various means, including forcing people to move from the city. According to Tannerfeldt and Ljung, such attempts have all failed and they can even hinder social and economic development (Tannerfeldt & Ljung, 2006:32 & 139). They state, "attempts to curb urbanization may have an adverse effect on economic development" (Tannerfeldt & Ljung, 2006:29). In line with this, Duranton (2009:68) argues that instead of trying to slow or reverse urbanization, policies should focus on preventing the worst imbalances accompanied by it.

Tannerfeldt and Ljung (2006:141) argue that it is sometimes wrongly assumed that improving conditions in urban areas would be expected to encourage migration, while improvements in rural areas would reduce it. Cali and Menon (2009:29) argue that since the poor in developing countries are usually concentrated in rural areas, there is a common belief that investments need to be concentrated in these areas in order to reduce poverty. There have been various attempts to improve conditions in rural areas in order to encourage potential migrants to stay. But, development programs bringing better education, information and communication to rural areas have counter-productive effects - they promote migration rather than prevent it (Tannerfeldt & Ljung, 2006:32-33). Tannerfeldt and Ljung state, "such programs, as well as the promotion of alternative production in rural areas, are not an alternative to continued urbanization, but can improve living conditions for the rural population locally" (Tannerfeldt & Ljung, 2006:32). Other strategies are focusing on relieving pressure on bigger cities by promoting the development of small and medium-sized towns, which at the same time improves services for the rural population. Such strategies do not reduce migration, but could promote agricultural development (Tannerfeldt & Ljung, 2006:34).

In conclusion, both urban and rural development stimulates migration. Local conditions may speed up or slow down urbanization temporarily, but it is not possible to neither stop nor reverse the process - it is inherent in economic and cultural development (Tannerfeldt & Ljung, 2006:12 & 141). Duranton argues that instead of trying to slow or reverse urbanization, policies should aim to prevent and restrain the worst imbalances within the process. He argues that agendas for growth often identify a number of 'growth drivers' that need to be promoted, but that it would be more rewarding to consider limitations that need to be removed (Duranton, 2009:68 & 107).

2.1.2 Problematization

My initial view after my bachelor thesis was one of ambivalence. I had listened to PWG's stories – the women grew up in poor rural areas where lack of possibilities forced them to leave their homes. As for many other rural women, limited economic opportunities forced them to migrate to the city in search of work and a better life (UN Women, 2018:Online).

The women had shared their life stories and their dreams and it became clear that none of the women actually wanted to stay in Nairobi or Kibera. They had for various reasons moved to Nairobi and I understood these reasons as expressions of forced movement - either direct or indirect. In addition of being ostracized because of their HIV status, the lack of infrastructure and opportunities in their rural areas created situations where they had no other alternatives than to move to the city. When in Nairobi they had no other options than to reside in the slum with its poor infrastructure and lack of basic human rights. I was confused -I knew that urbanization promotes opportunities and economic growth, but I could not get my head around the reality I was observing: growing slums with growing inequalities.

First of all, I got a main understanding through Tannerfeldt and Ljungs' basic explanations of the opportunities and challenges that rapid urbanization brings. In one way, their "urban development paradox" pinpointed my confusion after the bachelor thesis: even though rapid urbanization might create growing slums, it is vital for economic growth. But, the situation for the women of PWG, and for millions of other people living in urban poverty, is a present issue and rural-urban migration remains massive – resulting in growing numbers of people living in urban poverty, as well as depopulating rural areas. How do we solve these issues?

During my bachelor thesis I heard about slum upgrading projects in Nairobi and ways to incorporate more people into the city – the migration continued to increase and there was thus a rapid need to solve the issues in the city. It is obviously vital to take action, no one should have to live in the miserable conditions in which the urban poor currently are trapped and our cities need to become sustainable in every possible way. But, my conclusion was at the same time that there must be more to it.

This is where I was standing after my bachelor thesis, how can Kenya continue to urbanize if this simultaneously contributes to more people living in miserable conditions? On the other hand, as stated previously, growing slums are not an unavoidable consequence of urbanization (Tannerfeldt & Ljung, 2006:42). How is everything connected and how do we "avoid" the production of slums in the process of rapid urbanization?



"As the relationship between the rural and the urban continues to evolve while also remaining interdependent, the rural is open to new definition" (Lin, 2016:74).

THE RURAL EXODUS

Photo: Selvaprakash Lakshmanan (Source: http:// www.noorderlicht.com/en/ archive/selvaprakash-lakshmanan/)

2.2 THE URBAN-RURAL RELATIONSHIP

2.2.1 Positive spillover-effects

"Cities are important drivers of development and poverty reduction in both urban and rural areas, as they concentrate much of the national economic activity, government, commerce and transportation, and provide crucial links with rural areas, between cities, and across international borders" (UN DESA, 2014:3).

The transition from a primarily agrarian society into a more diversified economy brings opportunities to urban areas (Tannerfeldt & Ljung, 2006:139). But, a study conducted by Cali and Menon in India between 1981 and 1999 showed that urbanization has positive effects also for surrounding rural areas. Cali and Menon state that urbanization and rural poverty are linked in various ways. The poverty reducing impact of urbanization in rural areas is mainly due to positive spillovers, such as alternative opportunities for occupation (i.e. rural non-farm employment), growing markets, agricultural productivity, improved services and remittances (Cali & Menon, 2009:4 & 28, Tannerfeldt & Ljung, 2006:139). Rural life is partly preserved by migrants to rural areas and economic transfers from town dwellers to rural relatives represent an important contribution to the households. A more diversified economy is positive also for the rural population and rural development is dependent on a growing demand of agricultural products in cities. A growing city with a growing urban economy creates an increasing demand for agricultural products, which stimulates agricultural development and the value of agricultural production usually increases near urban centers. Tannerfeldt and Ljung argue that together with rural-urban migration this raises income per capita in rural areas. Further, urban centers have the ability to absorb the rural underemployed, which adds to the improvement of rural productivity and the raised income per capita in rural areas (Tannerfeldt & Ljung, 2006:13, 35, 139 & 141).

In other words, a growing urban economy is important for the development of the agrarian economy, at the same time as an increase of rural incomes promotes urban development (Tannerfeldt & Ljung, 2006:13). On the other hand, Cali and Menon's study in India showed that the poverty reducing effects of urbanization mainly applied to the rural poor who were relatively close to the poverty line - the extremely poor were not able to enjoy the same benefits of urbanization (Cali & Menon, 2009:28-29). Nevertheless, urban and rural developments are part of the same process; they are complementary and promote each other. Tannerfeldt and Ljung argue that the urban-rural economic linkages are strong. Even though often seen as separate, rural and urban lives and economies are linked and more interdependent than usually thought of (Tannerfeldt & Ljung, 2006:5, 13 & 35).

2.2.2 A changing relationship

"Rapid industrialization and economic growth has completely restructured the relationship between the rural and the urban and has led to a growing income gap, a decline in agricultural production, and a rural exodus" (Bolchover, & Lin, 2014: Cover).

Neil Brenner (Director of the Urban Theory Lab at Harvard University Graduate School of Design), argues in his article The Hinterland, Urbanised? that the previous relationship between the rural and the urban – or the non-city as exterior to the city - is no longer valid. The urban can no longer be exclusively confined to the city and what is defined as urban can vary drastically around the world (Brenner, 2016:121, 124 & 125). Lin states in his article Designing for an Uncertain Future, that rural construction in China is increasing rapidly, built with remittances sent home. But he argues implications with such remittances – the process has resulted in a rural economy completely dependent on the city. He argues, "paradoxically, this cycle of migration and construction leads to increasingly dense villages with gradually emptying populations" (Lin, 2016:74). Bolchover and Lin (2014: Cover) argue that rapid industrialization and economic growth (in China) have resulted in a reconstruction of the rural-urban relationship - with increasing income differences, decline in agricultural production and rural exodus as consequences.

The rural has very different characteristics across the world. In developing countries it is often full of contradictions - factories that intersect fields, rural areas that look like dense slums and farmers that no longer farm. Even though the UN has declared the majority of the world population urban, what is defined as urban in large parts of the world include villages of different types (Bolchover, Lin & Lange, 2016:8, Grahame Shane, 2014: 187). The boundaries between urban and rural areas are gradually disappearing - processes of urbanization have produced urban villages, rapidly urbanizing small towns, peri-urban and exurban areas. In other words, the links between urban and rural processes has produced a landscape of diverse, blurred and indefinite territories (Chen & Norgaard, 2016:2, Bolchover, & Lin, 2014: 11). Bolchover and Lin (2014:7) state, "the once clear distinction between rural and urban has become obsolete in the face of the processes that have blurred their definition".

Meanwhile, urban and rural areas are becoming increasingly independent - growing interdependencies are constantly being redefined by the flow of people, ideas, culture, capital and natural resources between rural and urban places (Chen & Norgaard, 2016:2). This is, according to Obudho and Owuor, the case in Africa: the nature and patterns of migration and urban-rural linkages are changing throughout the continent. Urban dwellers in Africa have always maintained links to their rural areas, but these urban-rural linkages have assumed new and important significance. Obudho and Owuor state that African urban dwellers are increasingly relying on their connections to rural areas in order to maintain their livelihoods. The amount, frequency and importance of food transfers from rural to urban areas are increasing and transfers from rural areas has become important for food security for many urban dwellers (Obudho & Owuor, 2006:2, 5 & 6). They argue (2006:5-6), "rural links have become vital safety-valves and welfare options for urban people who are very vulnerable

to economic fluctuations". Vulnerability in the urban context thus decreases for households with active urban-rural linkages, whereas urban households with weak connections are the most vulnerable to hunger.

While urban dwellers rely on food from their rural homes, remittances from urban to rural areas in Africa decline as a consequence of increasing costs and unemployment issues in towns. A study in Kenya in 2006 found that 50 % of the households in Nakuru town sent money to their rural home less frequently than previously. Meanwhile, remittances are still important for many rural households and the decrease in money transfers has largest consequences for low-income families (Obudho & Owuor, 2006:6-7).

The change of the urban-rural relationship in Africa also takes other forms. For example, urban-to-rural visits are decreasing; urban dwellers do not visit their rural homes as often as before as a result of increased transportation costs. Simultaneously, rural-to-urban visits are also declining, since urban relatives do not have the same opportunities to accommodate their visitors for longer stays. But, Obudho and Owuor state, "despite the decline in rural remittances and visits, social links between migrants and their home areas remain as strong as ever". They argue that the links are a part of many migrants' social identity, a way to spread assets and maintain a safety net (Obudho & Owuor, 2006:7).

Obudho and Owuor argue that even though migration patterns have changed across Africa during the last few decades, migration is still an important part of many livelihoods. There are indicators showing that the rate of rural-urban migration has decreased, at the same time as circular migration between urban and rural areas is increasing and return migration – people moving from the city back to the rural "home" – is emerging. As a result of migrants' inability to sustain a livelihood in the city they choose to move back to their rural homes - or smaller urban centers close to it - where life is less expensive. If there is not enough money to support the whole family, part of the urban household could be sent back to the rural area. Households may thus have some members living in rural areas and others in urban, i.e. they may be "multi-local" (Obudho & Owuor, 2006:2, 5, 7 & 9).

2.2.3 Problematization

Tannerfeldt and Ljung (2006:141) state that urbanization brings possibilities to rural areas. In agreement, I argue that positive spillovers-effects could bring various possibilities for rural areas in Kenya. On the other hand, Cali and Menon's study showed that the extremely poor were not able to enjoy the same benefits of urbanization as others (Cali & Menon, 2009:28-29). During my studies I have rather observed negative than positive consequences of urbanization in rural parts of Kenya. During my Bachelor studies I visited various rural areas in Kenya, and kept noticing the issues of depopulation, poor infrastructures and decline in agricultural production.

Tannerfeldt and Ljung (2006:13) argue that cities have the ability to absorb the rural underemployed, which adds to the possibilities of improvement in rural areas. But, when I conducted a study visit to Kapng'etuny (a rural community in western Kenya), interviews with villagers indicated issues of a population decline of most people in working age, resulting in major challenges for the community. Tannerfeldt and Ljung (2006:141) state that rural development is dependent on a growing demand of agricultural products in cities. But in Kapng'etuny, the milk production was declining as a result of lack of infrastructure and labor. It seemed to me that Kenya's rapid urbanization had apparent negative consequences for its rural areas. Infrastructure such as water and sanitation were lacking in Kapng'etuny, shortages that obviously are not a consequence of urbanization, rather a sign of uneven development. But, I kept thinking that while the cities of Kenya continued to grow, attracting more people, investments and development, the rural parts of the country were simultaneously left behind.

When travelling to rural Kisumu, for the research for this project, the processes of urbanization became even more evident. Kisumu town is expected to expand in the future, and the area of my study - Obambo - is situated within this proposed urban expansion. At first glance the area constitutes my notion of an authentic rural area, but at closer look I could see small indications of transformation. Along the main road from Kisumu town there were new constructions and several stores and marketplaces selling construction materials. All around the area you could see formal rural homes abandoned, and new constructions appearing. I learned that land prices were increasing as many urban dwellers from Kisumu town bought land and built vacation homes. How do I describe the area? Sub-urban? Rur-urban? Like Kapng'etuny, the area seemed to have been left out of the development process, as urban forces kept imposing rural land without consideration of social and economical consequences.

My argument does not oppose those of Tannerfeldt and Ljung; I am convinced that Kenya's urbanization can bring opportunities also to rural areas. But, even though I heard about some interventions in the rural areas, were these enough? In order to tackle the unprecedented rapid urbanization of the development world, should we maybe do this in a more holistic and comprehensive manner, where we in a wider way develop opportunities both in rural and urban areas? As Tannerfeldt and Ljung (2006:141) argue, this would not reduce migration - both urban and rural development stimulates migration. But, could it maybe lead to a more sustainable development where no one is left behind?



2.3 AN URBAN BIAS?

"It's by now an enormous cliché that half of mankind lives in the city. And the other half doesn't. But this has in an ironic way been a pre-text to focus on the city only. And for that reason we are bombarded practically every day with statistics saturating the ubiquity on the urban condition" (Koolhaas, 2012: Online).

Brenner argues that the notion of an urbanizing world has become the universal interpretative frame. He states that current debates mainly concerns cities, which commonly "represent the elementary spatial units of the contemporary urban age" (Brenner, 2016:120).

As discussed previously, investments in new technologies, healthcare and education are disproportionately concentrated in the largest cities. Megacities and large cities thus offer the best services, whereas smaller towns have the next best supply and rural areas commonly the worst access and the poorest quality of services. Krishna argues that globalized growth has been accompanied by increasing inequality, which has a clear spatial dimension and the poorest tend to be rural (Krishna, 2015:292 & 294). Globalization is resulting in very unequal social layers within various countries. Krishna (2015:291) uses Kenya as an example, where people living in gated communities in Nairobi have First World amenities, whereas "Third World pockets persist deep in the countryside". Various factors have contributed to an increasing urban-rural divide in developing countries and an urban bias in policy making, inherited from colonial times, have according to Krishna restricted rural growth for generations (Krishna, 2015:293).

Michel Lipton conceptualized the idea of an 'urban bias' in the development process in 1977 in his book Why Poor People Stay Poor. He observed inequalities in poverty and spatial differences between urban and rural areas and argued that the rural classes contain most of the poverty whereas urban classes contain the power and organization. The influential concept argued that urban classes control the state, which creates policies in favor for cities that deliberately under allocates resources to rural areas and promotes city growth. Policies with urban biases result in unequal allocations of funds to rural areas and unequal support of health care and education, which in turn leads to excessive rural-urban migration and harm the rural poor (Lipton, 1977:13, Zimbalist, 2017:2, Chari & Corbridge, 2008:241). Lipton started the book by stating that:

"The most important class conflict in the poor countries of the world today is not between labour and capital. Nor is it between foreign and national interests. It is between the rural classes and the urban classes. The rural sector contains most of the poverty, and most of the low-cost sources of potential advance; but the urban sector contains most of the articulateness, organisation and power. So the urban classes have been able to 'win' most of the rounds of the struggle with the countryside; but in so doing they have made the development process needlessly slow and unfair" (Lipton, 1977:13).

In later writings, Lipton maintains his stand on the negative aspects of an urban bias and argues that the unequal allocation is worsening in many parts of the developing world - the rural-urban gap is still a major challenge for policy makers (Chari & Corbridge, 2008:242). Krishna (2015:293) argues in a similar manner that there are increasing big-city biases in several development countries - governments have been making disproportionate investments in big cities in order to attract global capital. Meanwhile, smaller towns and rural areas are suffering and the gaps between rural and urban areas

MEGALOPOLIS GREATER TOKYO (Source: https://www.nationsonline.org/oneworld/bigcities.htm)

continue to grow. Krishna (215:294) argues, "many developing-country governments have turned their gaze away from their vast and economically backward rural areas". In agreement, Pierskalla argues that anti-rural bias has been a common phenomenon in developing countries. But, empirically, governments vary in their treatment of the rural and the degree and strength of urban bias varies substantially across contexts, countries and over time (Pierskalla, 2015:287 & 303).

Lipton's critics view his stand on urban growth as overly pessimistic - cities are seen as merely predatory rather than innovative sites and possible benefits are disregarded (Chari & Corbridge, 2008:242). Other critics argue that a rural bias theory is more appropriate in some contexts (Zimbalist, 2017:2). Clarke Annez and Buckley argued in 2009 that the assumption that urban growth in developing countries is driven by a pro-urban bias rather than economic fundamentals is inaccurate. Instead, cities have, as discussed previously, shown possibilities to support growth in ways that rural areas cannot. Clarke Annez and Buckley argue that the existence of urban bias has basically become an empirical question of policy: it is often assumed that, if the rural poor continue to be disproportionately represented, an urban bias exists (Clarke Annez & Buckley, 2009:19 & 25).

2.3.1 Realigning focus of design attention?

"If the 20th century represented the rise of the megalopolis, could the 21st century mark a return to the countryside?" (Bolchover, Lin & Lange, 2016:7).

In line with Lipton and Brenner, Cole Roskam (2016:15) argues that the architectural discourse has a "distinct disciplinary bias towards urbanity". He states that the rural is a spatial condition, and architecture is a spatial practice. While the urban continues to dominate the architectural field, the rural remains to be defined. In line with this, Rem Koolhaas has turned his attention to the rural and argued in a lecture in 2012 that architects, particularly in the last century, have merely focused on the city and there are few manifestos for the countryside (Koolhaas, 2012: Online).

Patrik Schumacher share Koolhaas's above interest in the rural as a largely neglected area for architectural engagement. But, on the other hand, he argues that the discipline of architecture is inherently urban. The neglect of the rural in favor of the urban shows a relative importance of these rural territories and their problematic in relation to architecture. He argues that since the countryside is becoming more and more sparsely populated, there might not be any real need for architects to engage in the area (Schumacher, 2016:128, 129 & 130). In his article Don't Waste Your Time in the Countryside, he argues that architects' "time and skills are put to better use in cities, where buildings impact a far greater number of individuals and their social and cultural functionality is more important" (Schumacher, 2016:128). While the difference architects can make in cities is much more meaningful than what it would be in rural areas - architects' interaction with the rural is a waste of time. It is, according to Schumacher, the diverse complexity of cities that challenge advanced design solutions, compared to the simplicity of rural areas that pose "comparatively trivial architectural problems" (Schumacher, 2016:130).

On the contrary, Brenner argues that the spaces of the non-city are as central to the processes of urbanization as are larger urban centers (Brenner, 2016:123-124). In agreement, Bolchover, Lin and Lange argue that rural areas are emerging territories that require as much focus

and design experimentation as urban. They argue that the rural has become more than a counterpoint to the urban, it is now the frontline of the urbanization process and its evolution is critical for sustainable development (Bolchover, Lin & Lange, 2016:7 & 8). Rural territories comprise emergent conditions, critical challenges and new ideas, with the potential to inform the urban. Bolchover, Lin and Lange (2016:13) state, "we need to start actively engaging, researching and designing the rural in order to shape our collective urban future".

Generic construction is currently taking place all over the Chinese landscape and Bolchover and Lin (2014:16) argue the importance of design approaches that challenge and resist this "normative generic building typology". Schumacher on the other hand argues that if generic problems were identified solutions could allow "for a massive generalized roll-out". He argues that engineers should lead such projects rather than architects (Schumacher, 2016:130) - engineers are "perfectly equipped to devise generic solutions for the rural realm". Schumacher argues that the countryside is emptying and its future is a "vast engineered landscape of physical machine-based production processes, where the absence or sparseness of human life will limit the need for architectural design" (Schumacher, 2016:131).

Urban centers are becoming increasingly uniform in a globalized world, and our cities continue to grow into questionable sizes. Bolchover, Lin and Lange argue that, as a reaction to an urbanized world, architects and urban thinkers are increasingly shifting their attention to the rural (Bolchover, Lin & Lin, 2016:7 & 13). They state, "we live in an urban age, but we believe its future course is intertwined with the fate of the rural" (Bolchover, & Lin, 2014: 7). In line with this, Brenner's arguments (2016:126-127) challenge the predominant assumption of growing cities as the unavoidable future of humanity.

2.3.2 Problematization

While the relationship between the rural and the urban is changing, inequality in many regions remains strongly defined by the rural-urban divide, according to Chen and Norgaard (2016:1). Others argue that the belief of urban living conditions as superior compared to rural is starting to gradually become overshadowed by growing urban poverty (Brandful Cobbinah, Poku-Boansi & Asomani-Boateng, 2016:420). During the research for my master project in Kenya I kept reacting to growing cities and an emptying countryside. The high-end housing in Nairobi was booming creating a network of rather uniformed gated communities, while the efforts in the slums showed a much slower development. I kept wondering, is the answer to focus on developing our cities, or is the answer to be found elsewhere? The debates and articles I found seemed to have a bias towards the urban and I kept wondering, what about the other parts of the world? This is when I came in contact with Neil Brenner, Rem Koolhaas and other thinkers that opened up a new way of thinking that was in line with my confusion and concerns regarding an urban bias.

In the above discussion, various authors point to a new direction, in which architects and urban thinkers increasingly turn their attention to the rural (Bolchover, Lin & Lin, 2016: 7). This shift is in line with my previous concerns regarding a neglected rural realm. Bolchover, Lin and Lange (2016:13) state, "we need to start actively engaging, researching and designing the rural in order to shape our collective urban future". On the other hand, Schumacher (2016:128 & 130) argues that architects' involvement in the rural is a waste of their time – the engagement in the rural is a job for which engineers are perfectly equipped. In response to the arguments about a 'discursive shift' from urban to rural and the rural as an emerging territory requiring as much innovation and design experimentation as the urban, Schumacher (2016:131) argues that even if this might be accurate, "the required innovation is probably engineering rather than architectural".

Bolchover and Lin argue that the vernacular in the rural landscape is replaced by generic structures, which are driven by economic need and are insensible to the context. Schumacher's response is that "this can lead us already to the conclusion that the value society places on architectural structures and architectural design work in rural areas does not merit a reversal of attention from the urban to the rural" (Schumacher, 2016:131). Brenner, Bolchover and Lin, among others, state that the architectural involvement in the rural is vital, whereas Schumacher basically argues the opposite. Bolchover and Lin aims to create design solutions where the generic construction of the countryside is challenged, whereas Schumacher argues that the rural future is one of generic solutions.

Schumacher argues that no real rural client actually exists. He identifies risks connected to a discourse that, instead of working with actual problems identified by clients, conceives new problems and missions in order to achieve architectural innovation. Hence, substituting the missing clients with themselves (Schumacher, 2016:132).

Of course Schumacher's argument of a discourse that invents problems in order to substitute real clients is worth considering. But, this argument is built on a belief that there are not any rural clients, and why wouldn't there be? Around half of the world's population still lives in rural areas; don't they have the same rights as their urban counterparts? If architectural engagement is required in cities where the rest of the population lives, why would it not be required in rural areas? Do rural dwellers not have the same right to good design and access to inspiring spaces? In relation to this master project I thus strongly oppose Schumacher's argument. The women of PWG – with their vision of a new rural women center – is the client of the project. The rural clients might not have a lot of money, but their problems are real and require as good design solutions as any urban problems. In line with Orkidstudio, I believe in a future where everyone can access good design (Orkidstudio 2018: Online).

In one way you can point to two subjective preferences of future development in the various arguments presented in this chapter. Would you like to see a future where the rural is merely the "muscles" behind the city, a future where a generic unpopulated landscape provide the cities with their products? Or would you like to see a future where the rur-urban territories complement each other as equally important in a sustainable world - a future where the identity and cultural knowledge of the rural is preserved and developed? As might be obvious, my preference is clear: Schumacher's view of the future is not a desirable solution, rather a worst-case scenario where traditions and cultures are erased in favor of generic industrial landscapes.

The rural is under transformation and my concern, in line with Bolchover and Lins', is that this transformation could lead to more and more generic landscapes. Unfortunately, this is a scenario that we currently seem to be facing and radical changes are needed. The question is thus still, how are we planning in relation to the urban and rural, and are some people excluded from the global planning agenda? Should more focus be put on the rural in order to reach a sustainable future for all global citizens? How do we make room for the excluded? Almost as a response to my wonderings, the NUA was published. It highlights my concerns and the arguments discussed by Brenner among others. As stated previously, the NUA calls for an urban paradigm shift where wider planning processes are called for.

PALM OIL PLANTATION (Source: http://www. saynotopalmoil.com/ Whats_the_issue.php)



2.4 AN URBAN PARADIGM SHIFT

2.4.1 An integrated approach

"Traditional solutions have often tackled rural and urban poverty separately, without adequately acknowledging the growing interdependencies along the urban-rural continuum, which is constantly being redefined by the flows of labor, capital, ideas, people, and natural resources between places" (Chen & Norgaard, 2016:1).

The Kenya Urbanization Review (KUR) argues that policymakers need too look across various sectors, issues and locations in order to tackle the poverty challenges Kenya is facing. Although the report is focusing mainly on cities it argues that in order to achieve poverty reduction, strategies must include rural areas. The KUR argues that urbanization and better access to urban areas not only have the possibility to reduce urban poverty in Kenya but rural as well (Cira, Kamunyori & Babijes, 2016:1-2). The report states that; 'as a rural country, Kenya's poverty reduction and economic growth strategies must include a focus on agriculture, and on locations where poverty rates are high, including "marginalized" counties' (Cira, Kamunyori & Babijes, 2016:2). In agreement, the International Fund for Ag-

ricultural Development (IFAD) believes that investing in the rural poor benefits everyone. Since many global challenges (such as hunger, poverty, youth unemployment and forced migration) are rooted in rural areas, investment in rural development could have far-reaching impacts (UN DPI, 2018: Online).

The response to an urban bias has often been to focus only on the countryside and avoid support to urban areas - despite the fact that many of the poor live in cities. In this way, urban and rural areas are pitted against each other (Clarke Annez & Buckley, 2009: 25). Some critics to Lipton's thesis on the urban bias argue that its distinction between rural and urban areas is unclear and does not comprise the large variations of urban and rural areas. Zimbalist argues the importance of moving beyond this binary in poverty analysis and to examine differences across all geographical varieties (Zimbalist, 2017:1-2). He states that "the urban-rural formulation, albeit useful, masks significant differences within the broad urban and rural categories" (Zimbalist, 2017:1). In line with this, Chen and Norgaard state:



SOCIAL HOUSING IN BRAZIL (Source: www.archdaily.com/504114/minha-casa-nossa-cidade-brazil-s-social-housing-policy-and-the-failures-of-the-private-public-system)

"The waning value of traditional policies and practices rooted in the 'urban-rural binary' points to the need for a more sophisticated economic and socio-spatial approach to creating durable systems of opportunity along the rural-urban continuum, especially for people who have long been marginalized because of their race, ethnicity, gender, or class" (Chen & Norgaard, 2016:1).

Brenner (2016:124) argues in a similar manner that there is a static dualism within mainstream urban theory: city versus countryside, urban versus rural, and society versus nature. He states, "inherited vocabularies for describing non-city spaces - rural, countryside, hinterland - are locked into an externalist framework that attempts to distinguish them, analytically and spatially, from the city" (Brenner, 2016:125). But, he asks the questions: "what defines the urban?" and "can the non-urban necessarily always be classified as rural?". Brenner argues that there is a lack of a comprehensive theory to describe these realms - what is usually defined as countryside or hinterland has become a significant part of the process of capitalist urbanization (Brenner, 2016:119).

Rural and urban areas have thus often been viewed as separate and exclusive entities with individual and unique characteristics and problems. Rural and urban developments have traditionally been targeted separately and an urban-rural binary is still a commonly used axis for policy making and poverty analysis in many countries (Obudho & Owuor, 2006:9, Zimbalist, 2017:1, Chen & Norgaard, 2016:2). Obudho and Owuor (2006:9) argue implications with such positioning - it does not reflect the reality in large parts of Africa, in which livelihoods are fluid in size, composition and location. In agreement, Chen and Norgaard (2016:2) argue that traditional solutions of tackling rural and urban problems separately do not acknowledge the reality in which urban and rural areas are becoming more interdependent.

Chen and Norgaard argue further that inequalities in many regions are still strongly defined by the rural-urban divide and state that the binary approach to urban and rural development is ineffective. Hence, a need of acknowledging and addressing the complex linkages between the rural and the urban in order to disrupt and reduce inequality (Chen & Norgaard, 2016:1-2). Krishna argues in a similar manner that spatial inequalities between rural and urban areas cannot be solved with more rapid urbanization - rural problems must be resolved

in situ. Rural-urban migration is mainly distress-driven and "instead of helping resolve the root problem where it exists, migration merely shifts its location, producing ever more urban slum residents and pavement dwellers" (Krishna, 2015: 296).

Brenner argues, in line with the above discussion, that we need new ways to understand the world's various territories of urbanization, which are not binary to the city. When the current strict analytical constrains are relaxed, the dualism of urban theory can be replaced, the rural redefined and new analytical horizons open. Brenner states that we cannot talk about urban or rural any longer, we should instead talk about rur-urban (Brenner, 2016:124-126). Rather than assessing rural and urban problems as binary, multi-dimensional analysis and integrated approaches that improve lives both in urban and rural areas are thus required (UN DESA, 2014:1, Chen & Norgaard, 2016:3). In the words of Chen and Norgaard, "urban-rural linkages, which supplant the conventional "urban" and "rural" binary, aim not to treat urban and rural development in separate siloes but instead to consider the deep fluidity and connectedness between these geographic poles." (Chen & Norgaard, 2016:6). In agreement, Obudho and Owuor argue the importance of urban and rural interactions for the processes of both rural and urban change. Rural links and contexts must be taken into consideration in urban development strategies - solutions to urban poverty cannot be found in urban areas alone and policies need to reflect the urban part of rural development and vice versa (Obudho & Owuor, 2006:9). Koolhaas (2012:Online) argues in a similar manner that the rural and the urban are linked; it is not possible to understand urban issues without understanding the rural.

2.4.2 The NUA's call for change

The NUA call for a form of urbanization that embraces all levels of human settlements in order to bridge urban, peri-urban and rural areas. The way cities and human settlements are planned, designed, developed, financed, governed and managed needs to be readdressed. The NUA state that in order to fully take advantage of the potential of sustainable development, an urban paradigm shift is needed. This paradigm shift must be grounded in the social, economic and environmental dimensions of sustainable development (Habitat III,

2016:1 § 5, 5 § 24, Habitat III, 2017:Online).

The agenda will work to decrease inequalities within urban centers but also between urban and rural areas. It focuses on just regional development that fills in social, economic and territorial gaps across the urban-rural continuum (Habitat III, 2016:8 § 49 & 18 § 136). The agenda encourages various actors - from international and regional organizations to the private sector - to "enhance coordination of their urban and rural development strategies and programs to apply an integrated approach to sustainable urbanization" (Habitat III, 2016:11 § 82). In other words, the NUA promotes integrated and balanced territorial development plans in order to encourage collaboration between various scales of cities and human settlements. The aim is to strengthen the spatial relationship between cities and the rest of the urban fabric and surrounding functional areas, to enable the positive contribution of migrants to cities and to strengthen urban-rural linkages. This includes interactions and connectivity between cities and their surroundings - peri-urban and rural areas (Habitat III, 2016:6 § 32, 8 § 50 & 13 § 95).

2.4.3 A new form of urbanization

"It is not simply a question of a future that is rural or urban, rather there need to be mechanisms that allow for the rural to evolve, rather than be completely subsumed by urban territory" (Bolchover & Lin, 2014:116).

In line with the NUA and its paradigm shift, Brenner argues the need to imagine different forms of urbanization, or alter-urbanizations. Many different ways of urbanization are possible and new narratives can be written. For example, he argues the possibilities of a form of urbanization that includes multiple settlement patterns into a holistic framework of territorial development. Further, he envisions a form of urbanization "in which households and communities that choose to remain rooted in less densely settled or remote zones will enjoy access to viable public infrastructures, sustainable livelihoods and some measure of political control over the basic conditions shaping their everyday lives" (Brenner, 2016:127). Krishna (2015:296) states in a similar manner that, "individuals shouldn't be asked to move to places where the government can concentrate services; governments should provide the same basic services wherever people live".

Brenner argues that the role of design in non-city spaces might be to "facilitate the imagination and production of these and many other alter-urbanisations" (Brenner, 2016:127). The implication of Brenner's arguments for architectural and design interventions in non-city spaces remain to be developed. But, at minimum, he argues that the ideas challenge any intervention that seeks to design gated retreats in the former countryside. Instead he argues the need to develop "politically negotiated, democratically coordinated, environmentally sane and socially meaningful modes of connectivity" across the various places and territories of our urbanized world (Brenner, 2016:126). Brenner states, "as they mobilize their capacities to shape their emergent terrain of intervention, designers confront an important ethical choice - to help produce maximally profitable operational landscapes for capital accumulation; or alternatively, to explore new ways of appropriating and reorganizing the non-city geographies of urbanization for collective uses and for the common good" (Brenner, 2016:126).

2.4.4 Problematization

It is clear, and stated many times before, that urbanization brings possibilities to Kenya. But, during my various studies in Kenya, I have, as mentioned, been reacting to the negative consequences of rapid urbanization. Yes, this pinpoints the urban development paradox discussed previously. A large group of people has still not been able to take advantage of the possibilities that urbanization brings, and they are rather suffering as a consequence of the process. For the women of PWG, the main reasons why they left their rural homes were stigmatization and lack of treatment for HIV, work opportunities and education for their children. While in Nairobi, the main reason for them ending up in the slum were their lack of education resulting in lack of employment. If they had been properly educated in their rural areas, the transition to the urban life would have been easier.

While the economic and social linkages between the urban and the rural are strong - it is according to Tannerfeldt and Ljung (2006:35) misleading to make a sharp distinction between urban and rural. I argue that whether it is true that an urban bias exists or not, development should include both urban and rural areas and reassure that the benefits from urbanization reach everyone.

I wonder, in line with Brenner, what if we would imagine a different form of urbanization? For example, a form of urbanization, in the words of Brenner, "in which households and communities that choose to remain rooted in less densely settled or remote zones will enjoy access to viable public infrastructures, sustainable livelihoods and some measure of political control over the basic conditions shaping their everyday lives" (Brenner, 2016:127). What if there would be "mechanisms that allow for the rural to evolve, rather than be completely subsumed by urban territory" (Bolchover & Lin, 2014:116)? I believe that a future where people can choose to live in less densely populated areas, with the same human rights as urban dwellers, is possible. A future where education and infrastructure are a given also in rural areas. A future where education creates possibilities and opportunities also in rural areas and the people who choose to migrate to urban areas have better possibilities for employment and a decent life away from the slum. A future where the various cultures and traditions of our world are preserved and developed.

As the leading guiding document in the practice of urban planning and design, the NUA states that planning for a sustainable world must include also rural areas. In agreement, I argue that designing in the rural realm not only is relevant, but vital for a global sustainable future. So, with this as a given frame - the question of this project is how this could be done? How can design and architecture – in a form of a rural women center - help reach above-discussed future?



3.0 DESIGN MISSION

This project is built on a belief that transdisciplinary studies are important in order to meet the various challenges of rapid urbanization – my different backgrounds in Human Geography and Urban Design are thus both applied. The chapter starts by presenting the project's task. A mission for the design was formulated to fulfill the task. The mission has been broken down into three objectives. This chapter also establishes the project's delimitations.

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CONSERVATION AGRICULTURE IN KENYA (Source: https://www.un.org/africarenewal/news/conservation-agriculture-kenya-beating-drought-and-poor-harvest)

3.1 THE TASK

As mentioned previously, the research for my Bachelor thesis indicated that many of the women in PWG wished to move back to their previous homes in the rural parts of Kenya and open centers for various sub-organizations. The project and the center were initiated in order to offer possibilities and improve living conditions for one of Kenya's most vulnerable groups - HIV positive rural women. With PWG's goal of a new rural women center as the starting point for my Master project; its task is to **present a design proposal for a rural women center focused on HIV positive women.**

3.2 THE DESIGN MISSION

The project investigates different design solutions for a sustainable women center in rural Kenya focused on HIV positive women. With the help from the theory, the project aims to gain an understanding of various possibilities while designing a rural women center and inspiration from several projects serve as the foundation. The design proposal must be well anchored in the need of the women, in the project's problematization, theory and method. MASS architects state, "to make architecture improve lives, each architectural project must achieve a simple, legible, and transmissible idea" (MASS, 2018: Online). The aim, or the mission, of the project can thus be summarized as follows:

The mission of the design is to create opportunities lacking in rural Kenya and generate possibilities for HIV positive women. Through a participatory and inclusive process it will identify rural gaps and create a self-sustainable rural women center that offers opportunities of empowerment for women in the surrounding areas. The center will work as a prototype for further development, and hopefully become an inspiration for various PWG centers across Kenya's rur-urban continuum - empowering women all over the country.

3.3 INITIAL OBJECTIVES AND GUIDING QUESTIONS

To clarify the mission it has been broken down into three objectives. In order to fulfill the objectives - and the mission - guiding questions are needed. The questions have been formulated in relation to each objective.

Objective I: Participation

In order for the center to be successful, a wider knowledge and analysis of the needs of the future users of the center is required. The project must gain understanding of the situation of the women in PWG in order to develop a design based on their actual needs and visions. This project believes that participation of the women is vital in order to reach such understanding. The project's first objective is to gain an understanding of various participatory methods and design a process that includes the women as much as possible in the development of their new center. Participation is seen as more than a method for the project; it should be a main component and principle throughout the whole process.

The main guiding questions in relation to objective 1 are:

- How can a participatory process be designed in order to ensure inclusive development?
- What are the challenges with participatory design developments in rural Kenya?

Objective 2: Identify rural gaps

The women moved to Nairobi as a result of stigmatization and lack of opportunities in their rural homes. As discussed in the problematization, I believe that a future where people can choose to live in less densely populated areas, with the same human rights as urban dwellers, is possible. To reach such vision for PWG there are several vital needs to take into consideration while designing the new center. The second objective and starting point of the project is to identify rural gaps, i.e. uncover lacking opportunities and delimitations to basic human rights in the rural area.

The main guiding question in relation to objective 2 is:

Which are the most vital conditions lacking for HIV positive women in rural Kenya?

Objective 3: Self-sustainability

PWG works to create lives free of dependency. In terms of the center this means that it should offer them economic opportunities and ability to educate and care for their families. Since the situation for rural women in Kenya today is very insecure and the future of many rural areas is uncertain, the third objective of this project suggests that the center should be self-sustainable in order to create sustainable and long-term independency. This objective responds to objective 2. The center will accommodate vital functions and opportunities lacking in the area by filling the rural gaps identified - reassuring basic human rights. This also means that the center in the future should be self-sufficient in terms of both electricity and water, i.e. create the smallest ecological footprint possible.

The main guiding questions in relation to objective 3 are:

- Which design solutions and ecological sus-• tainable alternatives can be applied in order to create opportunities and improve living conditions in rural Kenya?
- How can the design develop a center that acts to proliferate social and ecological sustainability in the poor rural surroundings?
- How can the design provide urban services lacking in the area while preserving rural qualities and the identity of the area?

The project will work with participation as a main principle and method in order to identify rural gaps and create a self-sustainable women center.

PARTICIPATION

Participation as a main component and principle throughout the project

IDENTIFY RURAL GAPS

Identify lacking opportunities and limitations to basic human rights

SELF-SUSTAINABILITY

Create a self-sustainable center that fills the gaps to reassure independency and human rights



3.4 DELIMITATIONS

As the final goal of this project is to design one particular rural women center for one particular client (the PWG), most of the delimitations for the project are specified by the given task. This chapter delimits the project further in some aspects, but it will mainly present and discuss the relevance of the given delimitations.

The challenges of rapid urbanization that the developing world currently is facing are vast and complex matters. The first given delimitation of the project is that it will look at the challenges within one country, Kenya. The challenges the country is facing are many environmental degradation, urban sprawl and growing inequalities are prevalent. But, the country is in the middle of its urbanization process, which generates several possibilities. This makes Kenya a good study example for investigating how design can help to meet the challenges and promote the possibilities of rapid urbanization. This is of course still a very comprehensive and complex matter and further delimitations are needed. The geographical delimit of the project is focused on a small community on the outskirts of Kisumu town. This also implies a study of the urban-rural relationship in Kenya - there is a need to investigate the challenges and possibilities in rural parts of the country and see how these are linked to urban areas and urbanization.

Tannerfeldt and Ljung argue the importance of including and understanding the needs of vulnerable groups in development projects. In line with this, I argue the importance of looking at the problems from the perspective of the most vulnerable since they often are in most critical need of assistance. As mentioned in the introduction, among the poor, women are often the poorest (Tannerfeldt & Ljung, 2006:46) and the NUA puts special attention to women's full participation and equal rights (Habitat III, 2016:2 § 13:c). Another important delimitation of this project is the fact that the goal of the women center is to create opportunities for HIV positive women in rural Kenya. The project was initiated by PWG - the group is the client and HIV positive women are the main future users of the center. The project will thus look at the challenges in Kenya from the perspective of one of the most vulnerable groups in the country - HIV positive women in rural areas.

In order to gain accurate knowledge of the situation for this group I aim to look for deep and personal information. In order to achieve such results, a qualitative study method was chosen. Given the restrictions of a master project, it could be argued that a quantitative study would have been more appropriate, since it would have been possible to include more people in the same amount of time (Cloke et. al, 2004:17). But, personal and detailed information is required in order to reach the deep understanding needed for the project and a qualitative method is therefore the best option. It would not have been possible to reach the same deep understanding with a quantitative method (Cloke et. al, 2004:17).

Delimitations were necessary regarding the theoretical framework of this project. Since the challenges of the developing world are deep and complex the area of investigation offers several approach angles – even though a delimitation focusing on rural HIV positive women has already been established. A first delimitation was made by choosing to look at the challenges through four main perspectives; The rights perspective, The gender perspective, The perspective of the poor and The environmental perspective. These perspectives are used as the initial conceptual frame for the theory and will be presented in chapter 5.1.

There are several important development documents relevant for this project. In order to delimit the extent of the theory, focus has been put on the NUA, which, as mentioned, will work as a guiding principle throughout. It should be highlighted that other important documents and agendas, such as 2030 Agenda for Sustainable Development with its SDGs are of relevance, but these will not be discussed in detail. The NUA will by implementation contribute to the achievement of the SDGs, hence the focus on NUA as guiding for the project (Habitat III, 2016:2 § 9). The five main objectives of the NUA (1 Governance structures; 2 Social Inclusion; 3 Spatial development; 4 Urban prosperity; 5 Environmentally Sustainable) have been important for the project, but some have been more applicable than others. Given the timeframe collaborations with the government have not been possible, which make objective 1 (Governance structures) less relevant than the others. There is thus a delimitation to focus on objective 2 to 5.

3.4.1 Selection of participants

Since it was the women that initiated the design, it is of importance that they also are participants in the project. Given the time frame and approach, there is a need to delimit the number of participants. In order to keep a manageable size of the study the 12 women that currently constitute PWG are chosen as the only participants. The selection group is suitable for the purpose of the study for several reasons. First of all, the mission of the project is to create opportunities lacking in rural Kenya and generate possibilities for HIV positive women. All of the 12 women are living positive in Kibera, the largest slum in Nairobi. As mentioned in the introduction chapter, PWG work with counseling in the slum and their goal is to erase stigma and discrimination. Their knowledge regarding HIV is substantial and a vital advantage for the study.

It could be argued that other participants would have been of additional importance. The women of PWG are living and working in Nairobi. It would have been valuable to include other HIV positive women - including women living in different areas in Kenya - to see if their experiences differ. Further studies including the community around the rural site, where the center will be located, would have contributed with important knowledge. Given the timeframe (and other extents of a master project), a comprehensive participatory study with the local community around the site was not possible. It should be mentioned that, since the site is only "theoretical", the possible future center would not be located at the actual site investigated. A comprehensive study with the local community around this site would thus have taken time from people that probably won't be able to use the future center. On the other hand, the goal of the project is a rural women center and it is of importance to gain knowledge about rural conditions and rural life. In order to gain a basic understanding of the possibilities and challenges around the site, interviews with local NGOs in the area were conducted - with a focus on women and HIV. In addition to this, I had the possibility to join one workshop with the community (conducted by Reality Studio). The women of PWG were born in various rural areas and have good knowledge of challenges and possibilities within these. Their knowledge can thus, to some extent, substitute the lack of a wider participation of the rural community. Since the women are from different rural areas, their

experiences include a variety of multiple issues in different parts of the country, which adds to the validity of the selection. Further, all of the women have migrated to Nairobi for various reasons and are now living in poor conditions in Kibera, which contributes to an understanding of the consequences of rural-urban migration in Kenya.

The women are from four different Kenyan tribes, as well as one Tanzanian. In other words, for such a small group, it consists of many various ethnic backgrounds. I argue that this will contribute with a comprehensive understanding of the various obstacles the group might encounter in their daily lives. On the other hand, the group is quite narrow - it consists of women around the same age (38-59 years old). There are of course other vulnerable groups in Kenya, such as, children, the elderly and disabled. It would have been very beneficial to include children and women of more ages, both young and elderly, in the study. At the proposed women center these groups will also live and work and it is very important to include them in the project. Even though the center is focused on women, men should of course not be excluded. It would have been good to interview men and see how they experience the situation. Further, all of the women interviewed are Christians and an extended study including other religions would be important.

If the selection group would have been larger and included more groups, it could have contributed to an even better understanding of the life of poor women and HIV positives in Kenya. But, with the limitations of a Master project, it was not possible to include all of the above-mentioned groups. It was also important to not have a too large selection group; the aim was to delimit the number of participants in order to get a deep understanding of their situation. In order to perform workshops where everyone would be able to participate on equal terms, the small number of women was suitable. I thus argue that the group selected gives a good basis for the purpose of this project, given the restrictions. The size of the group is large and diverse enough to give a rather wide picture. But, it should be highlighted that extended research and participation, including above-mentioned groups, is of great importance in the future if the center would to be constructed. Possibilities for future research and participation are further discussed in chapter 10 (The future).

BACKGROUND

4.0 BACKGROUND: KENYA TODAY



Photo: Christian Als (Source: https://christianals.com/photo-stories/the-shadow-city/)



The background chapter introduces you to the situation in Kenya and provides a wider understanding of the current context. The first subchapter starts by presenting current trends - global, African and Kenyan. The second subchapter continues deeper into the issues of rapid urbanization and presents some of the current obstacles for the poor. The third subchapter focuses on HIV and describes current prevalence of stigmatization as well as possible future developments. The last part presents some of the current obstacles and challenges faced by women, with a special focus on the vulnerability of HIV positive women in rural Kenya.

4.0 BACKGROUND: **KENYA TODAY**

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4.1 CURRENT TRENDS



"A FISHING VILLAGE JUST A FEW DECADES AGO, SCHENZHEN IS NOW A BUSTLING MEGACITY" (Source: https://www.scmp.com/magazines/post-magazine/article/1530748/larger-life-rise-and-rise-asian-megacity)

4.1.1 Global trends

Only 30 % of the global population was urban in 1950 - the world's urban population grew from 746 million in 1950 to 3.9 billion in 2014. The urban population has outgrown the rural. In 2016, 54.5 % of the world's population lived in urban settlements, a number that is projected to grow to 60 % by 2030 and to 66 % by 2050. In the year 2030, one out of three people will reside in cities with at least half a million inhabitants. UN projections show that the overall growth of the world's population, together with urbanization, could result in an additional 2.5 billion people in urban areas by 2050. Close to 90 % of this increase is projected to take place in Asia and Africa. Most of the fastest growing cities are located here and the continents are urbanizing faster than other regions (UN DESA, 2014:1, UN DESA, 2016:ii & 6).

Historically, urbanization has been associated with other important economic and social transformations, which have improved geographic mobility and created longer life expectancy (UN DESA, 2014:3). Urbanization and economic growth are closely linked. One explanation of the positive relationships is that economic development stimulates urbanization; another is that urbaniza-

tion facilitates economic growth. A large share of GDP is produced in major cities. Countries with higher GDP and income per capita are typically more urbanized and an increase in income per capita has, in every country, been followed by urbanization (Tannerfeldt & Ljung, 2006:12-13 & 29).

The benefits of urbanization are not equally distributed, which results in serious problems. The negative consequences are many: poverty, inequality, slums, social instability, lack of security and environmental degradation. At least 40 % of urban dwellers in the world are poor, but urban poverty is underestimated and the number is growing (Tannerfeldt & Ljung, 2006:12-14 & 52). A large part of the expected urban growth will be concentrated in the expanding cities and slums of developing countries. As a result of rapid urbanization, countries of the developing regions will have to tackle several challenges in order to meet the needs of their growing urban populations. Specific challenges include issues related to, for example, housing, infrastructure, transportation, energy, employment and basic services such as health care and education (UN DESA, 2014: Online, Muggah, 2012: iv).

Migration contributes more to urban growth at the early stages of urbanization. Rural-urban migration is an important factor behind the change in proportion between rural and urban population (especially in less urbanized countries), but natural population increase contributes more to urban growth than migration. Rough estimations suggests that about 30 % of urban population growth in developing countries is the net effect of migration, 60 % is natural growth and 10 % is the result of changed borders or other administrative measures. Population growth in developing countries is typically much faster than it ever was in Europe, even though migration rates do not differ much. A higher rate of natural population increase creates a rapid urban growth in the developing world that is unprecedented. The average yearly urban growth rate in the least developed countries was 4.3 % in the beginning of the 21st century. Some countries experienced rates of 6 % and above and some individual centers had annual growths of 7-10 % in the second half of the 19th century. These rates could be compared with for example Berlin, which even during its peak never exceeded 4 % (Tannerfeldt & Ljung, 2006:12, 14, 21-22 & 27).

While the urban population continues to grow, the rural population is expected to decrease. In 2014 the global rural population was close to 3.4 billion, it has slowly grown since 1950 and is expected to reach its peak in a few years, after which it is expected to decline to around 3.2 billion by 2050. Close to 90 % of the global rural population still live in Africa and Asia, even though the regions are urbanizing rapidly. Roughly 40 % of the global population - around 3 billion people - lives in rural areas of developing countries and most of them are living in extreme poverty (UN DESA, 2014:1, UN DPI, 2018: Online).

4.1.2 African trends

Africa's current population is five times the size it was in 1950. It is projected to double from 1.2 billion in 2015 to 2.4 billion in 2050, and to eventually reach 4.2 billion by 2100. By the end of the century, 4 out of 10 people in the world will be African. UNICEF estimates that Africa by 2050 will be home to around 37 % of all of the world's children under 18; 40 % of all children under five; and 41 % of all births. Around one billion children will live in Africa by mid-century (UNICEF, 2014:5 & 7).

In 1950, only 14 % of the population in Africa was living in urban areas. The number increased to 27 %in 1980 and reached 40 % in 2014. By the end of the 2030s, Africa is projected to have more people living in urban than in rural areas and by 2050 around 56 % of Africa's population will be living in cities. The number of cities with at least half a million inhabitants is expected to grow by 80 % between 2016 and 2030 (UN DESA, 2014:1, UN DESA, 2016: 5, UNICEF, 2014:9).

There are of course large differences across regions and countries in Africa. Variations are prevalent between regions and countries, as well as within countries and cities. For example, in 2015 North Africa was the most urbanized region, with more than half of the population living in urban areas, followed by Central Africa (46 %), West Africa (45 %), and Southern Africa (44 %). The least urbanized region was Eastern Africa with only 28 % of its population living in urban areas (UNICEF, 2014:33, Tannerfeldt & Ljung, 2006:22).

Africa thus remains mostly rural, with 60 % of the population living in rural areas in 2014. Africa is still home to countries with a large part of the global rural population. Among the top ten countries with the largest percentage of rural inhabitants (in relation to total population), six are located in Eastern Africa (UNICEF, 2014:1 & 34). In 2016, more than half of the population still lived in rural areas, but the number is declining (UN DESA, 2016: 5). The rural population in numerous African countries is expected to continue to grow slowly beyond 2030 (Tannerfeldt & Ljung, 2006:20).



NAIROBI BY NIGHT Photo: Mutua Matheka (Source: https://medium.com/akoma-media/nairobi-the-next-great-global-city-7f9681961114)

Many countries in Africa are facing rapid economic growth, which creates opportunities for poverty reduction. For example, between 2010 and 2014, GDP increased by an average of 32 % in Eastern and Southern Africa. Meanwhile, these regions are also some of the world's poorest and most unequal (UNICEF, 2016: 1). Almost half of the 54 countries in Africa are classified as low-income and these are also home to around half of the total population. Nine out of ten children under 18 on the continent are living in low- or lower-middle-income countries. Despite high GDP growth rates in recent years, most of Africa's population is thus still living in poverty - often extreme. Around 60 % of the African population in 2014 survived on less than US\$2 per day. Extreme poverty is widespread - 40 % of the total population in Africa in 2014, and 48 % of the population in sub-Saharan Africa, lived below the international poverty line of US\$1.25 per day (UNICEF, 2014:9 & 37).

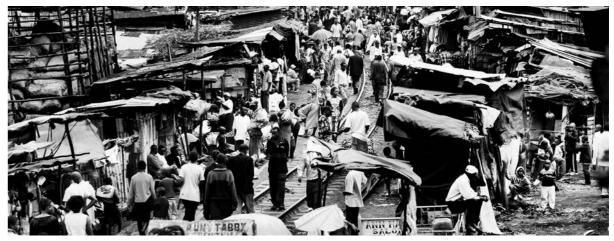
Life is shorter in Africa than anywhere else in the world; life expectancy at birth in 2014 was 58 years - 12 years shorter than the global average. One in every 11 children born in Africa dies before their fifth birthday. Even though child survival has improved on the continent, Africa still accounts for 50 % of all child deaths, a figure projected to increase to 70 % by mid-century. According to 2014 projections, the gaps in life expectancy between Africa and other parts of the world are narrowing steadily and will continue to do so (UNICEF, 2014:8 & 29).

4.1.3 Kenyan trends

"Informality, low densities, and sprawl are common characteristics across Kenya's urban areas and are exacerbated by poorly functioning land markets and land institutions" (Cira, Kamunyori & Babijes, 2016:4).

Urbanization in Kenya should be seen with cautious optimism. The Kenya Urbanization Review (KUR) hopes to "raise understanding of the important opportunity that urbanization presents for the country" (Cira, Kamunyori & Babijes, 2016:1). In 1960, the urbanization level in the country was extremely low at merely 7 %. Since then, urbanization has been rapid. As a result of urbanization, Kenya has seen positive economic growth but has not yet experienced an economic transformation. The country is urbanizing at about 4.3 % a year – a rate that has the possibility to drive economic growth. The average economic growth between 2003 and 2013 was 4.5 %. This has led to a growing middle class, but poverty reduction has been less than expected (Cira, Kamunyori & Babijes, 2016:1-3 & 6).

Kenya is ranked as a lower middle-income country with a gross national income (GNI) per capita of \$1280 in 2014. Agriculture still remains the largest share of the economy and constitutes around 25 % of gross domestic product (GDP). Manufacturing has declined from 13 % of GDP to 10 % between 2006 and 2016. It is the service sector - even though it has a large informal share of labor - that mainly drives economic growth in Kenya. From 2000 to 2011, the service sector expanded



KIBERA BY DAY Photo: Christian Als (Source: https://christianals.com/photo-stories/the-shadow-city/)

by 2.1 % annually, agriculture by 1.1 % and industry by 0.7 % (Cira, Kamunyori & Babijes, 2016:2-3).

The working age population in Kenya increases by around 800 000 every year but only around 50 000 new positions are created in the modern sector. Formal sector jobs are thus limited and unemployment in urban areas is high - about 13 % of the urban population between 20 and 24 years of age are unemployed and Kenya's urban areas are facing an increasing share of informal sector work. At the same time as unemployment is common in urban areas, underemployment is frequent in rural areas and urbanization in Kenya seems to mainly be driven by agricultural push (Cira, Kamunyori & Babijes, 2016:1-3). In other words - urbanization in Kenya has not been pulled by productive industrialization, instead agriculture productivity releases excess labor, which migrates to urban areas in order to find better opportunities in the modern sector (Cira, Kamunyori & Babijes, 2016:2, Clarke Annez & Buckley, 2009: 6).

In Kenya, most of the urban population lives close to the Northern Corridor, which constitutes a great importance for the country's urbanization. The Northern Corridor is one of the most important transport routes in East and Central Africa and connects Mombasa Port through Nairobi to Malaba by the border to Uganda, with a branch line to Kisumu by Lake Victoria. In total, around 75 % of the urban population lives within 15 kilometers of the corridor and less than 14 % lives farther than 35 kilometers away. The concentration of population has resulted in the planning development of

three principal hubs - the coastal hub around Mombasa, the central hub around Nairobi and the western hub around the cities of Kisumu, Eldoret, Kericho and Nakuru. These three hubs have among the fastest growing urban populations in Kenya and generate a significant portion of the countries GDP. Kenya will develop a "system-of-cities" primarily around these hubs (Cira, Kamunyori & Babijes, 2016:3-4).

Even though Kenya is urbanizing rapidly, the country is still under-urbanized and has high levels of poverty. About 27 % of the population lived in urban areas in 2016, a number that at the time should have been 40 % - based on correlation between GDP per capita and urbanization. Kenya is still at an early stage of urbanization and about 50 % of the population is estimated to live in urban areas by 2050. The country - with its emerging middle-income class and a growing share of people living in urban areas - could be close to a big social and economic transformation. No country has reached high-income status without urbanization and it thus brings important opportunities to the country. According to the KUR, Kenya has an opportunity to leverage the benefits of urbanization in order to drive economic growth and attain the goal of becoming an upper middle-income country by 2030 (Cira, Kamunyori & Babijes, 2016:1-3).

4.2 THE URBAN AND RURAL POOR



Photo: Christian Als (Source: https://christianals.com/photo-stories/the-shadow-city/)

4.2.1 The life in the slum

The demand for urban housing in Kenya was estimated at around 80 000 units a year in 2010, a number that is expected to increase to nearly 300 000 a year by 2050. Most of the demand exists in Nairobi, where only 15 000 housing construction permits were issued in 2013 and most of these were for high-income apartments. The lower income segments of the market account for the largest share of the demand, but only 2 % of formally constructed houses are targeted to this group. In addition, these estimations of demand regards new housing and do not include the existing shortage of qualitative housing, demonstrated by the high number of informal urban housing. Most of the accessible and affordable renting options are to be found in the informal market and informal housing has thus become the only alternative for a large part of the urban population in Kenya. Around 60 % of existing urban households live in conditions that would be defined as slum (Cira, Kamunyori & Babijes, 2016:8).

The majority of Kenya's urban residents thus live in informal conditions, with poor access to basic networked services. The issue of housing is not merely a matter of poor quality houses, other shortages such as basic infrastructure, schools and health clinics are often more severe. About 50 % of urban dwellers in Kenya have access to electricity, 60 % to improved water sources and 30 % to improved sanitation. Only 18 % of the Kenyan urban population has access to a sewer system, while 70 % rely on pit latrines and septic tanks and 12 % do not have access to any sanitation services at all (Cira, Kamunyori & Babijes, 2016:1-2 & 6, Tannerfeldt & Ljung, 2006:53).

The conditions in which the urban poor live are one of the most significant negative consequences of urban growth in developing countries. Many disease vectors (such as malaria, dengue and yellow fever) are linked to the inadequate provision of water and sanitation, which causes health burden and premature death for millions of urban dwellers worldwide, mostly children (Tannerfeldt & Ljung, 2006:13, 53-54 & 103).







HOME IN KIBERA Photo: Christian Als

(Source: https://christianals.com/photo-stories/the-shadow-city/)

WATER COLLECTION IN KIBERA

Photo: Christian Als (Source: https://christianals.com/photo-stories/the-shadow-city/)

NIGHT IN KIBERA

Photo: Christian Als (Source: https://christianals.com/photo-stories/the-shadow-city/)

4.2.2 Urban-rural gaps in living standards

Globally, the probability of being poor is higher in rural than urban areas (Krishna, 2015: 293). Urban incomes are typically higher than rural and there are large health access disparities between rural and urban areas in the world - especially in developing countries. A majority of global rural populations are excluded from healthcare access, in contrast to urban counterparts. 56 % of people that are living in rural parts of the world are lacking access to vital health care services. This is more than twice the figure in urban areas, where only 22 %are uncovered. The largest differences between rural and urban areas are found in Asia, but the highest number of people that are uncovered is in Africa, where 83 % of the rural population is lacking essential health care services. The countries with the highest levels of poverty are the ones most affected. The absence of services is linked to underfunding. Financial resource gaps are almost twice as high in rural compared to urban areas and the largest gaps are discovered in Africa (Kim, 2009: 148, ILO News, 2015: Online).

There are thus big urban-rural differences in living standards across Africa and even though there are variations of urban-rural divide among countries, rural living standards lag far behind urban almost universally (Sahn and Stifel, 2004:14 & 26). The rural population in Kenya comprises the majority of the countries poor people. Out of the 40 % of Kenyans in the bottom of the income distribution, 90 % live in rural areas (Krishna, 2015: 291, Cira, Kamunyori & Babijes, 2016:2).

The gaps in Kenya - between the rich and the poor, between urban and rural areas, between genders and among ethnic groups - are large and there are great disparities between well-endowed and deprived citizens. Inequalities within counties in Kenya are extreme. People living within the same county in many cases have completely different lifestyles and access to services. There are large differences in access to improved housing as well as sources of water, both between Kenya's 47 counties and within them (KNBS & SID, 2013:vi, vii & 2). More than one billion rural people globally do not have access to any electricity (UN Women, 2018: Online) and the differences in access to electricity in Kenya are enormous. This is the case also within counties - the gap between the ward with highest access and the one

with least access is more than 40 percentage points in 29 out of 46 counties. Access to improved sanitation also differs a lot within counties - access between the best and worst performing wards differs by over 80 percentage points in nine counties (KNBS & SID, 2013: vii).

There is also a large gap in educational achievement between rural and urban areas, due to fewer schools and poorer educational quality in rural areas. As a consequence, rural and urban people have different learning result, even if they attend school for the same amount of time. A study in sub-Saharan Africa showed that just over 50 % of rural sixth-graders had reached expected competency levels, compared to more than 75 % in urban areas (Krishna, 2015: 293). Enrollment rates are also generally much higher in urban than in rural areas (Sahn and Stifel, 2004:14).

Statistics and average figures on for example health, education and access to water and sanitation indicate that the world's urban population is favored compared to the rural (Tannerfeldt & Ljung, 2006:40). But, urban areas are more unequal than rural areas, despite the comparative advantages of cities (UN DESA, 2014:3). Major cities in Kenya have high levels of education, but also very large disparities. In Nairobi, Mombasa and Kisumu the share of residents with secondary school education differ by nearly 50 percentage points between the wards with the highest and lowest levels (KNBS & SID, 2013: vi). Case studies also show that poor communities in large cities are exposed to comparable or higher levels of death and disease than their rural equivalents. For example, mortality among children under the age of five is more prevalent in informal settlements in Nairobi than in rural areas in the country. Kibera is the largest informal settlement with more than 500 000 inhabitants - almost one child in five dies before the age of five (Tannerfeldt & Ljung, 2006:40).



KIBERA RIVER FILLED WITH GARBAGE Photo: Christian Als (Source: http://christianals.com/rekibera/)



RURAL HOUSE IN OBAMBO, KISUMU Photo: Tilda Kristersson

"If you're poor, the chances are high that you are rural. If you're rural, the chances are high that you are poorly served by electricity, roads, water supply, education, health care, and almost everything else that facilitates upward mobility and paves the way to a higher standard of living'' (Krishna, 2015: 293).

4.3 HIV/AIDS

4.3.1 Trends in HIV prevalence

There were around 2.1 million new HIV infections worldwide in 2015 and a total of around 36.7 million people were living with HIV. Adolescents and young adults account for around 40 % of new HIV infections globally (UNAIDS, 2016:1, Montalto et al, 2017:3).

The total number of people living with HIV in Kenya was estimated to be 1 517 705 in 2015 - including 98 169 children (0-14 years old) and 268 588 youth (15-24 years old). The HIV prevalence among people aged 15 to 49 was 5.9 % in the same year. It remains higher among women (6.5 %) than men (4.7 %), but estimations show a decline for both sexes (MHK, 2016:6-8 & 14-15).

The geographical distribution of HIV is uneven globally. HIV prevalence is higher in cities in many countries (UNAIDS, 2016:7) and higher levels of urbanization tend to facilitate the spread of HIV/AIDS. Rural HIV rates are approaching or surpassing urban in some countries, but the disease is still generally more prevalent in urban areas, specifically in larger cities (Tannerfeldt & Ljung, 2006:74). The HIV prevalence in Kenya is like other countries also geographically diverse and there are large regional variations in the country. In 2015, HIV prevalence in Kenya ranged from about 26.9 % in Homa Bay County to about 0.4 % in Wajir County. Five counties (Nairobi, Homa Bay, Kisumu, Siaya, Migori) account for 45 % of all HIV infections in Kenya. Out of Kenya's around 1.5 million people living with HIV in 2015, about 65 % live in 11 out of 47 counties (MHK, 2016:6, 8 & 15, NEPHAK, 2011:16).1

4.3.2 Stigma and discrimination

Since HIV is related to sex, often associated with irresponsible behaviour, and is perceived as contagious and dangerous, it is highly stigmatized. Stigma can be described as a "discrediting attribute that reduces individuals into degraded persons" and can be conceptualized in different ways. One distinction is between felt stigma (perceived by individuals) and enacted stigma (acts of discrimination) (Yebei, Fortenberry & Ayuku, 2008:97). Felt stigma - also referred to as internalized stigma or self-stigmatization - is used in order to describe how a HIV positive person feels about him-/herself, especially when feelings of shame are involved. Felt stigma can result in for example, low self-esteem and depression and can result in social withdrawal among people living with HIV. Discrimination in relation to HIV consists of actions based on stigma and are directed towards the persons being stigmatized (NEPHAK, 2011:14-15).

HIV stigma has been recognized as a major barrier to HIV prevention, testing, treatment, care and support. It is well established that stigma commonly discourage people from seeking medical care and thus contributes to poor health outcomes (Rosser, Njoroge & Huchko, 2015: 413, PLHIV Stigma Index, 2013:Online).

The People Living with HIV Stigma Index measures stigma and discrimination experienced by people living with HIV (PLHIV Stigma Index, 2013:Online). The stigma index has conducted surveys in more than 65 countries. In 30 of these countries more than 10 % of people living with HIV stated that they had lost their job or source of income as a result of their HIV status and in 22 of the countries more than 10 % stated that they had been denied employment for the same reason. In these 22 countries more than 10 % also reported that they had been denied health care. Between 2009 and 2014, in roughly half of the countries with available data, more than 50 % of the population between 15 and 49 years of age stated that they would not buy vegetables from a person living with HIV (UNAIDS, 2016:10-11).

In sub-Saharan Africa, Kenya is one of the countries most affected by the HIV/AIDS epidemic and stigma levels are very high in the country. The National Empowerment Network of People Living With HIV and AIDS in Kenya (NEPHAK) published The People Living with HIV Stigma Index in Kenya in 2011. The study was conducted between 2009 and 2010, and included analysis of 1073 final transcripts from people living with HIV (NEPHAK, 2011:7, 15 & 49). The study found that HIV related stigma was prevalent in Kenya. Many participants experienced social exclusion and nearly 30 % reported experiencing HIV related stigma or discrimination, with no significant difference between genders. Almost 80 % of the participants were aware of gossip about them and more than 50 % had been verbally insulted or harassed. Around 30 % had been physically assaulted, nearly half of these by someone from within the household (NEPHAK, 2011:48-49).

Among the respondents, almost 40 % reported that their rights had been abused in the past year. 40 % reported that loss of job was the most common form of discrimination and 22 % had been refused employment. Around 30 % had been refused accommodation or been forced to move within the last year. Discrimination was also found in relation to healthcare and education -15% of the participants had been denied health services (including dental care) because of their HIV status and 33 % had been either suspended or prevented from attending an educational institution (NEPHAK, 2011:49-50).

The most common source of stigma and discrimination was a partner or a household member. The participants reported that the most likely to react discriminatory to disclosure of their HIV status were friends and neighbors, adult family members and their partners. Only 51 % of the participants in the study had disclosed their status to their partner and 37.3 % to their children (NEPHAK, 2011: 48 & 51). Meanwhile, "over 15 % of respondents reported that a health care professional had told other people about their HIV status without their consent" (NEPHAK, 2011:51). The NEPHAK study also showed that felt stigma was prevalent and widespread: 50.4 % of participants felt that they had themselves to blame for being HIV positive, 48.8 % felt low self esteem, 46.1 % felt guilty and 43.8 % ashamed about their status. Almost one in five (17 %) felt suicidal (NEPHAK, 2011:49).

4.3.3 A future free of AIDS?

Treatment improvements

The number of people living with HIV on antiretroviral therapy (ART) has increased drastically during the last couple of years and the global coverage reached about 46 % in 2015. Annual AIDS related deaths have decreased by 43 % globally since 2003 (UNAIDS, 2016:1 & 3). Eastern and southern Africa are the regions in the world which are most affected, but also the regions with the greatest improvements - the largest reduction in new adult infections occurred in the region. In 2015 there were about 40 000 fewer new adult infections than in 2010, which is a 4 % decline. People with treatment in the region have more than doubled between 2010 and 2015 - coverage of ART increased from 24 % to 54 %and deaths related to AIDS decreased by 36 % (UN-AIDS, 2016:1, 3 & 6).

Kenya has seen a decline in AIDS related deaths since 2003 - a direct result of a massive roll out of free ART the same year. In 2010, estimations showed that 51 314 people died of AIDS related causes - compared to 35 822 in 2015 (MHK, 2016:8). The treatment coverage in the country increased by more than 25 percentage points between 2010 and 2015. After South Africa, Kenya was in 2015 the country with the largest number of people with treatment in Africa - nearly 900 000. (UNAIDS, 2016:3). The Ministry of Health (MHK) of Kenva estimates that around two million AIDS related deaths have been averted between 2000 and 2015 - as a result of scale up of ART (MHK, 2016:20).

Meanwhile, the program to prevent mother-to-child transmission of HIV has been scaled up during the past years. MHK estimates that as a result of this scale up, 97 400 child infections have been averted between 2004 and 2015. In 2015, 59 214 pregnant HIV positive women received antiretroviral prophylaxis to prevent HIV transmission to their newborn children, which represent 75 % of all HIV positive pregnant women in need of HIV prophylaxis at the time. The final transmission rate from mother-to-child (including breastfeeding) has declined from 17 % to 8 % between 2010 and 2015 (MHK, 2016:20-21).

¹ These counties include: Nairobi (163 287), Homa Bay (148 657), Kisumu (135 703), Siaya (118 877), Migori (78 621), Kiambu (68 349), Mombasa (50 328), Kakamega (46 939), Nakuru (37 324), Busia (35 588) and Kisii (31 987) (MHK, 2016:15).

Treatment needs

Even though the development is going in the right direction, there are still huge challenges to be met in order to end the AIDS epidemic. Many do not know their HIV status and around 54 % of people living with HIV are still in need of treatment. Ignorance and misunderstanding are still challenges that weaken the efforts to end the AIDS epidemic (UNAIDS, 2016:1 & 10-11). UNAIDS (2016:10) state that "discriminatory attitudes towards people living with HIV have declined slowly, but progress has been uneven across countries and between women and men". The current large disparities in HIV prevalence must be addressed in order to end the endemic (UNAIDS, 2016:6).

The geographic variation in HIV prevalence in Kenya is a major challenge. Despite progress in Kenya, there is still a lot that has to be done in order to end the AIDS epidemic in the country (MHK, 2016:4 & 8). Dr. Nicholas Muraguri (Principal Secretary of the Ministry of Health in Kenya) states, "although prevalence still remains high at about 5.9 %, a combination of increased awareness, scale up of prevention and treatment programs will lead to a sustained decline of HIV prevalence in Kenya" (MHK, 2016:4).

In 2015 around 5000 children died as a result of AIDS and there is still a large need for various treatment services in Kenya as well as scale ups of prevention programs. For example, pregnant women in the need of prevention of mother-to-child transmission (PMTCT) services increased from 72 451 in 2010 to 79 477 in 2015. During the same period, the number of adults in need of ART almost doubled and the number of children (0-14) in need for ART increased from 72 297 to 93 056 (MHK, 2016:4, 8 & 20).

"HIV-related stigma and discrimination are widely recognized as major barriers to accessing HIV prevention, treatment, care and support services" (NEPHAK, 2011:14).

"The spread of the epidemic must be halted, with zero new infections the principal target" (MHK, 2016:8).

"The world has committed to ending the AIDS epidemic by 2030" (UNAIDS, 2016:1).

4.4 WOMEN'S VULNERABILITY

"I think if poverty had a face, it would be the face of a rural woman" - Cornelia Richter, vice-president of IFAD (UN DPI, 2018: Online).



4.4.1 The most likely to be left behind

Among the poor, women are often the poorest - women and children are a majority of the poor. No matter what the circumstances are, single mothers are always in a difficult situation (Tannerfeldt & Ljung, 2006:46). UN Women state, that women and girls "are among the people most likely to be poor, to lack access to assets, education, health care and other essential services, and to be hit hardest by climate change" (UN Women, 2018: Online).

The poorest women and their children suffer most from the hazards in the slum and the lack of basic services (Tannerfeldt & Ljung, 2006:46). For example, air pollution and health related complications such as increased respiratory infections are great risks. The type of fuel used for cooking and lighting is related to the house-

WOMAN IN KIBERA Photo: Christian Als (Source: https://christianals.com/photo-stories/the-shadow-city/)

hold's socio-economic status. Households with lower socio-economic status mainly use primitive sources of fuel, such as firewood. Around 2.5 billion people rely on biomass (fuel-wood, charcoal, agricultural waste, animal dung etc.) to meet their energy needs for cooking (KNBS & SID, 2013: 8). Smoke from fires and stoves and indoor air pollution is a serious problem, especially when cooking and heating are done indoors. Women and small children that spend most time near the source are most exposed and suffer from the smoke from open fires, burns and other accidents. They are also most exposed to sanitary health hazards. Pit latrines are the most common solution to the lack of adequate sanitation. These bring problems in relation to overfilling, groundwater pollution and flooding (Tannerfeldt & Ljung, 2006:42, 54, 61 & 103).

Rural women constitute around 20 % of the global population and around 43 % of all agricultural workers. But, they are meanwhile facing several inequalities - access to land, markets, training and technology that could improve their lives are restricted (UN Women, 2018: Online, UN DPI, 2018: Online). UN Women state, "on almost every measure of development, rural women, because of gender inequalities and discrimination, fare worse than rural men". Rural women are, in other words, among those most probable to be left behind (UN Women, 2018:Online).

4.4.2 Women and HIV/AIDS

"The feminization of the HIV epidemic in Kenya mirrors the trend observed in much of sub-Saharan Africa" (NEPHAK, 2011:16).

The devastating effects of HIV/AIDS have disproportionately affected young women globally. First of all, the risk of infection is more likely for women than men (Tannerfeldt & Ljung, 2006:46). Adolescent girls and young women (aged 15-24 years) account for about 11 % of the global adult population. Meanwhile they face high risk of HIV infection, thus accounting for 20 % of new infections among global adults in 2015 and 25 % of adults in Sub-Saharan Africa. Women of all ages account for 56 % of new HIV infections among adults in the region and gender imbalance is more evident in areas with higher HIV prevalence (UNAIDS, 2016:8).

As in the rest of the world, young women in Kenya are particularly vulnerable to HIV. In 2015, 55 % of all adults (15 years and above) that were living with HIV in Kenya were women – the country had 830 243 women living with HIV. The prevalence ratio between adolescent women and men in 2012 was almost 3 to 1 and young women accounted for about a third of all new HIV infections among adults in Kenya 2015 (NEPHAK, 2011:16, MHK, 2016:7-8 & 17-18, Montalto et al, 2017:3).

Women with HIV have an increased risk for cervical cancer, which is one of the leading causes of cancer related deaths amongst women in sub-Saharan Africa. The mortality rates are primarily a result of lack of access to treatment services and early screening. A sexually transmitted virus causes cervical cancer and Rosser, Njoroge and Huchko state that it is commonly associated with HIV positivity. Their study on cervical cancer stigma in Kenya showed a high correlation with HIV

stigma (Rosser, Njoroge & Huchko, 2015: abstract, 413 & 417).

It is also commonly women and young girls that nurse the sick. This means that girls often have to leave school to take care of housekeeping or nursing in areas with high prevalence of HIV/AIDS (Tannerfeldt & Ljung, 2006:46). HIV/AIDS together with urbanization have resulted in overstretched safety nets - traditional networks of support are no longer enough. This means that families might not be able to help relatives in need, children might be abandoned and young people that leave home in search of opportunities are often left exposed to economic exploitation (UNICEF, 2016:3). The AIDS epidemic has left many children vulnerable and added to Kenya's amount of orphans. The total number of orphans is estimated at around 2.4 million, half of whom have lost one or both of their parents as a result of AIDS related causes (MHK, 2016:8, NEPHAK, 2011:17).

4.4.3 Gender-based violence

"Gender-based violence and HIV/AIDS are synergistic global health pandemics, each exacerbating the impact of the other" (Hillard et al., 2016: 1683).

During their lifetimes, 45 % of Kenyan women become victims of physical or sexual violence. HIV positive women are more likely to have experienced partner violence than women who are not HIV positive. HIV/ AIDS and gender-based violence are thus synergistic global health pandemics. Various other factors also increase the risk of violence against women in Kenya - they experience higher rates of violence if they, for example, live in poor households, have unskilled jobs or have a Luhya, Kisii/Kuria, or Luo ethnicity. A case study in Kenya also shows that the risk of experiencing physical violence in the country increases drastically among women who are divorced or widowed (Hillard et al., 2016:1683 & 1686-1687).

4.4.4 Loss of land

Violations of property rights and exclusion from ownership or control of property is quite common and frequent among women in Kenya and within other countries in Eastern Africa. Women in Kenva often only have secondary rights to land, commonly gained through marriage. Women are vulnerable to loss of land, especially when a husband dies of HIV in areas where the prevalence of HIV is high. In such cases, women are often blamed for infecting the husband. Victims of property grabbing experience physical, psychological and sexual violence during the dispossession process. Studies have shown that when a husband dies, families often use violent methods to drive women away from their homes. Widows are thus particularly vulnerable to land grabbing and exposed to violence during the process of disinheritance (Hillard et al., 2016:1685 & 1687).

5.0 THEORY: DESIGNING THE RURAL

As stated previously, the mission of the design is to create opportunities for HIV positive women in rural Kenya and result in a self-sustainable women center. Initially, in line with NUA, this project argues the importance of including all levels of human settlements in the development process, including smaller rural communities (Habitat III, 2017: Online). The problematization of previous chapter discussed the relevance of designing the rural. The theory of this project relates to this discussion, but will have a focus on how to design the rural. Which challenges are there and how can these be solved through design interventions? The theory will give various views and examples from different contexts in order to create a framework of different strategies on how to, in a sustainable way, help solve some of the issues in rural areas with design interventions. It investigates and discusses various strategies that are applicable for a women center in rural Kenya and creates an understanding of which strategies to apply in order to design a sustainable center that serves a wider range of women.

The objectives from the NUA have created the foundation for the project and the theory selection. I also aim to follow Tannerfeldt and Ljungs' recommendations for development cooperation projects. The project (and this chapter) takes off in four perspectives that Tannerfeldt and Ljung (2006:17) define as vital for development cooperation. To tackle the prevailing challenges the NUA calls for a new form of urban development that promotes equality and human rights (Habitat III, 2017:Online). The second part of this chapter has a focus on human rights and ways to ensure equal opportunities for all. Another important aspect of the agenda is that it insists on a participatory approach (Habitat III, 2016:4 § 16), which is one of the main commitments of this project. The third part of this chapter discusses participation in broad terms with the aim of creating a foundation for the method (which will be developed and presented in chapter 6 Method and material). The three last parts of this chapter introduces different views and methods on: Culture and vernacular architecture; Incremental and flexible design processes; and Self-sustainability.



THE NAKURU PROJECT BY ORKIDSTUDIO (Source: https://www.archdaily.com/574887/ nakuru-project-orkidstudio)



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5.1 INITIAL PERSPECTIVES

5.1.1 The rights perspective

"If human rights on equal terms were adopted as the principle for governance, the prevailing conditions of the urban poor would not exist" (Tannerfeldt & Ljung, 2006:88).

In an extremely unequal urban society, the rights of the poor and vulnerable are constantly at risk. Tannerfeldt and Ljung argue that human rights are key issues in development and important in relation to urban poverty (Tannerfeldt & Ljung, 2006:17, 88 & 91). Tannerfeldt and Ljung (2006:149) state, "good urban governance as well as development support should be based on a rights perspective, which encompasses human rights and democracy, the rule of law and democratic and participatory governance". The rights perspective must embrace all citizens.

In agreement, the NUA endorses equally shared opportunities and benefits from urbanization, that is enabling decent, dignified and rewarding lives for everyone, whether living in formal or informal settlements. It is a matter of integrating equity, which becomes an issue of social justice - no one should be left behind (Habitat III, 2016:2 § 11 & 5 § 27, Habitat III, 2017:Online).

5.1.2 The perspective of the poor

"The poor themselves know best what their priorities are. Their voices must be listened to and their rights must be respected" (Tannerfeldt & Ljung, 2006:149).

Tannerfeldt and Ljung argue that it is vital to properly include the needs of the poor and explicit analysis must consider the different circumstances of the urban and rural poor. The perspective of the poor is vital - it should guide all urban governance and donor interventions in order to eliminate urban poverty (Tannerfeldt & Ljung, 2006:15, 17, 149 & 151). Tannerfeldt and Ljung state, "without the poor themselves being involved, it is not possible to have full information on their conditions and appreciate their real priorities" (Tannerfeldt & Ljung, 2006:151). In other words, all interventions and policies set to improve the conditions of the poor have to be developed from the priorities expressed by the poor themselves (Tannerfeldt & Ljung, 2006:15, 17, 149 & 151). The poor must have a voice and the right to be heard (Tannerfeldt & Ljung, 2006:148) and the goal for development cooperation should thus be "to contribute to an environment supportive of poor people's own efforts to improve their quality of life" (Tannerfeldt & Ljung, 2006:16).

In line with this, the Swedish International Development Cooperation Agency (SIDA) argues the importance of contributing to economic and political development that strengthens democracy and creates possibilities for people to lift themselves out of poverty (SIDA, 2017: Online). The NUA continues in the same line by stating that capacity development initiatives will be promoted in order to empower and strengthen skills and abilities of vulnerable groups, hence protecting human rights and supporting anti-discrimination (Habitat III, 2016:20 § 155).

The importance of including the poor in decision-making and different methods for such involvement will be discussed in the various subchapters of chapter 5.3 (Participation and participatory design).

5.1.3 The gender perspective

"Gender equality is a rights issue and a 'crosscutting' theme, which should be 'mainstreamed' - that is to say, applied to every case and every intervention" (Tannerfeldt & Ljung, 2006:151).

The poor are exposed to several dangers. Some dangers are common to everybody, but men, women and children are often affected in different ways. Matters related to housing, safety, health and HIV/AIDS are important for everyone, but are core concerns for women. Various issues thus need to be understood from a gender perspective in order to be appropriately addressed. Tannerfeldt and Ljung state that gender equality is a rights issue and must be a "crosscutting" theme - it should be applied to every case and every intervention (Tannerfeldt & Ljung, 2006:17, 42 & 151).

In line with the above, the NUA state that urban and rural development must be age and gender responsive. The agenda aims to eliminate all forms of discrimination and special attention is given the multiple forms of discrimination faced by vulnerable groups such as women, girls and people living with HIV/AIDS. The NUA has a vision of gender equality. The promotion of decent work and livelihood opportunities has a special attention to the needs and potential of women and others in vulnerable situations, particularly the poorest (Habitat III, 2016:2 § 13:c, 4 § 20, 5 § 26, 7 § 42 & 8 § 57).

5.1.4 The environmental perspective

"We commit to preserve and promote the ecological and social function of land (...) and foster ecosystem-based solutions to ensure sustainable consumption and production patterns; so that the ecosystem's regenerative capacity is not exceeded" (Habitat III, 2016:10 § 69).

Challenges such as pollution, loss of biodiversity, pressure on ecosystems and climate change are evident. These threats and challenges complicate the efforts to end poverty (Habitat III, 2016:9 § 63). Environmental concern should be a crosscutting theme in all projects -Tannerfeldt an Ljung argue that environmental aspects must be mainstreained in order to reach a sustainable development. In their words, "environmental impacts shall be taken into account and assessed for every programme or project" (Tannerfeldt & Ljung, 2006:151).

In agreement, The NUA commits to urban and rural environmentally sustainable development. This includes facilitating and strengthening sustainable management of natural resources - such as land, water, energy and materials - with consideration of urban-rural linkages. The agenda will adapt to climate change and aims to protect biodiversity and ecosystems, as well as reduce air pollution and greenhouse gas emissions (Habitat III, 2016:3 § 14:c, 5 § 26, 10 § 65 & § 71).

5.2 PROMOTING ACCESS TO HUMAN RIGHTS

The above discussed rights perspective state the importance of incorporating and protecting human rights in development projects (Tannerfeldt & Ljung, 2006:83 & 149). Large differences in accessing essential services between different groups make poverty reduction difficult, even if the economy is growing (Tannerfeldt and Ljung, 2006:39). As mentioned in previous chapters, Krishna argues that investments in new technologies, healthcare and education are disproportionately concentrated in the largest cities. Increasing the capacities for the rural poor is essential for social cohesion and the development of the global economy (Krishna, 2015: 294). Hersi states, in a similar manner, that poverty and inequality are part of the same problem (KNBS & SID, 2013:iv). Sustained poverty reduction in Kenya will not be achieved if not equality of opportunity and access to basic services is guaranteed. (KNBS & SID, 2013:2).

National social protection floors and human-rightsbased approaches can play vital roles in order to reduce and eliminate rural-urban gaps (ILO News, 2015:On-

line). Krishna argues that there is currently no policy comprehensive enough to meet the challenges of uneven provision, but "by agreeing on some basic principles we can begin to make a difference" (Krishna, 2015: 295). Krishna proposes three main principles. The first principle regards investing in a minimum living standard. By imposing such standard, inequality can be limited and opportunities for poorer communities improved. This means that every individual should have living conditions equivalent to the commonly acceptable standard and be able to provide his/her family with, for example, nutrition, decent healthcare and education. The second principle regards working toward and upholding equality of opportunity, meaning that no matter where you are born everyone should be provided similar support, access to the same upward-leading staircases and career opportunities. The third principle regards extending and making the protections, opportunities and benefits of democracy easier to access for everyone - regardless if they live in cities or remote rural areas (Krishna, 2015:295-296).

As discussed previously, gender equality is a rights issue (Tannerfeldt & Ljung, 2006:151). The NUA state that all inhabitants should be able to achieve their full human potential and the principle leave no one behind commits to end poverty in all its forms and dimensions (Habitat III, 2016:3 § 14:a & 5 § 27). In order to fully harness their important contribution to sustainable development, the agenda commits to empower all women and girls (Habitat III, 2016:1 § 5, 2 § 13:c & 5 § 26). In a similar manner, António Guterres (United Nations Secretary-General) states:

"Women's rights are human rights. But in these troubled times, as our world becomes more unpredictable and chaotic, the rights of women and girls are being reduced, restricted and reversed. Empowering women and girls is the only way to protect their rights and make sure they can realize their full potential." —António Guterres, United Nations Secretary-General (cited in UN Women, 2018: Online).

OF HUMAN RIGHTS



The background chapter of this project showed that rural women often lack access to basic human rights and are among the most likely to be left behind. As everyone else, rural women have the right to well being and their human rights need to be fully respected (UN Women, 2018: Online, Nnoko-Mewany & Bielecka, 2018: Online). Cornelia Richter (vice president of IFAD) argues that the beginning of development is the empowerment of women and that a holistic approach is needed in order to transform the lives of rural women. Such approach cannot merely address one single topic. Instead, she argues that "we have to come up with a well-designed approach where we address the different levels by which women and girls are hampered" (cited in UN DPI, 2018: Online).

"All human beings are born free and equal in dignity and rights" (UN, 1948: art. I).

THE UNIVERSAL DECLARATION Photo: UN News (Source: news.un.org/ es/story/2018/09/1442481)

5.2.1 The right to a decent standard of living

"Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services" (UN, 1948: art. 25.1).

The human right to food reinforces all other human rights. Women's rights to food security and nutrition are restrained by gender discrimination in various ways - it limits their access to agricultural technology, to knowledge and essential services (UN Women, 2018: Online).

The Universal Declaration of Human Rights (UDHR) states that everyone has the right to equal access to public services (UN, 1948: art. 21.2). In line with this the NUA promotes inclusive cities and human settlements that ensure all inhabitants quality of life with equal rights and opportunities. Everyone should be able to inhabit safe, fair, healthy, affordable and accessible human settlements and must have access to adequate, inclusive and quality public services. The provision of services must be sensitive to the rights of women, children and

youth as well as older persons, persons with disabilities and others in vulnerable situations (Habitat III, 2016: 2 § 11 & 12, 6 § 34, 8 § 55).

Kenya's new constitution, promulgated in 2010, guarantees a clean and healthy environment as well as access to basic services - such as safe water and sanitation as basic rights for all Kenyans (Government of Kenya, 2010: art. 42 & 43). The constitution also guarantees the right to accessible and adequate housing (Government of Kenya, 2010: art. 43). Despite this, formal housing supply does not keep pace with the growing urban population and the demand for housing in urban areas will continue to grow as the country urbanizes (Cira, Kamunyori & Babijes, 2016:8).

5.2.2 The right to work and employment

"Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment" (UN, 1948: art. 23.1).

The NUA recognizes that productive employment for everyone and equal opportunities are key objectives for a sustainable urbanization (Habitat III, 2016:7 § 43). The agenda argues that the promotion of decent work and livelihood opportunities should put special focus on the needs and potential of women, particularly the poorest. It commits to ensure decent work with equal pay for equal work (Habitat III, 2016:2 § 13:c & 8 § 57).

The poor in Kenya depend primarily on labor income and it is important to provide them with work opportunities. According to the KUR "rural poverty declined from 42.3 percent in 2000 to 37.6 percent in 2007, primarily as a result of rural workers doing non-farming work" (Cira, Kamunyori & Babijes, 2016:2). The households that managed to escape poverty had more diversified income sources, were more likely to have better educated members, had more land under cultivation as well as more non-land assets. In other words - diversifying income past farming is implied to be an effective poverty reduction strategy (Cira, Kamunyori & Babijes, 2016:2).

5.2.3 The right to productive resources

"Towards a new "energy democracy," renewable, clean energy should be available and affordable to all, and women, including in rural areas, should participate equally in its distribution and control" (UN Women, 2018: Online).

Lack of access to clean sources of energy is a key barrier to development. As mentioned in the background chapter, more than one billion rural people worldwide do not have access to any electricity and the type of fuel used for cooking and lighting is related to the household's socio-economic status (UN Women, 2018: Online, KNBS & SID, 2013: 8).

UN Women argues the importance of an energy democracy, where everyone have access to renewable



and clean energy that in turn improves health and livelihoods as well as improves work conditions. They state, "small-scale, low-cost alternatives, particularly in remote areas and poorer communities, can play a vital role in extending power and making energy democracy a reality". It is important that rural women are given the opportunity to acquire the skills and technology needed to make the best possible use of productive resources (UN Women, 2018: Online).

Photo: Christian Als (Source: http://christianals.com/rekibera/)

5.2.4 The right to land and property

"Everyone has the right to own property alone as well as in association with others. No one shall be arbitrarily deprived of his property" (UN, 1948: art. 17.1 & 17.2).

The Food and Agriculture Organization of the United Nations (FAO) states that one significant factor in order to promote rural development and productivity is secure land tenure rights for farmers (FAO, 2017:1). Hillard et al. argue, "land and property rights ensure basic human rights to shelter and livelihood" (Hillard et al., 2016: 1685). The rights perspective thus applies to security of land tenure (Tannerfeldt & Ljung, 2006:149) and the NUA works towards such security. Particular attention is given the security of land tenure for women, as one fundamental part of their empowerment (Habitat III, 2016:6 § 35).

The access to land security is currently unequal in many countries and women are especially disadvantaged. Ru-

ral women commonly have unequal access to land and other productive resources needed for income and food security. The distribution of agricultural land area between men and women is uneven - women own significantly less agricultural land than men and their plots are usually of lower quality (UN Women, 2018: Online, FAO, 2017:1 & 5). Meanwhile, as discussed in the background chapter, rural women's rights to equal property and inheritance are often violated - many women may lose property or land when they are divorced or widowed (Nnoko-Mewany & Bielecka, 2018: Online). Tannerfeldt and Ljung (2006:58) state, "the need to protect the rights of widows has been accentuated in a tragic way due to the death toll of HIV/AIDS, and 'property grabbing' by the husband's relatives is not unusual".

5.2.5 The right to live free from violence and harm

"Higher levels of poverty, limited access to justice and entrenched discrimination are among many factors that put women and girls in rural areas at increased risk of violence" (UN Women, 2018: Online).

Unequal access to land and resources can lead to other forms of discrimination as well as violence (UN Women, 2018: Online). Rural women are at great risk of different forms of harmful practices and violence - in the household, the workplace or in public spaces (UN Women, 2018: Online). Intimate partner violence in Kenya is often related with gender power inequalities and women who are involved in decisions in the households are commonly less exposed to violence (Hillard et al., 2016:1687).

The NUA will work against all harmful practices against women and girls - everyone should be able to live lives free of violence and harassment. The agenda aims to



Photo: UN HABITAT (Source: unhabitat.org/urban-themes/human-rights/)

eliminate all forms of discrimination and special attention is given the multiple forms of discrimination faced by vulnerable groups such as women, girls and people living with HIV/AIDS (Habitat III, 2016:2 § 13, 4 § 20, 7 § 39 & § 42). Gender-based violence and HIV/AIDS are overlapping problems - women who are HIV-positive are more likely to experience partner violence than women who are not. Hillard et al. argue that in order to counter these overlapping pandemics, interventions in both realms have often tended to emphasize individual and small group programming. But, they argue the importance of supplementing these small interventions with larger ones that intervene at community and structural levels (Hillard et al., 2016: 1683).

5.2.6 The right to a healthy life

"Health is a human right and should be provided to all residents within a country." - Isabel Ortiz, Director of the ILO's Social Protection Department (cited in ILO News, 2015: Online).

As mentioned previously, the rights perspective comprises provision of adequate basic services (such as healthcare) and these should be equally available to all citizens (Tannerfeldt & Ljung, 2006:83 & 149). Many rural women have no access to healthcare, or access only to poor quality services (UN Women, 2018: Online). Closing the gaps in rural health access in the world requires a comprehensive approach that is based on principals of equity and universality. ILO argues the need for a human rights-based approach that addresses various issues - such as missing rights, lack of health workers, funding and quality of care - simultaneously (ILO News, 2015: Online).

The NUA commits to enhance health and well being for everyone. This includes, for example, universal access to sexual and reproductive healthcare services in order to reduce maternal and newborn child mortality as well as ending the epidemics of AIDS, tuberculosis and malaria (Habitat III, 2016:3 § 14:a & 8 § 55). Programmes to prevent the spreading of HIV/AIDS are vital in order to reach a safe and healthy environment (Tannerfeldt & Ljung, 2006:137). Kilonzo argues that, in order to achieve the goal of a future free from AIDS in Kenya, the country "need to tackle the fundamental drivers of the epidemic, particularly gender inequality, poverty, stigma and discrimination in family and health service settings" (MHK, 2016:4). As mentioned previously, girls and young women are the most vulnerable to HIV. UNAIDS states, "harmful gender norms and inequalities, insufficient access to education and sexual and reproductive health services, poverty, food insecurity and violence, are at the root of the increased HIV risk of young women and adolescent girls" (UNAIDS, 2016:8). Promoting access to secondary education, structural approaches that promote gender equality, and cash transfers to girls are some efficient measures for HIV prevention (UNAIDS, 2016:11).

NEPHAK argue that it is vital to advocate for the rights of all people living with HIV - it must be a priority to

empower all HIV positive people (NEPHAK, 2011:11). They argue the need for psychosocial and socioeconomic support, which should include "training opportunities for people living with HIV to become peer educators, capacity and network building, counseling, training, and income generation" (NEPHAK, 2011:10). Support groups for people living with HIV, as well as local NGOs, are very important in order to help people experiencing stigma and discrimination (NEPHAK, 2011:50).

5.2.7 The right to an educated life

"Everyone has the right to education. (...) Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit" (UN, 1948: art. 26.1).

Education is vital for the rural population in order to obtain the skills needed to perform wage work or to become self-employed (Cira, Kamunyori & Babijes, 2016:2). The KUR states that urbanization in Kenya will strongly reinforce economic growth if urban firms can "benefit from a sufficiently large pool of better educated people who can migrate from rural areas". On the other hand, growth will be weaker if "uneducated migrants are forced to leave rural areas for the city" (Cira, Kamunyori & Babijes, 2016:3).

The rights perspective comprises provision of adequate education, which must be equally available to all citizens and accessible to everyone no matter of language or location (Tannerfeldt & Ljung, 2006:83, UN Women, 2018: Online). Krishna argues that poor and rural children attend the schools of worst quality, which leaves



- them with the least opportunities. Providing high-quality education for everyone, and equality in training and hiring, is thus essential in order to ensure 'equality of opportunity' (Krishna, 2015:295 & 297).
- UNICEF states that it is important to prioritize girls' education in Africa. Educated women are more likely to ensure that their children attend school and children with educated mothers have considerable better chances of survival than children of mothers without education, even in households which are deprived of essentials such as sanitation and clean water (UNICEF, 2014:11, KNBS & SID, 2013:7). In agreement, Richter argues that education and investment in capacity development is vital for the empowerment of women (cited in UN DPI, 2018: Online).

Photo: Christian Als (Source: http://christianals.com/rekibera/)

5.3 PARTICIPATION AND PARTICIPATORY DESIGN

5.3.1 Place, identity and belonging

Edward Relph (1976:37) describes place as "those fragments of human environments where meanings, activities and a specific landscape are all implicated and enfolded by each other". Places are important sources of both security and identity - people tend to define themselves through some sort of devotion to place (Relph, 1976:6, Taylor, 2009:296-297). Cliff Hague argues that it is everyday life that "sets the structures within which place communities are imagined, experienced and changed" (Hague, 2005:11). Everyday life thus plays an important role in the creation of place; peoples' actions contribute to its meanings and values. In other words, space becomes place when it is used and inhabited (Cresswell, 2009:169-170).

The emotional bonds people experience in a place creates its meaning. Places can hold various meanings and identities for different people that can be individual or shared. Shared experiences of a place are vital for feelings of belonging. Heritage, language, religion, ethnicity and shared interpretations of the past may thus define communities and create inclusion or exclusion (Foote & Azarvahu, 2009:96-97, Seamon 2008:3-4, Graham & Howard, 2008:5). Relph argues, "to be inside a place is to belong to it and to identify with it, and the more profoundly inside you are the stronger is this identity with the place" (Relph, 1976:49). The concepts of insideness and outsideness have a focus on how people experience place. Insideness describes feelings of belonging and sense of community, while outsideness describes feelings of separation and detachment (Relph, 1976:49, Stock, 2000:615-616, Seamon, 1996:2).

Ann-Dorte Christensen argues "the question of belonging is a strong marker not only of collective and individual identities but also of distinction and social exclusion" (Christensen, 2009:21-23). She emphasizes a close interplay between the construction of belonging and unbelonging. The two should be seen in relation to one another - the construction of who belongs generates the construction of who does not belong (Christensen, 2009:26). In line with this, Koefoed and Simonsen argue, "places in the meaning of loci or community generally have a dual character: they are social commu-

nities where residents communicate and do things together and they are bounded areas seeking to enforce the boundaries against those who do not belong" (Koefoed & Simonsen, 2011:354). Feelings of belonging are based on experiences of inclusion, and those who do not share the same values and believes may thus be constructed as the others (Graham & Howard, 2008:5).

Ayona Datta argues that in order to create feelings of belonging in an otherwise exclusionary environment, openness to others can be formed. In her study of a squatter settlement in Delhi, India, she showed that a cosmopolitan neighbourliness was produced where beliefs and values about the others were transformed in order to create a home in an otherwise exclusionary city. Differences became normalized and the other became familiar with the self (Datta, 2011:1, 3-4 & 19).

It is of great importance to experience meaningful places. Meanwhile, Relph argues that there is a decrease of diverse landscapes and meaningful places that indicates the possible outcome of a placeless geography (Relph, 1976:6 & 79). Placelessness, in Relph's words, is the product of the "casual eradication of distinctive places and the making of standardized landscapes that results from an insensitivity to the significance of place" (Relph, 1976: preface 2008). This results in a loss of sense of place, or in other words, diminishing bonds of attachments to place (Foote & Azaryahu, 2009:96). Placelessness is thus "the weakening of distinct and diverse experience and identities of places" (Relph, 1976:6). Relph conceptualized the concept of placelessness in 1976 and the meaning of it has changed since then (Relph, 2000:617-619). In later writings it is emphasized that increasing mobility is now one of the main reasons for loss of sense of place (Relph, 1976: preface 2008).



Photo: From the movie "Lost in translation" (Source: https://delistraty.com/2014/09/29/the-eroticism-of-placelessness/)

"The essence of planning is the presumption that deliberate 'topdown' action can translate a desired place identity into an actual place identity, but the reality is that a myriad of actions of others, the normal practice of everyday life in the city, will subvert such intentions" (Hague, 2005: 11-12).

5.3.2 Identity in relation to planning and design

Cliff Hague argues, in line with Relph's arguments regarding place and identity, that place involves a mix of memory and interpretation. It is narrative and interpretation that produces identity and it is in turn identity that alters space into place. It is according to Hague no surprise that words like identity and character are frequently used among planners. But he states that there is an assumption that place is defined mainly through its visual qualities - underlying meanings are not often decoded. People may experience varying meanings in relation to place and there will thus be multiple and contested identities within the same area. According to Hague, the key question for spatial planning is how it can construct, integrate or exclude these identities (Hague, 2005:4-5, 8 & 12).

The architectural firm MASS argues that architecture either heals or hurts - it is never neutral. Architecture has the power to project its values into communities. In other words, it has the power to improve communities, at the same time as it can be responsible for social injustices. MASS continues the argument by stating "the stakes are too high, and the accountability too low, not to insist that architects do something to address these challenges" (MASS, 2018: Online).

Hague states that the urban planner is essential for the creation of place narratives; "the construction, manipulation, negotiation and implementation of such narratives is an integral part of the role of planners" (Hague, 2005:181). Karryn Kirk argues in a similar manner that planning for place identity is "a process of constructing a discourse within which specific narratives are written" (2005:139). The question is; who is constructing these



(Source: issafrica.org/events/vou-can-help-thuli-madonsela-how-citizens-can-protect-democracy-and-rights)



(Source: unhabitat.org/urban-themes/safety/)

narratives and are they exclusionary of some peoples' meanings of place? Hague states that there is a gap between the lifestyle and living choices of ordinary people and the planners' narratives of sustainable development. In order to fill these gaps there is a need for a dialogue between the elite and the public (Hague, 2005:8 & 12).

Tannerfeldt and Ljung argue that urban development is a complex process involving many different and conflicting interests. Several stakeholders are involved in the development process, some more powerful than others. The poor majority of the population usually does not have any power at all and are often excluded from decisions and planning processes (Tannerfeldt & Ljung, 2006:83 & 96). Various meanings and experiences collide in places and narratives can be exclusionary and establish control. It is of importance for the planner to be aware of conflicting interests and be able to negotiate new and shared connections. Higgins states that "community narratives must be listened to and planners need to think not of place identity but of place identities" (Higgins, 2005:203).

Smith argues that it is possible to create shared narratives of place by involving different stakeholders in the process, hence merging various interests (Smith, 2005:39). Hague stresses the importance of community participation as a means to create these shared narratives of place and emphasizes the importance of planners' ability to engage local residents in the design process (Hague, 2005:8, 12 & 181). Hague and Jenkins argue that the basis for land use planning and urban design must be constructed through a focus on place identity and participation (Hague & Jenkins, 2005:209 & 223).

5.3.3 Possibilities and challenges with participation

As discussed previously, Tannerfeldt and Ljung argue that explicit pro-poor policies must be adopted in order to eliminate poverty and these must include broadened opportunities for participation - it is vital with comprehensive actions that involve the poor themselves, NGOs and the private sector (Tannerfeldt & Ljung, 2006:136 & 154). The NUA commits to urban and rural development that is people-centered, empowers all individuals and communities, and enables participation of all relevant stakeholders. Participatory approaches are required in order to identify existing and emerging challenges and to be able to address them properly, as well as establish opportunities for economic development. Sustainable cities and human settlements are, according to the agenda, participatory and enhance civic engagement and political involvement. This will in turn generate sense of belonging and ownership among all citizens - stimulating inclusion, safety and social cohesion in pluralistic and peaceful communities (Habitat III, 2016:2 § 13:b, 5 § 26, 6 § 31 & 7-8, § 48).

It is vital that participatory approaches permeate all stages of urban and territorial policy and planning processes - from conceptualization to design, budgeting, implementation, evaluation and review. Everyone's voice and representation must be enhanced and participatory approaches must be age and gender responsive (Habitat III, 2016: 9 § 59 & 12 § 92). Higgins states that participation that puts special attention to usually excluded groups is of great importance (Higgins, 2005:203). The NUA will ensure "women's full and effective participation and equal rights in all fields and in leadership at all levels of decision-making" Habitat III, 2016:2 § 13:c). Tannerfeldt and Ljung argue that women are the key to progress and they must be incorporated in every program that aims to address the needs of the poor. Men should obviously not by left out, but women's participation in decision-making is critical and must be integrated from the beginning and throughout every project (Tannerfeldt & Ljung, 2006:47).

Virmani argues that top-down planning by governments can leave communities feeling fractured. He opposes top-down programs where housing is constructed by governments and charities and handed to the community. Instead, Virmani argues for the possibility to build

social capital and the importance of structuring programs so that they are in the hands of the stakeholders (Virmani, 2016:67-68). Participatory design has its roots in the 1970s and was at its origin strategically guided by two main values. It started by the initial standpoint that people affected by a design should have the right to influence the process that is going to impact their lives. Another motive was the possibility to ensure the utilization of existing skills as a resource - by engaging stakeholders as designers their important tacit knowledge could be included in the design process (Bjögvinsson, Ehn & Hillgren, 2012:103).

The goals with participation might be clear but there are many challenges linked to it - the process is complex and the actual results difficult to achieve. If a participatory process does not involve redistribution of power, the existing issues could remain and the process could even work against the empowerment it was set to achieve. Further, if practiced with the wrong intentions, a participatory process could become manipulative (Arnstein 1969:217, Jernsand & Kraff, 2014:230). Hague and Jenkins argue that even when a participatory method is used, it is often in the context of an economical or political hidden agenda (Hague and Jenkins, 2005:209 & 222). Different forms of participation are illustrated by Arnstein's ladder of participation, an early contribution to the discussion on participation. Arnstein characterizes different levels of 'devolution' - degrees of which power could be delegated to citizens. With its different degrees of participation, the ladder is ranging from manipulation at the bottom - where participation is used as a mean of manipulating public opinion - to citizen control at the top. The goal should be participation where citizens are in control of decisions (Arnstein 1969:217).

Slum Dwellers International (SDI) states that even though participatory methods have been prioritized by development agencies, communities themselves have merely been given the possibility to develop their own alternatives (Muungano wa Wanavijiji documentation Team, SDI, 2015). Satterthwaite argues that the urban poor are very rarely consulted and that they have to rely on the professionals dominating the urban development discourse to articulate their needs. The views of the people (and organizations with legitimate right to speak and negotiate on behalf of urban poor groups) are missing from most national and international documents, debates and policy developments (Satterthwaite, 2016:135-136). In other words, the organizations of the urban poor do not have the influence they should have in urban development. Satterthwaite states that this has to change and argues that NGOs, local governments, and national and international agencies must work in partnership and collaboration with urban poor groups and their organizations in order to create new approaches that will have greater impact and possibility to solve the most difficult urban problems (Satterthwaite, 2016:137-138).

In agreement, Kimani and Muturi argue that the role of the community must be enhanced in development processes (Kimani & Muturi, 2013: Online) and Hague and Jenkins state the importance of bottom-up planning (Hague and Jenkins, 2005:209 and 222). This relates back to Tannerfeldt and Ljungs' perspective of the poor; "the point of departure must be to recognize the realities of the poor, their assessment of the situation and their priorities" (Tannerfeldt & Ljung, 2006:15). In other words, "when improvement plans are discussed and decided the perspective and priorities of the poor themselves should apply" (Tannerfeldt & Ljung, 2006:88). In relation to Arnstein's ladder, Tannerfeldt and Ljung discuss the important but complex role of NGOs. They highlight their invaluable work to improve the conditions of the poor and their important and supporting role in the public debate. But, the advocacy role also has its disadvantages; the NGOs are sometimes seen as representing the poor and occasionally wrongly act as they have this mandate. Tannerfeldt and Ljung highlight the danger with such actions – the poor have the right to act and speak for themselves. They state that, "relationships are clear as long as the urban poor are seen as active agents rather than passive recipients" (Tannerfeldt & Ljung, 2006:88).

Satterthwaite argues the importance of redefining the "role of professionals away from being the talkers, managers and solution generators to being listeners and supporters of community-generated solutions" (Satterthwaite, 2016:136). This is a large challenge for official agencies, but crucial in order to meet the poverty reduction targets. The redefinition challenges the way these agencies work, which brings personal challenges for all professional working within them. Satterthwaite argues that many professionals working with urban problems have very limited knowledge of the realities and daily lives of the urban poor. Their training have only rarely

taught them how to listen rather than talk and rarely equipped them with the knowledge to provide the most useful advise for low-income groups. Satterthwaite thus states the importance for professionals in urban development to learn how to "support the representative organizations formed by the urban poor" (Satterthwaite, 2016:138).

Jernsand and Kraff argue, in line with the above, that the participatory method should not merely regard asking the participants for approval or advice. In order for participation to be successful it must view the users as partners and actively involve them in the process (Jernsand & Kraff, 2014:227). They state, "by keeping the process transparent, by informing and involving, and by finding local stakeholders to collaborate with, a shared ownership could develop". It is important to use the ideas of the community as a starting point for the project – a process starting with an outside initiative face the risk of failing in the long run when the initiator leaves (Jernsand & Kraff, 2014:240). In agreement, Tannerfeldt and Ljung argue that development occurs as a result of local resources and efforts. They state, "these are mobilized only when the people themselves are involved, committed and feel 'ownership'" (Tannerfeldt & Ljung, 2006:84). Hence, all development must be built on the efforts of the people themselves and with local resources. Success is dependent on the enabling of these efforts (Tannerfeldt & Ljung, 2006:16). In other words, "management of resources and services need to be as close as possible to the people for whom they are intended" (Tannerfeldt & Ljung, 2006:84).

Bjögvinsson, Ehn and Hillgren argue that a challenge for designers is to move from designing objects to designing socio-material assemblies and they state the importance of envisioning 'use before actual use'. Participatory design is seen as one way to meet these challenges. They argue the importance of including potential users in the design process and engaging them as designers. The approach thus views both professional designers and stakeholders as designers (Bjögvinsson, Ehn & Hillgren, 2012:102, 104 & 107). In line with this, Hehl argues that design projects should, in an equal way, include residents, architects and social workers. He states, "participatory design then operates as an open framework that relies on the fact that architectural and urban design is conceived as an integral component of self-organization" (Hehl, 2016:40).

ECD&F CENTER IN RWANDA BY ASA Photo: ASA (Source: http://www.activesocialarchitecture.com/ecd-f-centers)

"Ultimately, all development must be built on domestic resources and the efforts of the people themselves. Success depends on the enabling of these efforts and the mobilizing of human and financial recourses" (Tannerfeldt & Ljung, 2006:16).

Hehl argues that the success of designing rural communities rely on, among other things, "a solid structure of social and technical assistance to support cooperative organizations during planning and the post-occupancy phase" (Hehl, 2016:36). It is vital to hand over participatory tools so that the project can continue in the future (Jernsand & Kraff, 2014:239). Hehl argues further, "given the lack of education and fixation on individual property, participation of low-income populations requires particular attention on teaching how housing production works, how we can conceive the city as a collective project and what differentiates well-designed settlements from generic settlements" (Hehl, 2016:40). Satterthwaite argues in a similar manner that there is a



need to provide learning opportunities for the representatives of the poor and highlights the importance of community-to-community exchanges (Satterthwaite, 2016:136). Design could in this way become, in the words of the architecture firm Active Social Architecture (ASA), "a tool to empower communities and lead to a stronger, prosperous and sustainable future" (ASA, 2018: Online).

versity, and equality as key elements in the humanization of our cities and human settlements" (Habitat III, 2016:5 § 26).



RURAL HOUSING PROTOTYPE IN SHIJIA VILLAGE BY RUF Photo: RUF (Source: http://www.laterizio.it/cil/progetti/83-casa-prototipo-nella-provincia-di-shaanxi-cina.html)

5.4 CULTURE AND VERNACULAR ARCHITECTURE

5.4.1 The importance of culture

Lack of recognition of cultural heritage belonging to the poor and lack of access to culture are additional dimensions of poverty (Tannerfeldt & Ljung, 2006:16). The NUA commits to promote culture and to preserve cultural heritage and diversity. These are described as sources of enrichment for humankind and as vital dimensions of sustainable development (Habitat III, 2016: 5 § 26, 13 § 97 & 20 § 156). The agenda promotes "innovative and sustainable use of architectural monuments and sites with the intention of value creation, through respectful restoration and adaption" (Habitat III, 2016:17 § 125).

Tannerfeldt and Ljung state that historic environments are valuable magnets that attract tourism, capital and business. Cultural heritage is an important resource in all communities - the potential may not always have been realized, but cultural heritage is in many places the

single most important asset. The historic environment has more value than the potential economic benefits from tourism (Tannerfeldt & Ljung, 2006:106). Culture contributes to empower citizens to play an active role in development initiatives - it is thus important in order to stimulate and strengthen social participation, responsibility and the exercise of citizenship (Habitat III, 2016:6 § 38, 17 § 125 & 20 § 156). Tannerfeldt and Ljung argue, in relation to previous discussions on place and identity, that a nation or a community is bond by collective memories and interests that are commonly associates with places. Architectural heritage has an important role - in both urban and rural settings - as observable support to the shared memories of the past (Tannerfeldt & Ljung, 2006:106).

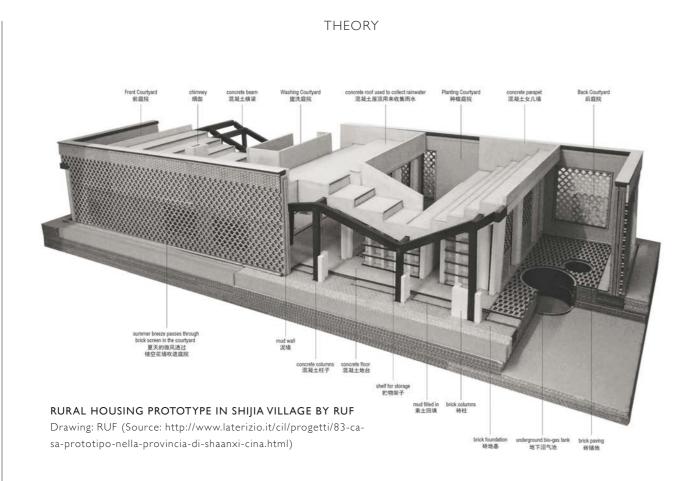
Achieng' Abonyo argues, in a similar manner, that underlying cultural values are often attached to the creation of places; the built environment is not merely determined by physical and natural resources. The identity

of a community is formed by the way it builds and gives meaning to places. Since culture varies between communities, so do the cultural meanings and uses of space. Achieng' Abonyo argues that ignoring people's culture could prevent sustainable use of newly established urban environments. She states, "we need to take into consideration the social, economic, physical, technological etc. aspects of the people to be housed, but we should not ignore culture" (Achieng' Abonyo, 2005:1).

5.4.2 Vernacular architecture

"Local materials are often the most appropriate for climate, culture and comfort, however growing aspirations for better quality of living has led many towards far less suitable yet modern products and methods of building" (Orkidstudio 2018: Online).

Sandra Parvu explains vernacular architecture as 'homemade'. She describes the core of the vernacular as "a relation to the environment, and a way of inhabiting that comes from a knowledge of the land, its climate and topography" (Parvu, 2016:30). David Grahame Shane argues that traditional village vernacular takes on various shapes in different places of the world. But, in line with Parvu, he argues that what they all have in common is their relation to the carrying landscape capacity (Grahame Shane, 2016:49). Virmani states, "the design of rural homes, though often simple in appearance, embodies more than meets the eye; they possess the tangible attributes of using local materials and consequently have low carbon footprints" (Virmani, 2016:71). Construction in traditional African communities has, according to Knutson, always been based on natural materials from their immediate environments. This results in buildings that are well integrated with nature and their surroundings (Knutson, 2011:29).



A loss of vernacular architecture

Millions of people still live in vernacular buildings globally. The majority of vernacular buildings that has survived until today are largely to be found in rural areas of developing countries. But, Achieng' Abonyo argues, "as urbanization spreads in these areas, some vernacular communities become urbanized 'without notice"'. She argues that urbanization often spreads Western values a contrast to the vernacular (Achieng' Abonyo, 2005:2). Modern and less appropriate products and methods are often used in the search for better living qualities. As discussed earlier, generic buildings are being constructed all over China. These are, according to Bolchover and Lin, "replacing very specific vernacular house types, which have adapted gradually over hundreds of years to the climate and location where they exist" (Bolchover & Lin, 2014:172). Modern alternatives result in the abandonment of traditional buildings, methods and materials (Bolchover & Lin, 2014:147).

Virmani states that it is the process of building that creates societies (Virmani, 2016:71). Building houses in rural China used to be an activity that brought the community together. Bolchover and Lin argue that one of the biggest changes to rural housing is its transformation from a communal activity to an expression of

individuality. Self-construction has been replaced with the hiring of labor and a new dependence on outside contractors has been developed. In the words of Bolchover and Lin, "the physical transformation of the village is simply a symptom of a larger shift from economic self-reliance into a system of dependency, threatening the very concept of rural livelihood" (Bolchover & Lin, 2014:160).

A new way to design

Knutson argues that many architectural projects in development countries have the goal of providing a product in line with its global counterparts. But, such goal might exceed what is locally appropriate and ignore the needs of the target population. He states the importance of a balance between global design standards and an appropriate local response (Knutson, 2011:30-31). As discussed previously, there is a cultural meaning imbedded in many indigenous spaces and buildings. Achieng' Abonyo argues, "professionals in the built environment have been more concerned with the physical environment, which seems easier to grasp, and have ended up ignoring the social which involves knowing the culture of the people they design for" (Achieng' Abonyo, 2005:7). There is thus a great need for architects and planners to be aware of the complex social structures that bonds communities and the built environment (Achieng' Abonyo, 2005:7-8).

Knutson suggests various principles for foreign architects working in developing countries. He uses the Kenya Women and Children's Wellness Centre in Nairobi as a case study and discusses various approaches appropriate for design processes in Kenya. When designing in developing countries he argues that three key factors must be taken into consideration in order to reach successful solutions. The areas of focus include: local environmental considerations and the regional climate; social and cultural considerations (i.e. cultural context and social expectations); and local construction methods and established practices (Knutson, 2011:21). Knutson states, "the resultant design should become a fusion of global ideas localized to the people it serves" (Knutson, 2011:30-31).

In agreement, Bolchover and Lin state the importance of new strategies and models for rural villages - every project must respond to the unique context of its location. Some of RUF's projects return to the vernacular, while others are more driven by the desire for difference. The aim of their projects is always to prioritize local specificity and offer alternatives to the increasingly generic countryside. A good example of their approach is the design of a prototype house in Shijia Village (Bolchover & Lin, 2014: Cover, 7, 11 & 165). With merely two options of rural housing available - the traditional or the modern - the design of the prototype bridged the two and created a third option where both traditional and modern materials and techniques were used. The aim was to support the preservation of knowledge of local techniques and materials and for the prototype to work as an "advocate for adaption as opposed to abandonment of traditional modes of living". (Bolchover & Lin, 2014:172).

Working with local materials, methods and practitioners

Rural societies have had the ability to preserve and cultivate centuries-old knowledge. Virmani argues that rural artisans are important knowledge bearers - technologies developed by them offer "the knowledge, skills and sensibility that have sustained this world for centuries" (Virmani, 2016:70). Knutson argues the importance of

considering local methods and practices already established - a clear understanding of local construction culture is critical to all design projects. In order to reach such understanding it is vital to work with local practitioners and learn through their existing methods (Knutson, 2011:21 & 28). He states, "although many aspects of the design process can be accomplished without local input, it is this input that makes work truly localized and tailored to its own environment" (Knutson, 2011:28).

Local and traditional building materials are cheap and accessible and possess valuable advantages in relation to climate, comfort and culture. Selecting local materials and nearby suppliers when designing in the rural context results in a valuable support of economies around the site and promotes a sustainable process (Knutson, 2011:29, Orkidstudio 2018: Online). The use of local materials and traditional methods are labor intensive, hence has the possibility to create job opportunities for local workers (Tannerfeldt & Ljung, 2006:108). Self-construction is an important tool in order to incorporate the community in the development process. Orkidstudio's projects focus on the construction process rather than the final product. The process - of sharing skills and knowledge on site - is a powerful tool for social change and empowerment. Orkidstudio state: "building collectively brings communities together, supports local economic growth, empowers, instills pride, and leaves a legacy that reaches far beyond final completion" (Orkidstudio 2018: Online).

5.5 SELF-SUSTAINABILITY

"The measure of success of our designs comes in their benefit to their primary users, as well as their value to the whole community and impact on the surrounding context as a means to empower, enrich and enhance lives" (ASA, 2018: Online).



HOUSING IN JINTAI VILLAGE BY RUF (Source: inhabitat.com/green-roofed-village-shows-a-more-sustainable-way-to-build-in-post-disaster-rural-areas/)

5.5.1 Village ecology

"The idea is to relate the various programs of the village to an ecological cycle" (Bolchover & Lin, 2014:176).

Hehl argues that there is a fragmentation in rural areas that cannot be undone. Instead, local communities and neighborhoods have to develop their own services that functions independently of urban areas. This approach is applied in the 'Eden' project, which is based on an exemplary development on the test-site of Bairro dos Mineiros - a new low-income neighborhood in rural Brazil. The design of the Eden project includes various functions. For example, a covered market works as a trading hub for organic farming and agroforestry. Income is further generated through a workshop that is self-organized by the community and is used both for repair services and for community practice (Hehl, 2016:36-37 & 39). Hehl argues, "by redefining infrastructure provision as a tool for social and ecological

development, the picture of the neglected rural periphery can be reversed: instead of a dead-end, Bairro dos Mineiros can then be considered as a local center and as a productive interface between urban and natural environments" (Hehl, 2016:40).

Bolchover and Lin argue in a similar manner the importance of viewing the village as a 'programmatic whole', through which it is possible to strengthen its economic sustainability. The aim of many of RUF's projects is to insert new economies into villages in order to decrease villagers' dependency on remittances sent from their children. The prototype house in Shijia Village, discussed in previous chapter, is one example of how RUF works to help assert village independency. The prototype house was designed to be multifunctional and work as both a home for women as well as a center for women's handicraft (Bolchover & Lin, 2014:16, 170-171 & 176). Bolchover and Lin state, "the construction of the house initiated a new phase for the village economy, developing a new cooperative business around traditional straw weaving" (Bolchover & Lin, 2014:171).

After the Wenchuan Earthquake in China in 2008, RUF worked with the reconstruction of Jintai Village - one of the places that were hardest hit. Their main approach was to create a contemporary Chinese village, which included reorganizing the program at the village level (Bolchover & Lin, 2014:173 & 176). The aim was to consider the village as a totality and to relate the different programs of the village to an ecological cycle. Bolchover and Lin argue, "this is done by linking the spatial organization of the village to its work cycle, by incorporating the village into the landscape, and by creating environmentally responsive cycle of waste disposal and water usage". Further they state, "by articulating these processes clearly, the village also hopes to become a destination for tourism from nearby urban areas" (Bolchover & Lin, 2014:176).

5.5.2 Far-reaching impacts

"A transcendent idea is one that speaks to greater societal goals outside the building and seeks to affect systemic change to society at large" (MASS, 2018: Online).

Bolchover, Lin and Lange stress the importance of strategies with "the power to affect the scale of the entire village" (Bolchover, Lin & Lange, 2016:12). Tannerfeldt and Ljung argue, in a similar manner, that preference should be given projects that produce replicable models and create an enabling environment. The aim should be to work with processes and complexity rather than single-sector approaches (Tannerfeldt & Ljung, 2006:17 & 155). They state, "the challenge is to develop effective forms of assistance to local action with an impact that goes beyond that of individual projects" (Tannerfeldt & Ljung, 2006:154). In order to test new approaches pilot projects may be good options, but single projects should be an exception. The challenge to improve living conditions for the million of people living in urban poverty and to prevent formation of new slums requires action on a corresponding level. Approaches that comprise larger geographical scales should thus be the rule (Tannerfeldt & Ljung, 2006:160). A meaningful scale can be reached in different ways and Tannerfeldt and Ljung state the importance of taking effects over time into account. They argue, "an activity that at first

is limited in scale, but designed to grow and go on for a long time may finally have greater effect than a major one-time project" (Tannerfeldt & Ljung, 2006:160).

5.6 INCREMENTAL CHANGE AND FLEXIBLE PROCESSES

"The core of each project does not correspond merely to a single architectural construction, but also to time: a project does not end at its physical completion" (Huang & Hung, 2016:61).

In line with previous discussions, Jernsand and Kraff argue the importance of a process that is connected to the situation and context - the situated knowledge and local circumstances must indicate what actions to take. This means that the process needs to be emphatic and changeable. It must be allowed a constant flexibility and the conceptual framework must be continuously tested (Jernsand and Kraff, 2014:240). There is, according to Bolchover, Lin and Lange, no dividing line between design and research - completing a project also creates questions. The construction phase of a project is thus

only the start of testing a hypothesis of how the project and its context will evolve. They argue the importance of viewing projects and research as parallel and codependent processes, where each can inform the other (Bolchover, & Lin, 2014:11 & 16). Bolchover and Lin state, "this is what we understand as a framework: a working methodology that sets up a productive dialogue between research and design in order to make architecture that actively contributes to the future transformation of the areas in which it is located" (Bolchover, & Lin, 2014:16).

Huang and Hung argue in a similar manner that every project must correspond with time. A project does not end when the physical construction is completed; the design is still in progress when the project is being used. They state, "life itself is part of the design concept" (Huang & Hung, 2016:61). In agreement, Bjögvinsson, Ehn and Hillgren argue that there will be design that is carried out within a project, but this will also be followed by 'design in use'. Professional designers have to consider and acknowledge that design will continue 'in use' and that it might comprise completely new stakeholders in the future. Bjögvinsson, Ehn and Hillgren thus state the importance of a design during project time that opens up for possibilities of new design in later use. The shift of focus moves from design of useful products and services at the moment of the project, to design that support possibilities for good design in the future (Bjögvinsson, Ehn & Hillgren, 2012:107-108).

Hehl argues that the future in many rural contexts is uncertain and there is a need for design approaches that creates a clear structure of possible future urban



INCREMENTAL HOUSING BY ELEMENTAL (Source: arcspace.com/feature/guinta-monroy/)

growth (Hehl, 2016:40). The Eden project, discussed earlier, tests the development of a new form of urbanity that has the possibility to cope with the fragmented and scattered nature of rural developments. The aim is "an incremental design strategy that acts as a framework for sustainable urban growth" (Hehl, 2016:36). Lin argues, in line with Hehl, that more flexible and diverse models for the development of villages are needed. Instead of defining a finished product, Lin argues the importance of embracing the possibility of the uncertain future. The aim should be to create a design process that can adapt to various outcomes and develop a balance between the individual and the collective (Lin, 2016:73-74 &77).

Many of RUF's projects might not survive the pressure of urbanization and they should not be seen as one-

INCREMENTAL HOUSING BY ELEMENTAL (Source: archtalent.com/es/proyectos/quinta-monroy)

stop solutions, rather as experiments designed to be as strong as possible in order to withstand and adapt to the evolving contexts. Each project is, in other words, a result of a constant and changing dialogue with its context (Bolchover, Lin & Lange, 2016:11, Bolchover, & Lin, 2014: 7). There are various examples of RUF's incremental design approach. In the village of Shichuang, RUF developed flexible housing prototypes that are correlating to growth patterns and are adaptable to the changing needs of the villagers (Lin, 2016:74). According to UN-Habitat, progressive housing options is a beneficial strategy for a sustainable development. Housing options should be varied to allow different household characteristics and investment possibilities (UN-Habitat 2014:109).

Another example of RUF's incremental approach is their design of a recycled brick school in Tongjiang Village. The school is designed to respond and withstand possible transformations within the context. It offers flexible infrastructure for various possible uses, which creates spaces that enable an adaptable environment for future needs of the building as well as the village (Bolchover & Lin, 2014:116). RUF has also been involved in the development of an incremental urban strategy for Ulaanbaatar in Mongolia, where a similar approach was applied. The aim was to create robust and adaptable programmes with the possibility to withstand the pressure of transformation (Bolchover, 2016:22 & 24). Bolchover highlights that, instead of removing local culture with standardized forms, an incremental design approach "enables more unique and adaptable models to emerge from the specific characteristics of the place" (Bolchover, 2016: 27).

"Architecture is an organic process that lives, dies, changes, and evolves: it is a verb and not a noun. One of the most direct opportunities for impact is through designing the process of building as well as the building itself" (MASS, 2018: Online).





WOMEN'S OPPORTUNITY CENTER IN RWANDA BY SHARON DAVIS DESIGN Photo: Elizabeth Felicella (Source: http://www.bigfuturegroup.org/womens-center/)

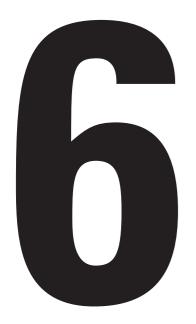
WOMEN'S OPPORTUNITY CENTER IN RWANDA BY SHARON DAVIS DESIGN Photo: Elizabeth Felicella (Source: http://www.bigfuturegroup.org/womens-center/)

Methods

6.0 METHOD AND MATERIAL



Photo: Tilda Kristersson



As mentioned, objective | of this project is to apply participation as a main component and principle from initial stages to construction and management of the center. In line with Tannerfeldt and Ljung I aim to contribute with an enhanced understanding of what the perspective of the poor (or in this case, the perspective of PWG) actually means and propose an example for how a participatory design process can be developed.

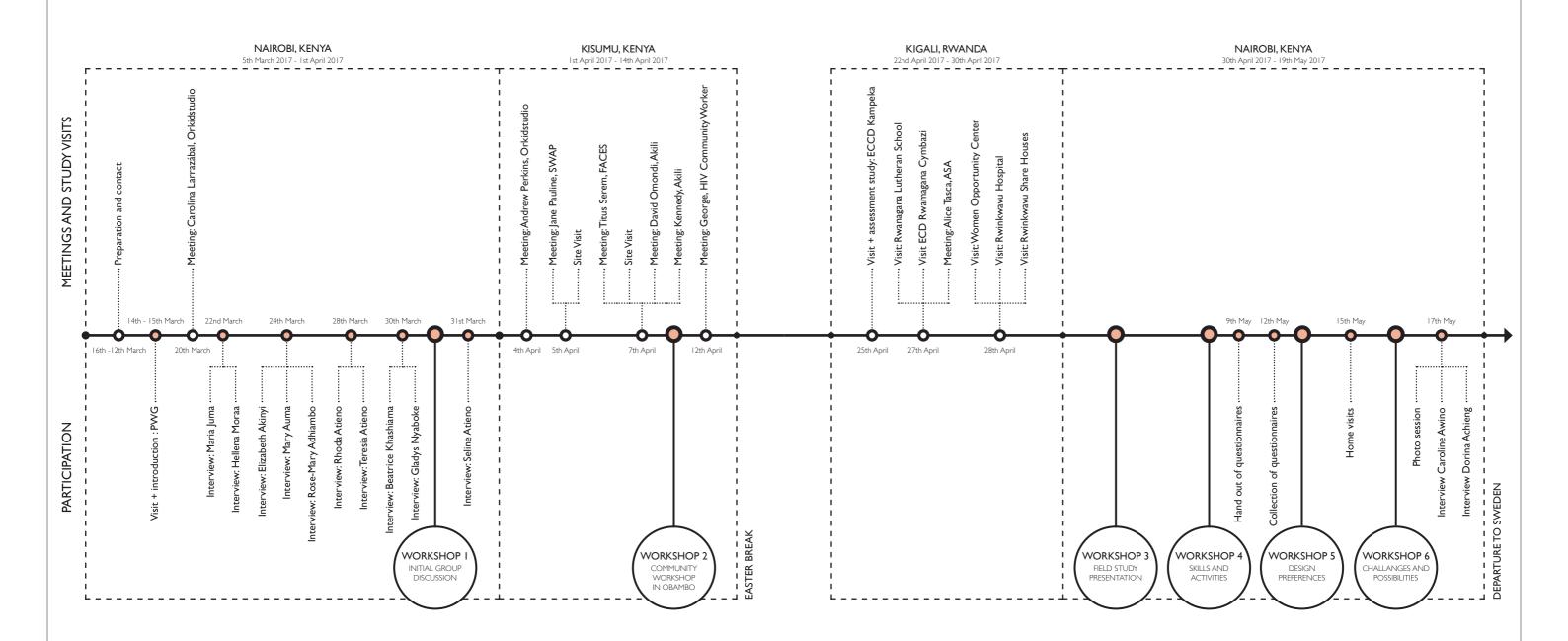
The project is built on comprehensive field studies in Kenya (and Rwanda) and a participatory method extracted from the theory. The first part of this chapter presents a timeline of the field studies. The following part contains a discussion on participation in relation to the above-presented theory on the matter. The third part presents the participatory method used in the project. It describes the various parts of the process - qualitative individual interviews, questionnaires, home visits, workshops and follow-ups. The last part presents the various study visits (to architecture offices and NGOs) that were conducted during the field studies. The information gathered during the study visits contributed to the development of the participatory method used in the project.

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6.1 TIMELINE: FIELD STUDIES

The field studies conducted had duration of around three months. They started in Nairobi where introductory discussions and preliminary interviews were conducted with PWG. Contact was established with the architecture firm Orkidstudio in order to gain a first understanding of how architecture offices in the area work with participatory approaches.

In the initial discussions with PWG, the women decided that the village of Obambo in Kisumu County would be the best location for a potential rural women center. I travelled to Kisumu to locate a possible site, and met up with students from the course Reality Studio from Chalmers in Gothenburg, Sweden. Very luckily they were working with a site in Obambo, which I was allowed to use as a "theoretical" site for the design proposal of the women center. I was also invited to work with the students in their analysis of the site and its surroundings, and joined one of their community workshops in Obambo. During the study trip to Kisumu I met with various local NGOs to gain a better understanding of the situation in the area, with a focus on HIV prevalence and problems related to it. The findings from the site and its surroundings will be presented in chapter



7.1. After two weeks in Kisumu the field studies continued to Kigali and Rwanda where I visited the architecture firm Active Social Architecture (ASA) in order to learn more about their participatory methods as well as gather inspiration for my project. After the study trip to Rwanda, I returned to Nairobi where the main part of the participatory process was conducted with PWG.

6.2 BUILDING THE PARTICIPATORY METHOD

As discussed previously, place identity is important in order to achieve a sense of community and feelings of belonging (Hague, 2005:8 & 12). Residents within a community often have varying meanings and identities in relation to place - there are thus often multiple and contested identities within the same community. Smith argues that narratives of place can be exclusionary of some people's meanings of place. But, by involving various stakeholders in the process it is possible to merge various interests and create shared narratives (Smith, 2005:39). In agreement, I argue the importance of including various possible identities into the actual design process. My argument is, in line with Smith's, that a participatory process has the possibility to integrate and embrace various meanings of place and many potential identities. By involving a diverse range of experiences into the process, I argue that it is possible to combine different interests, which in turn stimulates shared identities. If people are participating in the creation of a place and its identity, it is more likely that the process will result in a place that more people can identify themselves with and the place will thus be less excluding. In turn, by creating a shared identity or a shared meaning of a place - through various participatory activities - it is possible to enhance feelings of belonging as well as a sense of community.

The NUA state that participatory approaches are vital at all stages of urban and territorial policy and planning processes - from conceptualization to design, budgeting, implementation, evaluation and review (Habitat III, 2016:12 § 92). There are various methods to consider in order to reach a meaningful participation. UN-Habitat suggests several communication methods, such as consultations, community assemblies, focus group discussions, workshops, and the use of newspapers, flyers and social media (UN-Habitat, 2014:93). I argue that there might be difficulties with some of these methods - if participation is merely informative it will be positioned in the middle of Arnstein's ladder. It could in other words contain degrees of tokenism (Arnstein, 1969:217). The process should - from the initial stages to implementation and management - involve the participants in decision-making and assign control over the project to the community.

Hague (2005:8 & 12) argues that there are varying mean-

ings between the narratives of sustainable development constructed by designers' and the actual narratives of the people affected – he states that there is a need for a dialogue between the elite and the public. It is my opinion that such differences must be acknowledged and reviewed, which could be made possible by including the concerned community in the design process. On the other hand, I argue that the term 'dialogue' is vague. As discussed in previous chapter, Tannerfeldt and Ljung (2006:88) argue that the stakeholders must be seen as active agents and not passive recipients. Jernsand and Kraff (2014:240) argue that it is important to use initiatives and ideas from the community as a starting point for any project - this will make the project more likely to succeed in the future. I argue, in agreement, that the starting point of a project should be through the point of view of the community, not the mainstreamed narrative of sustainability. Kimani and Muturi state that the best approach is to let the community lead the process, while professionals and governments journey with them. Participation in this sense does not only involve people for the sake of it, but commits to put them in the center of their own development (Kimani & Muturi, 2013: Online).

In line with Jernsand and Kraff, I argue that there is a democratic reasoning behind participation; people should have the right to be part of the process that is going to have an impact on their lives. Jernsand and Kraff state that the participants must be seen as 'partners' in the process. In this sense, participation is not merely about getting approval, feedback or advise from stakeholders. It also includes involving the users in the whole process, from small to big issues, and in the actual design (Jernsand and Kraff, 2014:227 & 240). SDI argues that the aim should be "to create situations in which the urban poor are able to play a central role in co-producing access to land, services, and housing" (SDI, 2016: Online). In agreement, I highlight the importance of developing a shared ownership between the community and other stakeholders and that decisions and power should be leveled among them. In other words, I argue that an on going 'partnership' between the urban designer and the community is important in order to reach a successful participatory process. I argue that every participatory method should aim at placing itself at the top of Arnstein's ladder of participation -

citizen control. The designer should not merely design the site, but in this sense act as a facilitator with the goal to empower the community and create possibilities for them to improve their own environment.

There are various important examples of methods that can be used in order to create the basis for an inclusive partnership. One example is community-led data collection, such as semi-structured interviews, focus group discussions, surveys and mapping. SDI uses such methods in order to put the community at the center of the process and it has been shown to be an important way to reach successful development (Muungano wa Wanavijiji documentation Team, SDI, 2015: Online, UN-Habitat 2014:104). Other important tools in order to involve and empower communities are, for example, learning exchanges between various communities and women-led daily savings (Bradlow, 2012: Online, SDI, 2016: Online). As discussed in previous chapter,



self-construction is another important way to practically involve the community (UN-Habitat 2014:107 & 109).

I argue the importance of involving PWG from the beginning of the process and include them in everything regarding design matters to more general decisions in relation to the new women center. The project is thus incorporating as much participatory measurements as possible - from the initial design stage to the actual construction and maintenance of the women center. The idea is not to only design for the women, but with them - together we can develop a design based on their voice and needs. The goal of the method is to create collaboration and a 'partnership' between the women and me as the designer. The participatory method should not simply inform or explain the project and PWG should not merely participate; the women should be in the center of the process, have the leading role, and be in charge of the decisions that are going to affect their lives.

POWER WOMEN GROUP Photo: Tilda Kristersson

6.3 PARTICIPATORY DESIGN WITH POWER WOMEN GROUP

6.3.1 Qualitative interviews

The process started by conducting semi-structures qualitative individual interviews with the women of PWG. The goal with the qualitative approach is to gain a deep understanding of the women's lives, their daily struggles and the various reasons for their migration to Nairobi - the individual and her experiences are in focus. Before the interviews, two introduction meetings were conducted in order to explain and discuss the purpose of the project. During these meetings it was established that all of the women had a vision of a PWG center in a rural location in Kenya. The interviews thus also aimed to reach an understanding of why and how they want to build the center. At the end of the interviews, more direct questions regarding the women center were asked. This was also meant as a transition into Workshop 1, where the initial thoughts on the center were going to be more thoroughly discussed (see chapter 6.3.5 Workshops).

The 12 in-depth interviews were conducted in the spring of 2017 and were around 45 minutes each. They were held in a, for the women, safe and comfortable location - the PWG's office in Kibera. To further create a safe environment I ensured the women that they could decline to answer any question. In order to create an open character and allow flexibility during the interviews, they were conducted through a semi-structured interview guide (Flowerdew and Martin, 2005:119-120). This was developed in advance and was used similarly during the various interviews (see Appendix 1: Interview guide). The guide made sure that the interviews were following the same structure at the same time as its open-ended questions were vital - they ensured that the women were given space to describe their point of view (Flowerdew and Martin, 2005:119-120). All of the interviews were recorded, which gave time to focus on the questions and conversations during the interviews. The material was later transcribed and analyzed.

The interviews were conducted mostly without much difficulty. Some of them were held in English, with those of the women who are fluent in the language. For those of the women who do not speak English the interviews were conducted in Swahili with the help of

a translator. Two of the women with the best English skills alternated the translations. The study did not use a translator from the outside because of one main reason - in such case it might not have been possible to ask the more sensitive questions, for example those related to HIV. The choice to use members of PWG as translators was in other words another strategy to make the women feel safe during the interviews. On the other hand, this may also have its disadvantages; using a non-objective translator could implicate a risk of information being altered in the translation to push for certain stands to get across or information could simply get lost in the translation. The main obstacle of the interviews was thus the language barrier. But, since I know some Swahili and could follow the translations, I was able to make sure that the most important information got across.

6.3.2 Questionnaires

In addition to individual interviews and several workshops, questionnaires were handed out. These were meant to fill gaps where the other parts were lacking and collect some more quantitative data. The questionnaires collected data about everything from the women's lives, to the arrangement of their houses and their visions of the new women center (See template in Appendix 3: Questionnaire).

6.3.3 Home visits

Home visits were carried out in order to gain a better understanding of the women's daily life. Three of the women's houses were visited. The visits were vital in order to comprehend how the women organize their space, their work and their day. This was very important for the project and offered a better understanding of the challenges and possibilities with the design of the new women center.



Photo: Tilda Kristersson



Photo: Tilda Kristersson

6.3.4 Workshops

Six workshops, with various purposes and different characters, were conducted during the field studies in Kenya. These were spread out and aimed to involve the women group as much as possible in the design process. The workshops were about one to two hours long, including a 15-minute break. Five out of six workshops involved PWG and were all conducted at their center in Kibera and recorded. Workshop 2 involved the community in Obambo, Kisumu and was thus conducted at a school in Obambo. All of the workshops started with a short introduction of how they were going to be conducted and were summarized in a conclusion at the end (the workshop that was going to follow was also briefly introduced). The aim and outline of the workshops are presented below, whereas the outcomes are described in chapter 7 (Result).

Workshop I – Initial group discussion

As described in the previous chapter, the individual interviews with PWG were concluded by more specific questions regarding the women center, as a transition to the workshops. The overall aim of the first workshop was thus to summarize the individual interviews and discuss the outcomes of them, as well as initiate further discussion on the possible women center. One important purpose was to gain an understanding of the main objectives for the women. In other words, gain an understanding of what to prioritize while looking for a possible site. The workshop consisted of three parts, which were constructed as follows:

Part 1 - Location: Various possible locations for the women center were suggested during the individual interviews. The first part of workshop 1 thus discussed these possible locations within Kisumu County. Four locations were suggested during the interviews and discussed in the workshop: Obambo, Ahero, Kajulu and Riat. During the discussions, Obambo was chosen as the best location and thus the main area to investigate further.

Part 2 - Functions: The individual interviews also contributed with suggestions of possible functions that the center could inhabit. The second part of the workshop summarized the various functions mentioned by

the women. After this, questions were asked in order for the women to discuss the importance of the functions further. This discussion provided important information for the project - it became clear which functions to prioritize and why these were vital for the women to have at the center (see chapter 7 for the results).

Part 3 - Design: The purpose of the third part was to initiate a more design specific discussion, regarding for example vernacular architecture and different materials. It merely aimed to introduce the discussion on the design and not result in clear design solutions at such an early stage of the process. Part 3 was less successful than the other parts and gave rather vague information. A more informative outcome was expected and it became clear that design elements were very complex to communicate and discuss. Even though a tricky discussion, some important information was gathered (which will be presented in chapter 7 Result).

Workshop 2 - Community workshop in Obambo

The field study to Kisumu took place after workshop 1, in order to look for a possible site for the women center. In Kisumu I met with students from the course Reality Studio at Chalmers University in Gothenburg, Sweden, and were given the opportunity to collaborate with them and work with their site in Obambo as a "theoretical site" for the center. I was invited to join one of their workshops with the community around the site. Reality Studio's purpose with this workshop was to get feedback on their interactive conceptions for the site - several parts of the workshop were applicable also in my project. The workshop consisted of three parts, which were constructed as follows:

Part 1 - Activities: The aim of the first part was to gain an understanding of which activities the stakeholders would prefer at the site. In order to get an understand-



ing of the community's preferred choice of activities, Reality Studio conducted the workshop in a way where the participants identified what they would like to do at the site through choosing and rating pictures of various activities.

Part 2 - Skills: This part of the workshop was one of the most applicable and important in relation to my project and aimed to map the skills of the community. Questions regarded what skills the participants had experience in and what they would like to learn (pictures were again used for references).

Part 3 - Perception of materials: The purpose of the third part of the workshop was to learn about the community's conceptions of traditional, natural and new building materials. This part was the least successful of the workshop. Even though not as applicable as the other parts, the information gained will serve as an inspiration for my project.



WORKSHOP 2: COMMUNITY WORKSHOP IN OBAMBO Photo: Tilda Kristersson

Workshop 3 - Field study presentation

Two different study trips - one to Kisumu and one to Rwanda - were conducted between workshop 1 and workshop 3. The overall aim of workshop 3 was thus to present and discuss the findings from these trips – it mainly presented the findings and discussed the basics of them. The findings were discussed and evaluated further in workshop 5, where they were broadened in relation to design and interactive tools were used in order for the women to take part of the design process. Workshop 3 consisted of five parts, which were constructed as follows:

Part 1 - Introduction: This part introduced and described the primary findings from Kisumu and Rwanda in order to give the women an overall understanding of the basics of the study trips. Starting with the findings from Kisumu: the presentation introduced Reality Studio, explained the meetings with various NGOs and described the basics of the site. The concept of the "theoretical" site was explained - it was made clear that there was no possibility for the women to buy the site. Part 1 continued by presenting the basics of the study trip to Rwanda, including a short introduction of ASA and the Women Opportunity Center.

Part 2 - Obambo: The second part presented and discussed the location and functions of Obambo.

Part 3 - Site: The aim of this part was to present and discuss the site in detail. This means that positive and negative aspects of the "theoretical site" were discussed. The discussion also aimed to find out more regarding the women's preferable location of the site. Part 3 started by presenting the location, after which a wider discussion of the location took place. The women were asked various semi-structured questions and they were in the center of the discussion. They agreed that the location was good for several reasons, which will be described in chapter 7 (Result). Further, the third part also explained the characteristics of the site by referring to various pictures, and a discussion on the various possibilities of the site was initiated. The purpose was to show pictures that gave a good background to all variables of the site, but it should be mentioned that this was a complex matter. The aim was to give an objective view, but since I had taken the pictures of the site, and I was choosing what to show the women; it was difficult

not to add subjectivity to the presentation. Although complex, the discussion resulted in valuable inputs, also described in chapter 7.

Part 4 - Design: Following the discussion of the site, the forth part aimed to present and discuss the architecture and materials of the area. The purpose was mainly to introduce the vernacular architecture as well as the materials often used in the area - a comprehensive discussion of architecture and design was further developed during following workshops.

Part 5 - Rwanda: The last part of the workshop presented and discussed the findings from Rwanda, starting by showing pictures of The Women Opportunity Center. Further, other projects visited in Rwanda were presented. These were not discussed as much, but were used in following workshops as design examples and inspiration.

Workshop 4 - Skills and activities

The content of workshop 4 was rather similar to that of workshop 2 - but now with the women as participants. The overall aim was to learn about the skills of the women as well as gain a deeper understanding of preferred functions and activities at the center. The workshop consisted of two parts, which were constructed as follows:

Part 1 - Skills: The first part of this workshop was to learn more about the skills of the women - to understand what skills the women have, but also which they would like to learn. This part of the workshop was very successful. My role at the workshop was merely guiding the discussion and the women were at the center of the discussion. The character of the structure was interactive, with various pictures to rate according to knowledge level, and resulted in important information. The result, and the valuable skills of the women, will be described in chapter 7.

Part 2 - Activities: The second part of the workshop was as successful as the first one and had a similar interactive character. Pictures were shown where prioritized functions could be rated - I was guiding the discussion, but the women were leading it. The discussion was





more detailed than previous discussions on functions, it looked deeper into which activities the women would like to do at the center. The aim was to gain a broader understanding of which functions were of greatest importance for the women.

WORKSHOP 3: FIELD STUDY PRESENTATION Photo: Tilda Kristersson

WORKSHOP 4: SKILLS AND ACTIVITIES Photo: Tilda Kristersson



WORKSHOP 5: DESIGN PREFERENCES Photo: Tilda Kristersson



WORKSHOP 5: DESIGN PREFERENCES Photo: Tilda Kristersson



WORKSHOP 5: DESIGN PREFERENCES Photo: Tilda Kristersson

Workshop 5 - Design preferences

This workshop was more directly related to the design of the center than previous workshops. The overall aim was to gain an understanding of the women's design preferences. The workshop consisted of two parts, which were constructed as follows:

Part 1 - Materials, construction details and design elements: The first part discussed different materials and construction details further and developed an understanding of what the women liked, regarding different design solutions in general and why these were good or not. The aim was to gain an understanding of the culture and the women's design preferences. For example, what materials can be used in order to make them feel as comfortable as possible and why are some materials good and other bad according to them? The purpose of the workshop was to gather information regarding materials and learn about how the women use space, which was further developed in the questionnaires and workshop 6. Even though the discussion was complex and it was hard to extract applicable information, I managed to gather some general ideas concerning the women's design preferences, which will be presented in chapter 7.

Part 2 - Design preferences at the bigger scale: The second part of the workshop concerned design preferences at the bigger scale and could be described as the most interactive part of the workshops. Like workshop 1, this part looked at design and different functions at the bigger scale. But, the functions were here discussed further and the important difference from workshop 1 (and workshop 4) was that focus was put on how the functions relate to each other. Part 2 was based on a site model and the women were given 3D volumes to arrange in the way that they preferred. Every volume represented a certain activity/function in a very easy and understandable way - each volume had one color and text explaining the function. There are many possible outcomes and variables from such exercise and the main goal was to understand how the women interpret the space at the bigger scale. The women came up with various possible solutions and some important relations within the site became evident. This was a successful way to interact with the women and served as a great inspiration and starting point when designing the center.

Workshop 6 - Challenges and possibilities

The last workshop aimed at discussing and problematizing various design challenges and possibilities, starting with the responses from the questionnaires and home visits. There could be simple elements that would improve the design according to the way the women live and use space. The goal of this workshop was thus to gain a deeper understanding of how the women use space - what the challenges and the possibilities are. Various features were included and discussed, such as: current challenges (how they live right now), challenges in the rural areas (how they lived in rural circumstances) and future possibilities (how they would like to live). The aim was to gain a comprehensive understanding of all challenges and possibilities related to the new center. The workshop was also a way to give the women - through pictures - a deeper understanding of suggestions and design options. The workshop consisted of three parts, which were constructed as follows:

Part 1 - Current challenges: During the first part of the workshop, challenges in Kibera were discussed, with a starting point in a summary of the questionnaires. There were also follow-up questions regarding the questionnaires in order to, in the best way possible, try to understand how the women organize their work and their day. This part investigated and gained a deeper understanding regarding the following categories: (1) Lack of living space and privacy, (2) Latrines in poor condition, (3) Showers in poor condition, (4) Lack of proper laundry area, (5) No kitchen, (6) Poor indoor climate, (7) Security, (8) HIV, (9) The PWG building, (9) The New Centre.

Part 2 - Challenges in the rural area: The second part discussed and tried to understand the challenges in the rural context. The new rural context might help to solve some of the problems that the women face in Kibera, but it might also make other things more difficult. In order to understand the women's stand on rural challenges, some topics were discussed: (1) Accessibility, roads and transport, (2) Proximity to water/lack of water, (3) Lack of electricity, (4) Lack of basic amenities such as grocery shopping, bank, health care etc., (5) Business opportunities.

Part 3 - Possibilities: The last part presented and discussed solutions to, for example, lack of services and functions. This part thus discussed how the problems and challenges presented in part 1 and 2 could be solved in the rural area. By showing various pictures of different design solutions, a discussion was initiated in order to get a better understanding of the women's preferences. Questions were asked to understand what the women's needs were in relation to the various functions. These questions were not always related directly to how to design the center, but how the women were interpreting space in order for me to gain an understanding of their ways. The discussion also went deeper and more

specific into the discussion on materials, compared to the discussions of workshop 3 and workshop 5. Different design solutions of the same function, and different colors and materials for these, were shown in order to get a better understanding of what was needed. Similar categories to those of part 1 were used, but this time as a way to understand how to solve the problems rather than understanding the challenges themselves. The categories were: (1) Lack of living space and privacy, (2) Latrines in poor condition, (3) Showers in poor condition, (4) Lack of proper laundry area, (5) No kitchen, (6) Poor indoor climate, (7) Water and electricity.



6.3.5 Follow-ups and future participation

In order to make sure that the women were included at all stages of the process the aim was to have various follow-ups conducted from Sweden where the main design of the center was going to take place. These follow-ups were mainly supposed to be in the form of Skype meetings, but as a result of the unsecure election in Kenya the women had a hard time finding the possibility to meet. The follow-ups have thus been inadequate, but there has still been some contact over email to keep the women up to date.

WORKSHOP 6: CHALLENGES AND POSSIBILITIES Photo: Tilda Kristersson

Participation is to be a main component throughout the project. The aim is thus to incorporate as much participatory measurements as possible also in the future. Participation should be in the core of the project - from the initial stages incorporated in the workshops, to the future with further follow-ups and design adjustments, and finally through self-construction and management of the center. Possibilities for future research and participation will be further discussed in chapter 10 (The future).

6.4 STUDY VISITS AND TRIPS

In addition to the work with PWG, various study visits and meetings were conducted, with the main purpose of gathering inspiration for the design and development of the women center. The aim was to learn how architecture offices work in Kenya and neighboring countries - with participatory approaches as well as use of local materials and vernacular design. In addition to research and study visits in Nairobi, one study trip to Kisumu and one to Rwanda were conducted and resulted in valuable inputs for the project. Various projects were visited and have been of most prominent inspiration and help. In addition to this, various NGOs were of great help in learning how organizations work with HIV/AIDS in Nairobi as well as in rural Kisumu.

6.4.1 Nairobi, Kenya

The time in Nairobi was mainly spent on work with PWG. In addition, research was conducted and several NGOs were contacted. Contact was established with UN-Habitat in Nairobi, as well as NGOs in the city. The aim was to visit these, but such meetings were not possible to arrange for various reasons. Instead, the foundation for the following field studies was developed and meetings with NGOs in Kisumu arranged. Further, contact with the architecture firm Orkidstudio was established.

Orkidstudio

Orkidstudio is an architecture firm based in Nairobi Kenya, founded in 2008. They work with projects across sub-Saharan Africa and focus on design solutions founded in human-centered principles. In the words of Orkidstudio, they "create high quality, affordable and healthy buildings, through an exceptional end-to-end design and construction process, which use local materials and promote opportunities for women" (Orkidstudio, 2018: Online).

A meeting was conducted with Orkidstudio's design director Carolina Larrazábal in Nairobi. During this meeting various questions regarding the design process and participatory methods were answered. In addition to the meeting, Larrazábal, as well as her colleague, Andrew Perkins (Projects Director of Orkidstudio) have been supporting through email. A shorter meeting with Perkins was also conducted during the field trip to Kisumu. The assistance from Orkidstudio has been of great importance for this project and a foundation for collaboration during possible construction of the future women center has been established.



AKILI GIRL'S PREPARATORY SCHOOL, OBAMBO Photo: Tilda Kristersson

6.4.2 Kisumu County, Kenya

As mentioned previously, a study trip to Kisumu was conducted between 1st and 14th of April 2017. The main purpose of this trip was to localize a "theoretical site" for the center as well as conduct research of the area. Students from Reality Studio were in Kisumu at the time. They were working with a site in Obambo, which I was able to use for my project. Site visits and research of Obambo and surrounding areas was thus conducted. I was invited to work with Reality Studio and got valuable inputs from both students and professors. In addition to the work with, and around the site, some important meetings were conducted, most importantly with three NGOs working with women and HIV in the area.

Riley Orton Foundation

The Riley Orton Foundation (ROF) was founded by David Omondi and Erick Otieno and is working with girls and women in Kisumu, Kenya. The foundation aims to "generate positive and sustainable change in the communities of Obunga and Obambo by empowering



GEORGE, COMMUNITY HEALTH PROMOTER Photo: Tilda Kristersson

girls through the provision of a quality education as well as economic empowerment of marginalized women and youth" (ROF, 2018: Online). The ROF has been of most prominent importance for this project for several reasons. First of all, the foundation is the owner of the "theoretical site", which obviously has been vital for the project. Secondly, members of the foundation have been interviewed, which contributed with valuable information regarding the community around Obambo as well as different ways to work with women in the area. Two interviews were conducted - one with David Omondi and one with Kennedy Odera (teacher at the foundation's school).

The ROF runs several interesting projects, among which three were visited. Their flagship project is Akili Girl's Preparatory School, which was initiated as a library in Obunga slum in 2011 and was expanded into a school in 2012. A second campus was opened in Obambo in 2016 and serves the older students with education and boarding facilities. The Obambo campus is very close to the "theoretical site" and functioned as the location both for the interviews and, as mentioned, workshop 2. Another important project visited was the Maendeleo Hub Library in Obambo. The hub operates from two locations (Obambo and Obunga) in order to help to build the capacities for women to run successful businesses and generate positive social change. The third project visited was the "theoretical site", which during the visit was a rather new project and no construction had started. At that time the foundation's aim with the site was to create an interactive demonstration farm – a project that Reality Studio was working with. Today the construction of a literacy garden has instead been initiated, with the aim to develop the skills and knowledge of marginalized girls and to promote literacy (ROF, 2018: Online).

Safe Water and AIDS Project

Safe Water and AIDS Project (SWAP) is a NGO based in Kisumu, Kenya that was initiated in 2005. Their aim is to "improve the health and socio-economic status of Kenyan people through disease prevention and socio-economic empowerment of the target population". SWAP engages 'Community Health Promoters' to sell health and hygiene products, with the aim to support and build their capacities and to develop health oriented micro-enterprises. Hence, improve the promoters' qualities of life as well as promote health in the country (SWAP, 2018: Online).

Contact with SWAP was established before the field trip to Kisumu and a meeting and interview with Jane Pauline as scheduled. The interview took place at the SWAP office in Kisumu on the 5th of April 2017. It was about one hour long and was recorded. Pauline suggested a second interview with George, one of their 'Community Health Promoters'. This interview was also recorded. It took place at the SWAP office on the 12th of April 2017 and lasted for about one hour. Both of the interviews contributed with valuable information about the situation of HIV and stigma in the area, as well as strategies to improve the lives of HIV positive people. Future collaborations between the possible women center and SWAP were also suggested and discussed.

The Family AIDS Care and Education Services program

The Family AIDS Care and Education Services program (FACES) was launched in 2004 and work to pro-

vide and strengthen health services for HIV affected families in Kenya. FACES was initiated, and is today co-led, by the Kenya Medical Research Institute and the University of California San Francisco. Originally they worked in four different Kenyan counties, but in 2016 they shifted their focus and are now working exclusively with vulnerable populations in Kisumu County. FACES vision is to "create a world that is HIV-free, where every person has access to high-quality health care". FACES's goal is to promote healthy societies and a HIV free future by conducting medical and social research, improving health care services and build capacity through local training and partnerships (FACES, 2018: Online).

FACES have been of great value for this project. Like SWAP, the program's work has served as an important source of knowledge, especially in relation to HIV in Kisumu County. Contact was established before the field trip to Kisumu and an interview with Titus Serem was conducted on the 7th of April 2017. The interview took place at a café in Kisumu Town, it was about 1 hour long and it was recorded. During the interview various issues related to HIV in Kisumu were discussed and future collaboration was initiated.



DESIGN BY ASA Photo: Tilda Kristersson

6.4.3 Kigali, Rwanda

The field trip to Rwanda was conducted between the 22nd and 30th of April 2017. The main goal was to visit the architecture firm Active Social Architecture (ASA) to learn about how they work with participatory methods as well as local materials and vernacular architecture. The aim with the visit was, in other words, to learn about participatory methods in order to develop a participatory strategy that could be applied in the design process of PWG's new rural women center. Some of ASA's projects, as well as the Butaro District Hospital by MASS Design Group, were visited. Further, one important aim with the trip was to visit The Women's Opportunity Center, which has characteristics similar to the vision of this project.



DESIGN BY ASA Photo: Tilda Kristersson

Active Social Architecture

ASA is based in Kigali, Rwanda and aim "to achieve quality and excellence in architecture and design, concentrating on elements that improve people's livelihoods, strengthen and empower communities and their sense of identity" (Active Social Architecture, 2018: Online). Architecture and design is understood as creative means to problem solving and as tools to empower communities and lead to a sustainable future. ASA's projects are drawn from, and responding to, the specifics of the sites and use of local techniques and materials. They are all based on a research-by-design method where participation of stakeholders is a constant factor of the process (Active Social Architecture, 2018: Online).

I stayed with ASA for about one week – a longer stay would of course have resulted in more comprehensive information, but this was not possible. Even though it was a short stay, I had time to visit four of their projects and collaborated in an assessment study of one of these. Several characteristics of ASA's projects in rural Rwanda are similar to the vision of this project and they served as great inspiration. In addition to the study visits, an interview with Alice Tasca was conducted on the 27th of April 2017 at the ASA office in Kigali. The interview was recorded and lasted for about one hour. During the interview I had the possibility to learn more about how ASA work and what the main objectives are while managing a participatory design process. During the stay at ASA I got a short insight to their work and how methods of participation are being used in practice - valuable information for the project that gave me the possibility to develop a participatory strategy for the women center.

The Women's Opportunity Center

The Women's Opportunity Center was design by Sharon Davis Design - a New York based office founded in 2007. They describe the aim of the center as "energizing one small community's subsistence-agriculture economy through female empowerment". Through various classes at the center, the women of the community learn income-generating skills (Sharon Davis Design, 2018: Online). I have tried to contact Sharon Davis Design, with the aim of visiting their New York office and learn more about their work, but without any response. The center was designed in collaboration with the organization Women for Women International, which today is in charge of the center. The organization was launched in 1993 and work with women in eight countries, all affected by conflict and war. Their mission is to support "the most marginalized women to earn and save money, improve health and well-being, influence decisions in their home and community, and connect to networks for support" (Women for Women International, 2018: Online).

The Women's Opportunity Center is located in Kayonza district in eastern Rwanda. The visit lasted for around four hours and was conducted in the company of two ASA interns. During the visit a guided tour of the center took place, after which we had time to walk around the center by ourselves. The Women's Opportunity Center has served as great inspiration for the project. The way the center is designed and is operating has been valuable in order to see how a rural women center in eastern Africa can work in practice. It has contributed with valuable inputs for the project and created a base for later workshops with PWG. Several photos were taken during the visit and these were later used in some of the workshops.

The program of the center has similar characteristics as the aim of the PWG center. During the construction of the Women's Opportunity Center, the women of the community were involved through the manufacturing of bricks. Such components of self-construction have been used as reference and taken into consideration in PWG's project. Further, the vernacular elements of the design have been inspiring and the self-sustainable approach of the center - with for example water collection and compost toilets - has been of great practical reference (Sharon Davis Design, 2018: Online).

In addition to the Women's Opportunity Center another of Sharon Davis Design's projects was visited. The Rwandan Share Houses is located in rural Rwinkwavu and offers temporary housing for medical professionals (Sharon Davis Design, 2018: Online). Although we were not allowed to enter, the exterior design of the center was inspiring. Photos of the project from Sharon Davis Design's website have later served as additional inspiration.

The Rwinkwavu Neonatal Intensive Care Center

The architecture firm MASS Design Group is based in Kigali and Boston and was launched in connection with the design and construction of the Butaro District Hospital in 2008. MASS's mission is "to research, build, and advocate for architecture that promotes justice and human dignity" (MASS, 2018: Online). Unfortunately, the time of the study trip to Rwanda was limited and I did not have the possibility to visit their office. On the other hand, together with the two interns from ASA, one of



THE RWANDAN SHARE HOUSES Photo: Sharon Davis Design



THE WOMEN'S OPPORTUNITY CENTER Photo: Tilda Kristersson

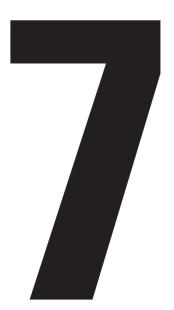
MASS's projects was visited - the Rwinkwavu Neonatal Intensive Care Center (constructed in 2014). It has been of great inspiration for this project. The visit lasted for about two hours during which we walked around at the care center and were invited in to one of the maternity cares. This visit was of course not enough to get a comprehensive understanding of different aspects of hospital layouts in eastern Africa, but contributed with a basic understanding - especially regarding maternity cares. For example, various solutions for natural cross ventilation have been of important reference (MASS, 2018: Online).

THE RWINKWAVU NEONATAL INTENSIVE CARE CENTER Photo: Tilda Kristersson





THE SITE Photo: Tilda Kristersson



7.0 RESULT

This chapter presents and discusses the findings and results from the field studies. The "theoretical" site and its surroundings are presented in the first part. This includes the site's location, possible urban expansion in the area, description of the Luo tribe (which inhabits large parts of the eastern shores of lake Victoria), vernacular architecture of the area, and characteristics of the site.

The outcomes of the participatory process of the project are summarized in the second part of this chapter. This part concludes the result of the participatory activates, such as workshops, in order to give the reader an understanding of PWG's vision of the center. It includes a presentation of the women's priorities regarding functions and activities at the center and gives a summary of their skills. The women's design preferences, discussed in various workshops, are described and a presentation of their views on challenges and possibilities ends the chapter.

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7.1 THE SITE AND ITS SURROUNDINGS

As described in chapter 6 (Method), possible locations of the center were initially suggested in the interviews and further discussed in workshop 1, part 1. Four locations in Kisumu were discussed and Obambo was chosen as the prioritized location. After the initial discussion of the location in workshop 1, the obvious priority was to find a site in, or close to, Obambo. During workshop 1, additional questions were asked regarding what

7.1.1 Location

Kisumu County

Kisumu County - with its valuable location and climate - offers important possibilities for the new women center. The county of Kisumu is located in western Kenya, on the shores of lake Victoria, with its northern boundary basically on the equator (Anyumba, 1995:50). The climate and proximity to the lake makes the area great for agriculture.

Education: Around 18 % of the population in Kisumu County has no formal education at all and 57 % of the population only has a primary level of education. Merely 25 % of the population in Kisumu County has a secondary level of education or above (KNBS & SID, 2013:12).

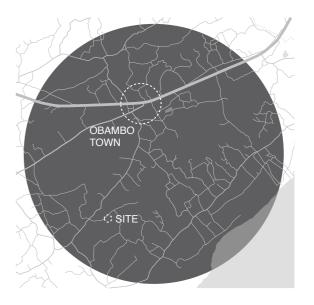
Cooking fuel: The most common cooking fuel in the county is firewood; 58 % of residents use it while 29 % use charcoal. Around 7 % use paraffin and 3 % use liquefied petroleum gas. The use of firewood is less common in male-headed households (51 % uses it) compared to female-headed households (71 % uses it) (KNBS & SID, 2013:13).

to prioritize with the site. The most important priorities for the women was that the site should be located close to lake Victoria and have good farming possibilities. As mentioned earlier, while travelling to Kisumu I met with students from Reality Studio and was given the possibility to work with the same site as they. Fortunately, the characteristics of this "theoretical" site comprised many of the priorities the women were looking for.

Lighting: Among the residents in Kisumu County, merely 18 % use electricity as their main source of lighting. The most common source is tin lamps, used by 56 %. Around 23 % use lanterns and less than 1 % use fuel wood as the main source of lighting. Electricity is most common in male-headed households (21 %) compared to female-headed households (14 %) (KNBS & SID, 2013:14).

Water: Only 54 % of the population in Kisumu County has access to improved sources of water. Access to such is slightly more common in male-headed households (55 %) than in female-headed households (50 %) (KNBS & SID, 2013:16).

Sanitation: Only 57 % of the population in Kisumu County has access to improved sanitation. Access to such is slightly more common in male-headed households (58 %) than in female-headed households (54 %) (KNBS & SID, 2013:16).





KENYA



KISUMU COUNTY

OBAMBO

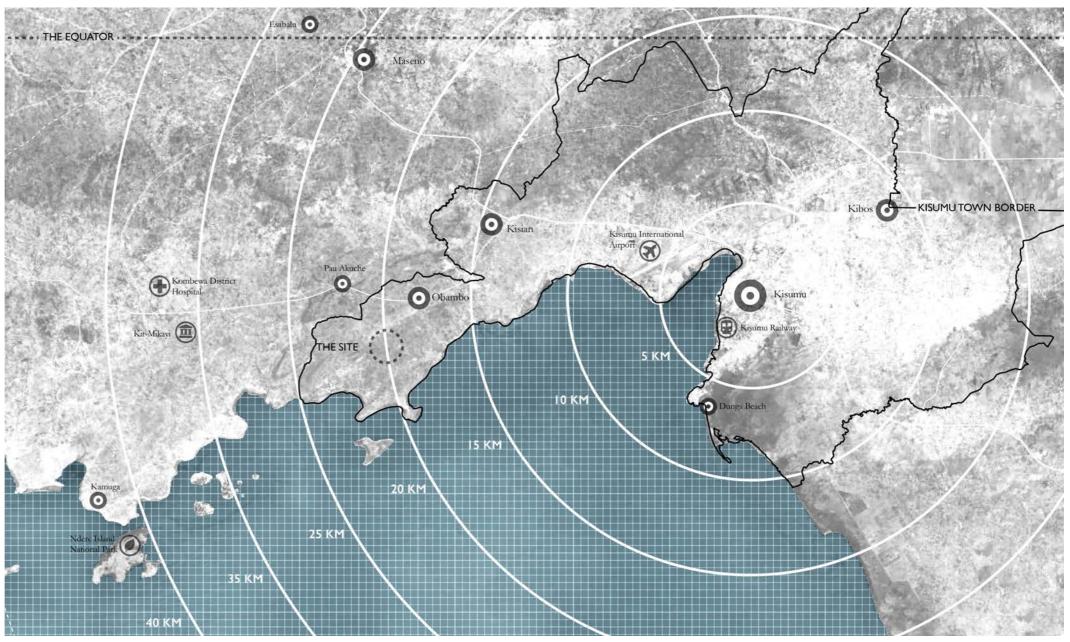
Kisumu City

Kisumu City is located within a belt, surrounding lake Victoria, which has the largest concentration of people in Eastern Africa. It is the third largest city in Kenya and is situated at the eastern extremities of Lake Victoria, in the heart of Luoland. It is mainly populated by Luo people who have migrated to the city for different reasons (Achieng' Abonyo, 2005:2, Anyumba, 1995:49).

Kisumu City was initiated as a railway depot when the construction of the Uganda Railway reached the eastern shores of Lake Victoria in 1901. The population was quite low during the colonial period, but after Kenya's independence in 1963 an exodus of people migrated to the town from rural areas. In 2005, Kisumu had a population of around 700 000 inhabitants (Achieng' Abonyo, 2005:5).

From its origin until today, Kisumu City has been described as a vital commercial and transport hub. To the southeast, major roads connect Kisumu City with Nakuru, Nairobi and finally Mombasa by the Indian Ocean. A road to the east links the town with Muhoroni and the west of Rift Valley and to the north with Kakamega, Eldoret and Kitale and further on to Sudan and Ethiopia. To the west, a road connects Kisumu town with Uganda, through Yaka and Busia (Anyumba, 1995:4 & 50-51).

Kisumu City has the leading port on lake Victoria and its pier facilities link it with other ports in Kenya, Uganda and Tanzania. Railway links connect Kisumu City with Nairobi and Mombasa, among other cities, and an airport connects it with Nairobi as well as other East African cities (Anyumba, 1995:51).



PROXIMITY

Obambo

One of the women's initial reasons for choosing the area of Obambo was because of its proximity to Kisumu City - Obambo Town is located along the main road from Kisumu. Secondly, Obambo is a great farming area and the closeness to Lake Victoria was prioritized. After the field study to Kisumu was completed, a more extensive discussion on the location was held during workshop 3, part 2. The women confirmed that the location of Obambo in relation to Kisumu City was good - it is rural, but at the same time close to the city. It is thus connected to the important transportation networks and vital functions that the city has to offer. The women also confirmed that the proximity to Lake Victoria was good, it is close enough to take advantage of the possibilities of the lake.

There are several functions within Obambo Town. For example: a secondary school with boarding possibilities, a large outdoor market, small restaurants, shops, and a small transportation hub - a stop for motorcycle taxis and matatus. The ROF has constructed a learning Hub in Obambo, which aims to educate women in the area. Outside Obambo Town, they have also opened a boarding school for girls, as discussed previously.

During the discussion of workshop 3, the women argued that the size of Obambo Town was good, but that some functions were missing. These are functions that could be added to the women center - creating possibilities for the center to succeed and empower people living in the surrounding area.



OBAMBO TOWN Photo: Tilda Kristerssor



MAIN ROAD THROUGH OBAMBO TOWN Photo: Tilda Kristersson









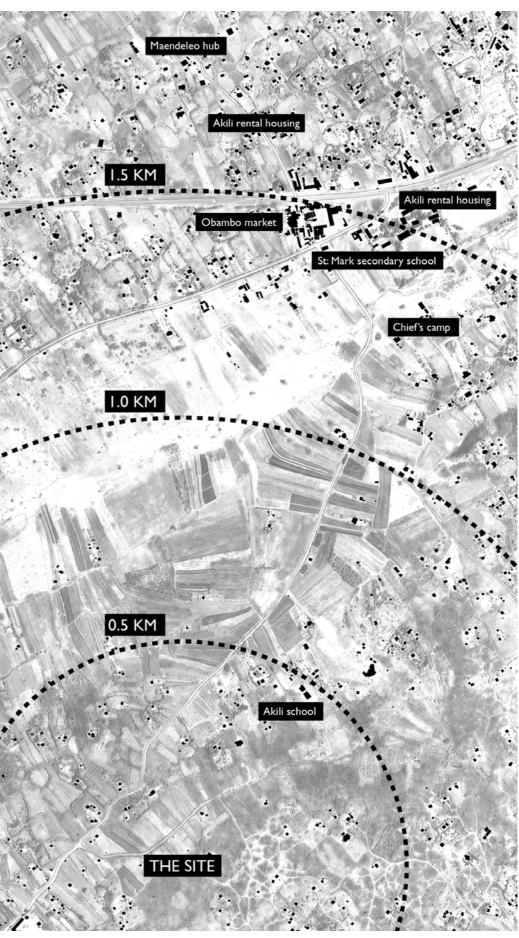
MARKET IN OBAMBO TOWN Photo: Tilda Kristersson

TRANSPORTATION HUB IN OBAMBO TOWN Photo: Tilda Kristersson

SECONDARY SCHOOL IN OBAMBO TOWN Photo: Tilda Kristersson

The site

The site sits on the peri-urban landscape on the outskirts of Obambo town. It is located along an existing good but basic road that brings you to Obambo Town in about 15 minutes walking. After the field study and site visit, the site was presented to the women and a discussion initiated. The women thought that the site had a good location – it is rural but still close to Obambo Town. It would maybe have been even better if it was located a bit closer to Obambo Town, but in such case it would have been further away from the lake. In other words, the discussion ended in that the location of the site actually was very good, since it was located about the same distance from both Obambo Town and Lake Victoria. The women agreed that the surroundings of the site were good. They liked how the area has a lot of farming possibilities and they highlighted the value of it being surrounded by many neighbors - people that might need help from the center in various ways.

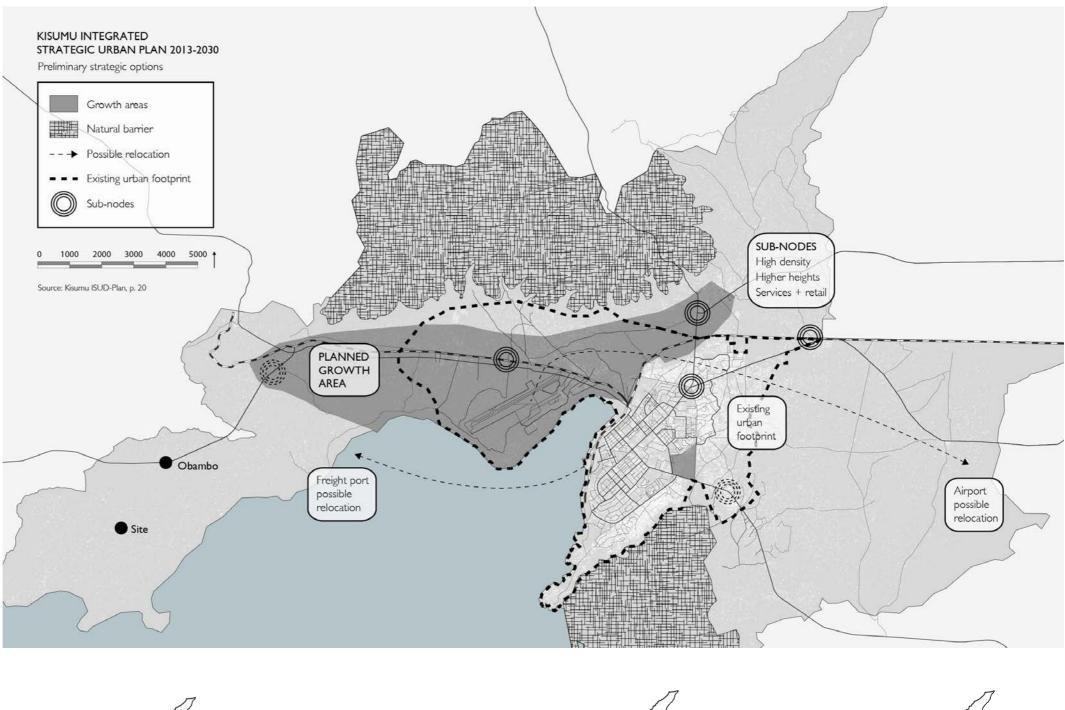


PROXIMITY TO OBAMBO TOWN

7.1.2 Urban expansion

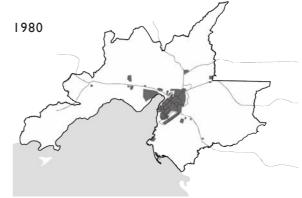
The physical growth of Kisumu City was very small during the colonial period. The population-increase after independence resulted in an expansion of Kisumu's physical area. The boundary of the town was officially extended in 1972 and the area increased to 417 km2. The city has repeatedly extended its boundaries into the surrounding rural hinterland in order to accommodate for its growing population. Today, Kisumu City continues to grow and its boundaries will be extended further in the future (Achieng' Abonyo, 2005:2 & 5-6).

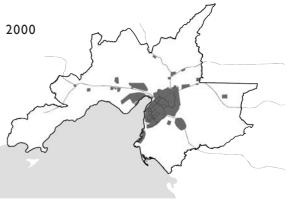
Kisumu City is expanding, and Obambo Town is as a result becoming more urban. The outskirts are, however, still distinctively rural in character. At first glance, Obambo look like a rather traditional rural area with small houses and farmland. However, if you look closer it reveals many construction sites - the whole area seems to be on the verge of change. Around the area one can see signs of the urbanization process, new modern houses are being constructed on several locations. Concrete foundations and half finished houses, or newly constructed ones, are common and there are piles of bricks and stones for construction along the roads. In meetings with David Omondi he confirmed that the whole area is in transition. More and more people from Kisumu City buy land and build vacation homes and the land is getting more and more expensive. Farmers are offered money, sell their farmland and move to the city – but many end up in the slums.











7.1.3 The Luo

Kisumu, Obambo and the site are located within Luoland. The Luo is a Western Nilotic people, which ancestors migrated from Southern Sudan to Kenya in the late fifteenth or early sixteenth century. The Luo is Kenya's third largest ethnic group, with a population of around 4 million in 2005. They live on the eastern shores of lake Victoria and its interior in western Kenya (Shiino, 1997:213, Achieng' Abonyo, 2005:1-2).

Traditionally, the Luo livelihood has involved three vital elements - farming, fishing and livestock herding. The Luo has a strong belief that the material universe is the creation of God, who provides life and all necessities to sustain it. There is until today a strong belief in the spirits of the dead - no matter if they live in rural or urban areas, the Luo have to bury their dead in their ancestral land. The Luo people are in other words deeply preoccupied and seriously concerned with their burial place - far more than other ethnic groups in Kenya (Shiino, 1997:213, Achieng' Abonyo, 2005:2-3 & 7).

7.1.4 Vernacular architecture

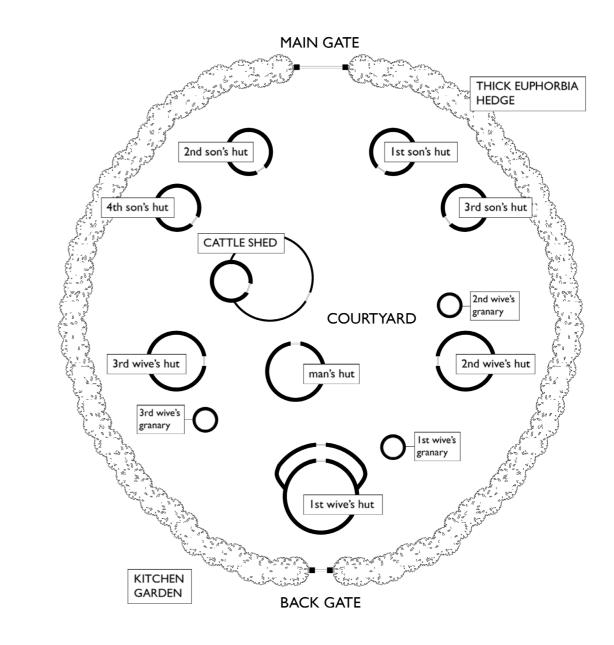
The design was initially discussed with PWG in workshop 1, part 3, where I tried to get an understanding of the women's view of rural architecture in Kenya. When in Kisumu, the local architecture was studied and the traditional architecture of the area has been a great source of inspiration throughout the project - both regarding materials as well as design elements. Workshop 3, part 3 discussed the architecture and materials of the area around Obambo. The initial thoughts of the women were that they did not like "un-modern" buildings, but they liked stone and bricks if they were used in a modern way.

Traditional Luo architecture

The Luo often has underlying cultural values ascribed to their traditional environments. There are both functional and cultural meanings attached to spaces and the meanings are specific to the Luo. The layout of both larger (homesteads) and smaller scales (dwellings) thus serves both functional and cultural requirements. The physical structure is ordered by unwritten cultural norms, which govern the disposition of structures in the homestead. These include for example the construction and physical delimitation of the homestead within a circle. A euphorbia hedge with two gates surrounds the circular homestead. There is one main entrance gate, which is used as the basic reference point, as well as a smaller one at the back of the homestead. The gates have hidden cultural and symbolic meanings, important and well known in the community (Achieng' Abonyo, 2005:1 & 3-4, Anyumba, 1995:24).

The homestead consists of huts belonging to the whole family - the man who heads the home, his wife or wives, and his sons. The huts are built around - and open into - a common courtyard. This courtyard is a vital feature of the homestead and works as the main area for several activities, such as working and playing. The homestead also accommodates other important elements such as granaries and a kraal for cattle. The cattle are of great importance and the kraal is thus placed in the middle of the homestead to assure maximum protection (Achieng' Abonyo, 2005:3).

The traditional Luo hut is a circular building with one room, which contains several main functions such as sleeping and cooking. It also accommodates storage and a small space for livestock keeping. In the middle of the room there is a sitting area for beer drinking and social gathering. The door is more than a sign of entrance, it also has symbolic value in the form of privacy - certain family members should for example not enter the mother's hut. The main hut belongs to the first wife and is placed opposite the main entrance of the homestead. This is the largest one and the only hut with a verandah. The huts belonging to the other wives are a bit smaller but contain the same functions, whereas the sons' huts are even smaller and are mainly used for sleeping (Achieng' Abonyo, 2005:3-4).



Traditionally, the community has had the knowledge to build their environments - with land, climate and local resources taken into consideration. Everyone has a part to play in the construction of the hut; it is a communal activity. Local materials - that the community has the skills to exploit and utilize - are being used for construction. The traditional hut consist of walls made out of mud and wattle, floors made out of rammed earth and roofs made out of a timber structure thatched with grass. The hut usually has two openings for windows and one door (Achieng' Abonyo, 2005:3-4).

Modern changes and adaptation

The Luo way of building have changed, especially during the last century and traditional homesteads are hard to find in Luoland today (Achieng' Abonyo, 2005:6). The changes in the Luo aesthetics of built forms and environments were initially a result of the impact of new cultural values brought by British colonialism. These impacts can be summarized by the replacement of the circle with the square and rectangle as shapes of the built forms. The changes were manifested through everything from new outlines of the homestead to the shape of houses and furniture (Anyumba, 1995:35).

The changes, and the speed of them, vary in different areas - for example between the Luo in rural areas and those in urban areas who are more pressured and exposed to transformations. The changes have also been more drastic in the parts of Luoland that Kisumu City has been expanding into. These areas have been abruptly turned from rural to urban and residents have had to contend with the changes and adhere to new urban regulations (Achieng' Abonyo, 2005:6-7).

Even though changes are evident, elements of pre-colonial traditional building methods are still present. For example, the layout of the homestead where the family arrange their houses around a common courtyard has survived, in rural as well as in urban areas (Achieng' Abonyo, 2005:6-7).



TYPICAL HOUSE IN KISUMU COUNTY Photo: Tilda Kristersson



COURTYARD IN DUNGA BEACH Photo: Tilda Kristersson



HOUSES IN KISUMU Photo: Tilda Kristersson



TYPICAL HOUSE IN KISUMU Photo: Tilda Kristersson



TYPICAL MATERIALS OF THE AREA Photo: Tilda Kristersson



PUBLIC SQUARE IN OBAMBO Photo: Tilda Kristersson

Housing facts in Kisumu County today

Flooring: Around 55 % of residents in Kisumu County have homes with earth floors, while 42 % have cement floors, 2 % have tile floors and less than 1 % have wooden floors (KNBS & SID, 2013:14).

Roofing: Around 85 % of residents in the county have roofs made out of corrugated iron, while 9 % have homes with grass and makuti roofs. Only 1 % of residents have homes with concrete roofs (KNBS & SID, 2013:14).

Walls: Around 71 % of homes in the county have mud and wood or mud and cement walls and 24 % have either stone or brick walls. Around 3 % have walls made out of corrugated iron, less than 1 % has walls made out of wood and less than 1 % has grass and thatched walls (KNBS & SID, 2013:15).

7.1.5 The characteristics of the site

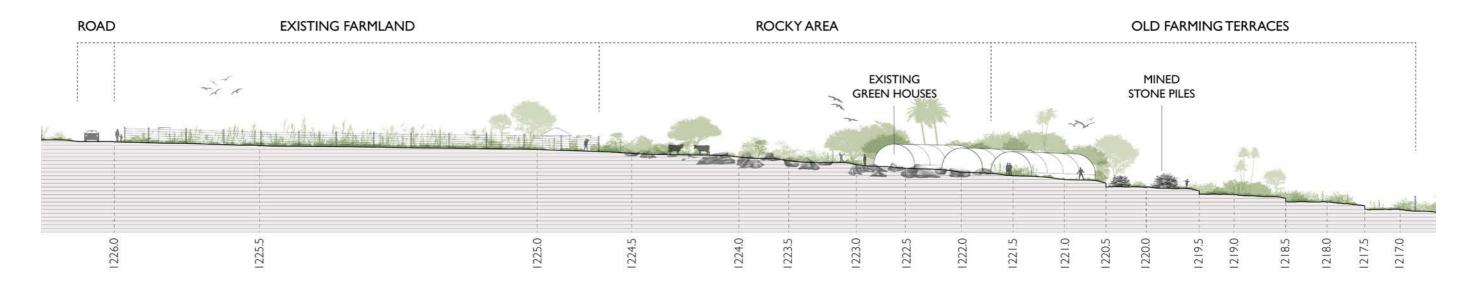
Located on a slope facing Lake Victoria the site offers valuable possibilities. As mentioned, the site sits along an existing road, on an uneven slope of dirt and farmland. There is a constant breeze from the lake and a beautiful view.

On site, there is existing farmland with fertile soil, as well as greenhouses that could be reused. The site has a dug well, but no electricity. On the slope, old farming terraces can be seen. Although in bad condition they could be restored and reused. There are also a lot of rocky areas that offers both challenges and possibilities - the stones could be used for construction and some of them are already mined and ready to be used on the site. The location almost on the equator means that Kisumu has minimal deviation in the hours of sunrise and sunset. The sun remains high throughout the day and year. Because of its equatorial location, the sun has a high overhead position throughout the year and sunlight will hit the center from all directions (Knutson, 2011:24 & 26).

Workshop 3, part 3 tried to explain the characteristics of the site for PWG by refereeing to various pictures. Overall, the women really liked the site. First of all, they argued that the slope of the site was good because it gave a nice view of the lake. Further, they felt that the size of the site was good and specifically highlighted its farming possibilities. They saw the advantage of the stones at the site and thought that it would be good to reuse these in the construction.

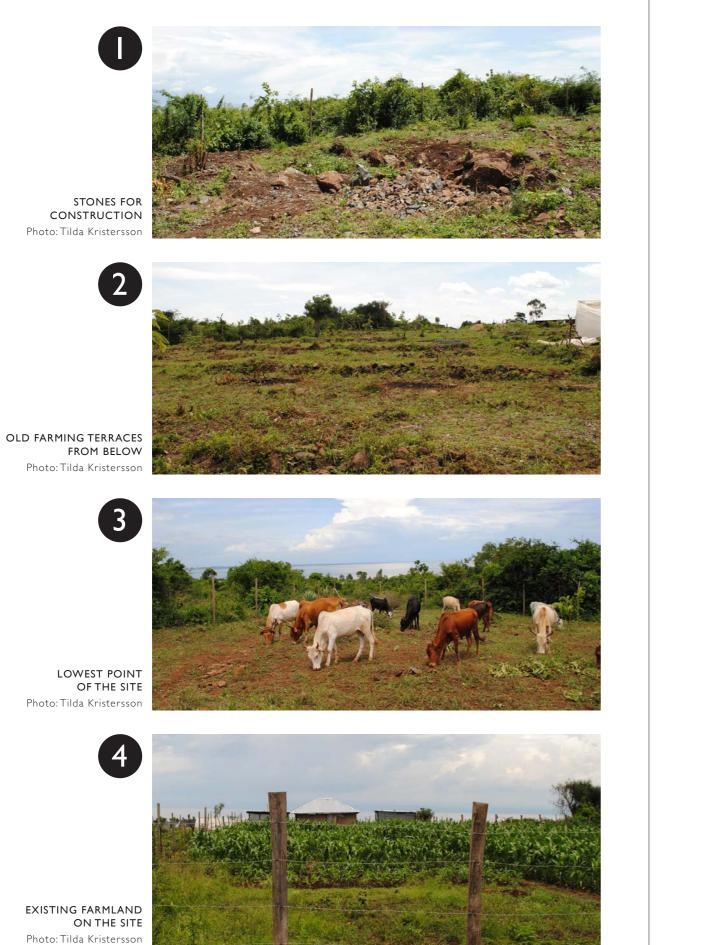
It should again be noted that this site is only used as a "theoretical example" in this project. The site is owned by the ROF and is currently being constructed into a literacy garden.

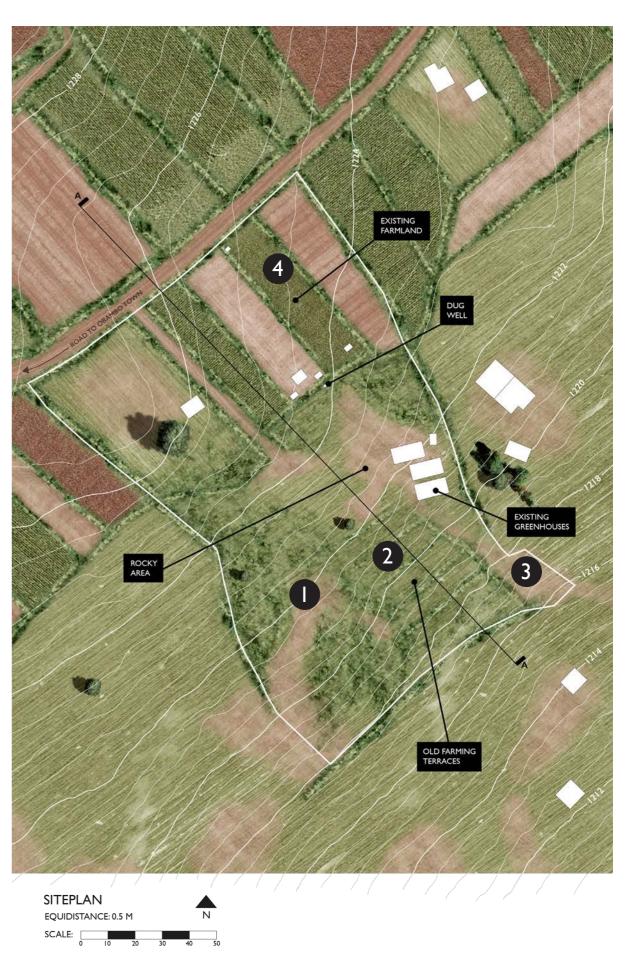




THE SITE Photo: Tilda Kristersson

RESULT





Based on measurements on site and google earth data through: http://www.sk6lk.se/elev_path.html

7.2 PWG'S VISION OF THE CENTER

7.2.1 The houses

The interviews, the questionnaires, and workshop 6 gathered information about the women's lives. Most of their current houses in Kibera are constructed out of mud and/or iron sheets. They are often too cold during night and too warm during day. Most of the women feel safe in their houses (security is good) and safe walking to and from the PWG center.

All of the women live in houses with only one room, where they live three to nine people and do everything including cooking and sleeping. This creates problems regarding several things, not at least lack of privacy. In order to feel comfortable sleeping, the women prefer that there would be two to three people in addition to themselves in the room. All of the women have electricity in their houses, but none of them have water in the house. For some of them, the distance they have to go to fetch water is too far. All of the women cook inside, they use charcoal and the kitchens are not separate rooms. This creates risks of fire, burns and air pollution. When the women got to prioritize functions which they would like to add to the houses, three top priorities were evident; water in the house; an additional bedroom; and a separate kitchen.

The women use shared latrines in Kibera, but most of them are in poor conditions. Some of the women have access to shared showers (in poor conditions), but most of them don't have access and clean themselves at home instead. The women do not have an area to do their laundry; they do it outside or inside their houses. Some of them are using shared washing areas, but these are in very poor condition. The women are okay with sharing latrines, showers and laundry areas. To feel comfortable, the women want latrines that are less than one minute away.



ELIZABETH'S HOUSE IN KIBERA Photo: Tilda Kristersson

7.2.2 Functions and activities

Most of the women think that the current PWG building in Kibera is too small. Important rooms/functions missing are: an office, training rooms/workshops, a daycare and a library.

Most of the women replied that they do not feel sick because of HIV very often. One of them (Rhoda) said that she feels sick often and in those cases for duration of up to one week. Activities that the women like to do when they feel sick are sleeping and dancing. The main thing missing in relation to HIV in their lives (for most of the women) is encouragement at home and food.

The discussion regarding functions of the new women center was initiated in workshop 1, part 2. It became clear which the most important functions to include in the center were. These include: a healthcare center, workshops, tourism and agriculture. Workshop 4, part 2, aimed to look deeper into which activities the women would like to do at the center and to get a better understanding of possible smaller workshops and which activities to prioritize. Some of the most essential findings from workshop 4 were thus the women's priorities regarding the most important activities. It is vital for the women to be able to spend time with their children at the center. They also find it very important to meet with the surrounding community and discuss various collaboration opportunities. Another important activity to include at the center is bible study. All of the women want to work with farming and they want to have both livestock and fruit trees on the site. All of them also want to work with administration as well as teach in workshops. They are also very interested in participating in various workshops to learn more. Subjects they are interested to learn more about are, for example, cooking, farming, compost toilets and water harvesting. None of them would like to participate in the construction of the center.

As described in chapter 6 (Method), the second workshop was conducted with participants from the community in Obambo. This gave me an initial understanding of the area and preferred activities that were lacking. Among the most popular activities - and applicable for

PWG's project - were that a lot of the participants would like to spend time with their family and take their children to play at the site. It was also very popular to come to the site to learn about nutrition, seasonal farming and permaculture (among other subjects) and participate in cooking workshops. Many of the participants also wanted to work at the site with agriculture, as well as with the construction of the site.

7.2.3 Skills

Workshop 4, part 1 aimed to gain an understanding of what skills the women have, and what skills they would like to learn. Some of the women have specific skills, such as hairdressing and tailoring, at the same time as others would like to learn these skills. The skills of the women are summarized in box 1 as a way to understand the knowledge base within the group. The various skills that the women want to teach and learn created a foundation for which activities and workshops the center could offer.

All of the women are experienced in counseling and most of them would like to teach others this skill. They are also experienced in guiding and many of them would like to work with this at the center. The women are all good farmers, but would like to learn more about different farming methods etc. They would also like to teach others how to farm. All of the women are experienced in crafting bracelets and necklaces and would like to teach others. On the other hand, none of them know how to craft baskets or do weaving - almost everyone wants to learn these skills. None of them know construction or carpeting and have no wish to learn, but all of them know how to paint walls. All of the women are also very experienced in business and administration and would like to teach others, but only two of them have basic knowledge in computer and most of them would like to learn. Some of the women speak English fluently, while others do not know any English at all these women would like to take English classes. Meanwhile, all of the women know Swahili and would like to teach others. Only some of the women know how to ride a bike, and the rest would like to learn this skill. None of them have a driver license, but some would like to get one.

Valuable information regarding the skills of the community in Obambo was gained during workshop 2. Almost all of the participants had experience in guiding. Some were experienced in painting, driving, cooking, teaching, singing, computer, and farming. Skills that they wanted to learn were carpentry, construction, weaving, crafting, painting, driving, teaching, cooking, computer, singing, and learn more about farming.

English	
Instructors	Number of the women that want to teach: 2 Other possible instructors: Teachers in Obambo volonteers
Participants	Number of the women that want to participat Other possible participants: Obambo communi
Swahili	
Instructors	Number of the women that want to teach: 2 Other possible instructors: Teachers in Obambo
Participants	Number of the women that want to participate Other possible participants: Tourists, volonteer
Computer	
Instructors	Number of the women that want to teach: 2 Other possible instructors: Teachers in Obambo volonteers
Participants	Number of the women that want to participat Other possible participants: Obambo communi tourists
Busniness/	Administration
Instructors	Number of the women that want to teach: 7 Other possible instructors: Professionals in Oba bo, volonteers
Participants	Number of the women that want to participat Other possible participants: Obambo commun
Crafting h	askats
Crafting ba	askets
Instructors	Number of the women that want to teach: 0 Other possible instructors: Professionals in Obambo
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Hairdressing

Instructors	Number of the women that want to teach: 2 Other possible instructors: Professionals in Obambo
Participants	Number of the women that want to participate: 3 Other possible participants: Obambo community
Cooking	
Instructors	Number of the women that want to teach: 7 Other possible instructors: Obambo community, tourists, volonteers
Participants	Number of the women that want to participate: 7 Other possible participants: Obambo community, tourists, volonteers
Biking	
Instructors	Number of the women that want to teach: 2 Other possible instructors: Obambo community, tourists, volonteers
Participants	Number of the women that want to participate: 6 Other possible participants: Obambo community

Solar energy

Instructors	Number of the women that want to teach: 0 Other possible instructors: Professionals in Obam- bo, volonteers
Participants	Number of the women that want to participate: 7 Other possible participants: Obambo community

Carpenting

Instructors	Number of the women that want to teach: 0 Other possible instructors: Professionals in Obam- bo, volonteers
Participants	Number of the women that want to participate: 0

Other possible participants: Obambo community, tourists, volonteers

Organic farming techniques

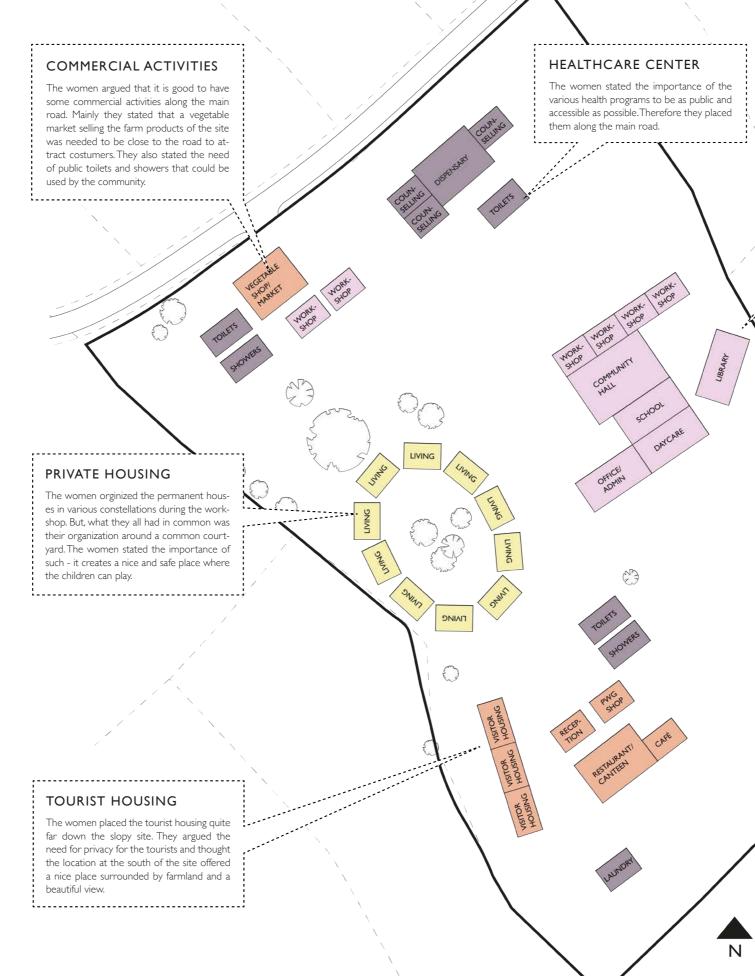
Instructors	Number of the women that want to teach: 0 Other possible instructors: Professionals in Obam- bo, volonteers		
Participants	Number of the women that want to participate: 7 Other possible participants: Obambo community, volonteers		
Weaving			
Instructors	Number of the women that want to teach: 0 Other possible instructors: Professionals in Obambo		
Participants	Number of the women that want to participate: 6 Other possible participants: Obambo community, tourists		



As described previously, design elements were initially discussed in workshop 1, part 3, where it became clear that the traditional architecture of the area around Kisumu is not something that the women prefer. They want to leave the old behind and what seemed most important for the women was that the center should be in a very strong and long-lasting construction. They prefer square buildings made out of either bricks or blocks for the walls and iron sheets for roofing. Workshop 3, part 5 discussed and presented the findings from the field study in Rwanda, with a focus on the Women Opportunity Center. The women really liked the center and its possibilities. They found that one of the best things with it was that it was rural and included many functions.

Design preferences were discussed further in workshop 5. Part one of this workshop aimed to gain an understanding of for example, what materials that could be used in order for the women to feel comfortable. First of all, they liked buildings with good ventilation and natural lighting. The women think that colors will be very important at the new center. They appreciated ideas of natural ventilation, for example ventilation holes in facades. They also liked ceilings and partitions in organic materials, for example papyrus or bamboo. Most of the women liked the look of both bricks and stone, as long as the construction was solid and modern. None of them liked more traditional and old structures. Most of them disliked or were partial about buildings constructed out of wood. They disliked buildings made out of only bamboo since they thought it looked unstable. All of them liked courtyard designs since they felt that it creates safe and welcoming places. They liked outdoor environments that offered meeting opportunities, with for example, many seating possibilities.

Part 2 of workshop 5 aimed to discuss design preferences at the bigger scale. The women came up with various possible solutions to the layout of the site and some important relations within the center became evident. This was a successful way to interact the women and it served as a great starting point when designing the center (the result from the exercise is summarized in the following diagram).



COMMUNITY CENTER The women placed the community center at the middle of the site. They wanted it to feel safe, but still public. Another reason for the placement of the community center was that the view on site is best at this location, which offers possibilities for the building. The women thought that it would be good to gather most of the educational programs around the larger community hall, but placed some workshops along the main road to attract visitors. AGRICULTURE The women thought that the agricultural activities of the center should be located far down the site in order to separate them from the more public functions further up. The placement of the agricultural functions also had other strategic reasons - this part of the site is the lowest and has the least view of lake Victoria. The spot would not make a good location for housing, hence the chosen use of it for agricultural buildings.

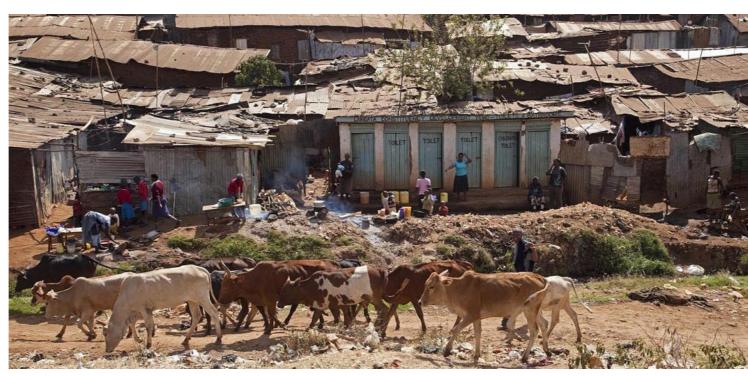
7.2.5 Challenges and possibilities

During meetings with NGOs in Kisumu I learned about the prevalence of HIV in the area, as well as discrimination and stigmatization as a result of it. This is a huge challenge and the main goal with the new center is to help people living with HIV. As mentioned in chapter 6, the last workshop (workshop 6) aimed to discuss various other challenges and possibilities with the rural women center.

The first part of the workshop aimed to understand the challenges of the women's lives, based on information from the individual interviews, questionnaires and home visits. Infrastructures and functions lacking were discussed and a basic understanding of the women's daily life gained. Some of the main things lacking in their lives were security of property, clean water and sanitation.

The second part of the workshop discussed possible challenges in the rural area - there might be a lot of space but other things could be lacking and challenging. For example, the site is lacking infrastructures (such as electricity), which the women have in Nairobi. Many infrastructures are lacking in the area around the site, and it is thus vital to include as many of these as possible in the design. In conclusion, various topics were discussed, both in relation to the urban and rural setting, in order to gain an understanding of the women's priorities. For the women, the most critical challenges with the new women center were: security, food, clean water, sanitation and electricity, as well as the lack of healthcare and counseling in the area. The third part of workshop 6 discussed possibilities with the center. Different design solutions to the challenges in the rural setting were discussed in order to understand the women's preferences. These discussions are the foundation of the final design proposal.





RURAL OBAMBO Photo: Tilda Kristersson

KIBERA

Photo: Matt Lesso (Source: www. borgenmagazine.com/progress-fighting-poverty-kibera-slum/)

8.0 ANALYSIS

This chapter discusses the result of the study in relation to the theory to create an understanding of what strategies to apply in order to design a sustainable center that serves a wide range of women. The chapter is divided into several parts to highlight various important design possibilities. It focuses on a diverse set of design approaches applicable in rural areas and connects the result of the study with the mission and objectives presented in chapter 3.

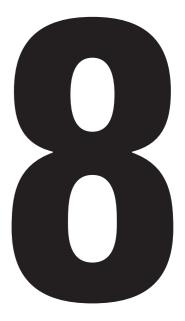
Objective 2 is to identify existing rural gaps i.e. human rights that are lacking in the rural area. The first part of this analysis identifies these gaps in order to understand possibilities and opportunities lacking in the area. To assure long-term independency for the women and address the gaps identified, objective 3 of this project is to create a self-sustainable center. The second part of the analysis investigates how the design can fill the rural gaps and achieve self-sustainability. I argue the importance of preserving various rural qualities in order to ensure the identity of the area. How can the design fill the identified gaps at the same time as rural qualities are preserved? The third part of the analysis relates the findings of the field studies to the theory on vernacular architecture as a means to: respect local resources, preserve rural qualities and protect the identity of the area. As discussed previously, Hehl asks for a model that allows for "dynamic incremental processes and at the same time directs urban growth in a more sustainable way" (Hehl, 2016:40). The fourth part of this chapter investigates the possibilities of such flexible design process. Finally the analysis is concluded in a last part, where strategies will be extracted to create a foundation for the design process.

"We need to find the nexus between rights and development. Like all of us, people in rural areas need both, and they deserve also to live in peace" -Phumzile Mlambo-Ngcuka, UN Women Executive Director (2018: Online).

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KIBERA Photo: Christian Als (Source: https://christianals.com/photo-stories/the-shadow-city/)



8.1 IDENTIFYING THE RURAL GAPS

"It can be said that there are four basic and primary things that the mass of people in a society wish for: to live in a safe environment, to be able to work and provide for themselves, to have access to good public health and to have sound educational opportunities for their children." -Nelson Mandela (cited in UNICEF, 2014:5).

As mentioned in the problematization chapter, Duranton argues the importance of preventing the worst imbalances within the urbanization process. He argues the importance of identifying and eliminating constraints in order to reach a sustainable development (Duranton, 2009:68 & 107). This chapter interprets and identifies the lack of access to vital human rights as such constraints.

The women of PWG have throughout their lives been living in lack of several human rights. As discussed previously, there are persistent inequalities between rural and urban areas, as well as between and within different regions in Kenya. The women's migration to Nairobi was partly a result of such inequalities. The life in their rural areas were extremely hard and they moved in search of a better life, basic human rights and a decent standard of living.

Meanwhile, as rural-urban inequalities continue to define Kenya, the slums of the cities are growing and so are the inequalities within the cities. Even though many of the services the women were lacking in their rural homes are available in Kibera, they still struggle to provide for their families. The women are still deprived of important rights and want to move back to their rural areas for various reasons.

As discussed in the theoretical chapter, rural women are among those most likely to be left behind and they are facing huge challenges in realizing their human rights (UN Women, 2018: Online, Nnoko-Mewany & Bielecka, 2018: Online). Krishna states that no one should be denied possibilities "merely because she is poor or rural, from a minority religion or a particular ethnic group, or because she happens to be a woman" (Krishna, 2015: 296). In line with Krishna, I argue the importance of improving opportunities for poorer communities and limiting inequality by imposing a minimum living standard. Everyone should have the right to a decent standard of living and equality of opportunity, no matter where they are born. The goal of this project is not in

any way to argue against the positive possibilities with urbanization, and it does not aim to slow or reverse the process. But, everyone - either living in rural or urban settings - should have the same opportunities to obtain their rights. No one should have to move from their home to assure access to basic rights. As stated in the NUA (Habitat III, 2016:3 § 14:a), the benefits from urbanization must reach everyone and no one should be left behind.

In other words, when designing PWG's rural women center it is vital to accommodate a way of life that assures the women their basic human rights. The mission of the design also includes securing these rights for the surrounding community. In order for such goals to be fulfilled, possible rural gaps (i.e. human rights that are lacking in the rural area) needs to be identified. The second objective of this project is to Identify rural gaps. In order to answer the objective's guiding question; "which conditions are missing in rural Kenya?" the participation of the women was vital. Achieving the second objective would not have been possible without their knowledge. The various gaps identified are discussed in the following and related to the discussion of human rights in chapter 5.2 (Promoting access to human rights).



8.1.1 The main gaps

As discussed previously, many rural women are denied their property and inheritance rights - they may lose their land and property when they are divorced or widowed (Nnoko-Mewany & Bielecka, 2018: Online). Some of the women in PWG were forced out of their rural homes when their husbands passed away - a rights violation that is still common in Kenya (Nnoko-Mewany & Bielecka, 2018: Online).

The women of PWG currently live in Kibera without adequate housing and security of tenure, which creates a very vulnerable situation. Some of the women have recently been evicted, or have faced the risk of eviction, from their homes in Kibera. The reasons are different: uncertainty surrounding elections, construction in connection to the railway, and raised rents are some of the challenges that result in a very unsecure tenure and a constant risk of eviction. Tannerfeldt and Ljung state that several studies have identified security of tenure as an important aspect of urban poverty and a major concern for the poor themselves. It is a priority as important as employment, food and safe drinking water (Tannerfeldt & Ljung, 2006:42). All of the women in PWG view security of tenure as one of the most important part of their lives.

As discussed previously, women's right to food security is often restrained by gender discrimination in different ways. The right to enough food for the women and their families is another vital right lacking from their lives.



LACK OF SAFETY AND COMMUNITY SAFETY NETS

As discussed, gender-based violence and HIV/AIDS are overlapping problems and women who are positive are more likely to experience partner violence. Rural women are in general at great risk of various forms of harmful practices (Hillard et al., 2016:1683, UN Women, 2018: Online). The women describe a situation in Kibera where they feel part of a community and can find help from others if they are in a vulnerable situation. On the other hand, they argue that such communal safety nets are lacking in their rural areas.



LACK OF WORK AND INCOME

Tannerfeldt and Ljung (2006:39) state, "poverty deprives people of freedom to decide over and shape their own lives". Many of the women of PWG moved to Nairobi because they lacked a secure income in their rural areas. They previously worked as farmers, but the crops were insecure and the money not enough. In Kibera, they mainly work with PWG and some of the women have other work such as cleaning. This generates some income, but not enough to provide for their families.

Women are often responsible for the home and children. Day care for the children is a major problem for women working outside their homes (Tannerfeldt & Ljung, 2006:47 & 54). PWG has opened a daycare in Kibera to help women in the community. The lack of daycares in Obambo creates a similar challenge in the rural setting.

LACK OF ADEQUATE HOUSING, SECURE TENURE AND FOOD SECURITY



LACK OF EDUCATION AND OPPORTUNITIES

None of the women have education above secondary level and many of them do not have any education at all. The women's lack of education is depriving them of opportunities. One reason for the women's move to Nairobi was education for their children - whom are all in school today. There are two schools very close to the site in Obambo, which means that education for the children will be available also close to the new center. On the other hand, there are not many adult training classes in the area.



LACK OF HEALTHCARE, HIV TESTING AND COUNSELING

All of the women in PWG have experienced deprivation of basic human rights as a result of being HIV positive. Stigma related to HIV is prevalent in Kenya and is still an ongoing part of life for people living with HIV in the country (NEPHAK, 2011:48, Yebei, Fortenberry & Ayuku, 2008:97). In Obambo there is a lack of healthcare facilities and various treatments in relation to HIV. There is, for example, lack of counseling possibilities, testing and dispensaries. Accesses to other treatments than those related to HIV are also poor. The risk of malaria in the area is great, but treatment opportunities are scattered. The lack of maternity cares in the area forces women to give birth at home under poor conditions.

Those of the women in PWG who got to know their status while living in their rural areas describe situations filled with stigmatization and discrimination as a result of their HIV status. In a similar manner, all of the women describe their first years in Kibera as filled with different experiences of stigma. Time has passed since the women first moved to Nairobi and Kibera and the situation today is different. They describe a Kibera where the levels of stigma has declined drastically - both as a result of the work against discrimination and increased counseling, but also as an effect of more and more people testing positive. The women state that if you are not infected, you are affected. The situation in rural Obambo is completely different, both according to the women and NGOs in the area. The women argue that stigma and discrimination is still very prevalent in many rural parts of the country. People die because of the low HIV awareness - they are not tested and refuse treatment. It is not uncommon that people get ostracized if they are positive, or if people suspect that they are.



LACK OF ELECTRICITY, WATER AND SANITATION

The women have access to electricity in Kibera. Clean water is of particular importance for people living with HIV (Tannerfeldt & Ljung, 2006:74), but the women are currently living in lack of such. The sanitary conditions of the women's lives in Kibera are very poor, creating dangerous situation where they and their children are exposed to diseases and infections. Pit latrines are commonly used (both in Kibera and in the rural setting) and these bring various problems. There is no adequate waste system in Kibera, and neither in the rural area. A small dug well supplies the water at the site in Obambo, which is far from enough for a larger rural women center. Lack of electricity is another challenge of the new women center - the site is not connected to any power distribution grid.



Photo: Christian Als (Source: http://christianals.com/rekibera/)

8.2 A SELF-SUSTAINABLE CENTER

As argued throughout this project, the situation for women in rural Kenya is currently very insecure. The initial idea of the project was that the new rural center should be a safe place and offer possibilities for the women to educate, to be educated and to live lives free of uncertainty. The center should in other words guarantee the women their basic human rights. In order to achieve this and create long-term independency for the women, objective 3 of this project (Self-sustainability) is to create a self-sustainable center.

Hehl argues that it is important to include opportunities for income generation, and to enable functions and activates lacking in the area of the design, when developing rural settlements (Hehl, 2016:40-41). Bolchover and Lin argue, in agreement, that it is essential to consider the village as a totality when creating a contemporary village (Bolchover & Lin, 2014:173 & 176). For example, RUF's design of Jintai village incorporated houses, community programs, tourism and comprehensive farming strategies (Bolchover & Lin, 2014:176).

In order to achieve self-sustainability and close the various gaps identified in previous chapter, I argue that the new women center must comprise several functions currently lacking in the area. The center must offer a set of integrated programmes and functions - such as healthcare and counseling, education, family support, tourism and agriculture. It must work to spread awareness regarding HIV and be a central meeting place in the community. In other words, the center must be a place to live, simultaneously as community programs spreads knowledge and various activities generate income. The center could in this sense be resembled with a small village where working and learning opportunities are included to offer a wide range of possibilities. Bolchover and Lin argue that the design of Jintai village could be seen as an opportunity to "demonstrate a new village prototype and alternative model for redevelopment" (Bolchover & Lin, 2014: 173). The mission of PWG's project is to, in a similar manner, create a women center that could be seen a prototype for a self-sustainable village.

"What if the design of rural settlements could also provide a backbone for commercial activities and services developed by the community themselves?" (Hehl, 2016:41).

8.2.1 Closing the main gaps



While designing the rural women center, all of the rights lacking in the lives of the women in PWG must be accommodated. One main function of the center should be permanent houses for the women that have the possibility to host their families. The mission of the project is not only to realize the rights of the women in PWG - the reach must be wider and offer possibilities for women in the surrounding rural area. If a woman (and her family) is forced to move from her home, housing options other than those in the poor conditions of urban slums must be made available. The women center should offer temporary shelter for women (and their immediate families) in urgent need of a place to stay. The center should also accommodate farming and livestock in order to make sure that there is enough food at the center. The center must reassure women's access to agricultural technologies and knowledge that will help them improve their food security and it must spread the knowledge to the surroundings.



SAFETY AND COMMUNITY SAFETY NETS

Everyone should have the right to a life free of violence and discrimination (Habitat III, 2016:2 \S 13). In addition to the focus on HIV, the center should accommodate programs for gender violence recovery. It should be developed to offer shelter for victims of violence and help reduce prevalence of gender discrimination. Intimate partner violence in the country is often associated with gender power inequalities, but women who are involved in decisions in the household are commonly less exposed (Hillard et al., 2016:1687). Empowerment of women through for example education and income generation - is thus vital. As discussed, Hillard et. al. argue that interventions on individual and group levels must be combined with interventions at community levels. Such structural-level interventions could include for example economic empowerment combined with property rights programs (Hillard et al., 2016: 1683). Hillard et al. state, "land and property may have the potential to minimize gender inequality and influence a variety of health out-comes, including violence against women" (Hillard et al., 2016: 1685).



WORK AND INCOME

As mentioned, the center should offer farming possibilities to ensure food security at the center and excess products could be sold to generate income. To gain more income from the agricultural production the center could also farm products (such as bamboo) for material extraction. The agricultural activates at the center will provide some work opportunities. But, as discussed previously, a diversified economy is positive for rural areas - employment opportunities beyond farming have proven to reduce poverty. The center should thus promote such diversification in various ways and host other income generating functions. These could include, for example, a restaurant and tourism. Since day care for the children is a major problem for women working outside their homes (Tannerfeldt & Ljung, 2006:47), the center should also provide this lacking function.

ADEQUATE HOUSING, SECURE TENURE AND FOOD SECURITY

EDUCATION AND OPPORTUNITIES

The mission of the project is to strengthen interdependency – within the center itself as well as in surrounding areas. The center should provide women (and their families) various possibilities to improve their situation through empowerment and assure equality of opportunity. The center should work as an educational and learning hub, where different skills are taught and exchanged. It should provide women with training in leadership and management and build skills and competencies applicable in several sectors and potential careers. Craftsmanship, construction, tailoring and hairdressing are examples of classes that could be offered to the community.

The center should link the women of PWG with the surrounding community and create knowledge exchanges. Faming methods could for example be exchanged at the center. The center should also work to mentor individuals in the surrounding communities and support them to achieve their future goals. The center could, for example, advice on business, administration and financial management, among other services needed in the area. If someone in the community would like to move to the city, the goal is that she will have the education and skills to obtain a job and be able to ensure a decent standard of living in her new urban location.



HEALTHCARE, HIV TESTING AND COUNSELING

In the previously discussed study by NEPHAK, almost 60 % of respondents described disclosing their status as an empowering experience (NEPHAK, 2011:51). The women of PWG describes, in a similar manner, that their disclosures empowered them and created new opportunities and prosperities of life. Peer-based and community approaches that share prevention tools have been proven effective in order to prevent HIV (UNAIDS, 2016:11). NEPHAK state the importance of strengthening the capacity of local organizations and support groups in order to help and encourage people living with HIV (NEPHAK, 2011:11).

PWG's main goal with the women center is to help others in their situation and spread awareness regarding HIV/AIDS. As discussed in previous chapter, there is a lack of health care facilities in Obambo. The new rural women center must thus close this gap and offer various treatments in relation to HIV (for example counseling possibilities, testing and a dispensary). Other important treatments (such malaria treatments) must also be available at the center. To ensure everyone a healthy life, a maternity care must be accommodated within the healthcare facility.



ELECTRICITY, WATER AND SANITATION

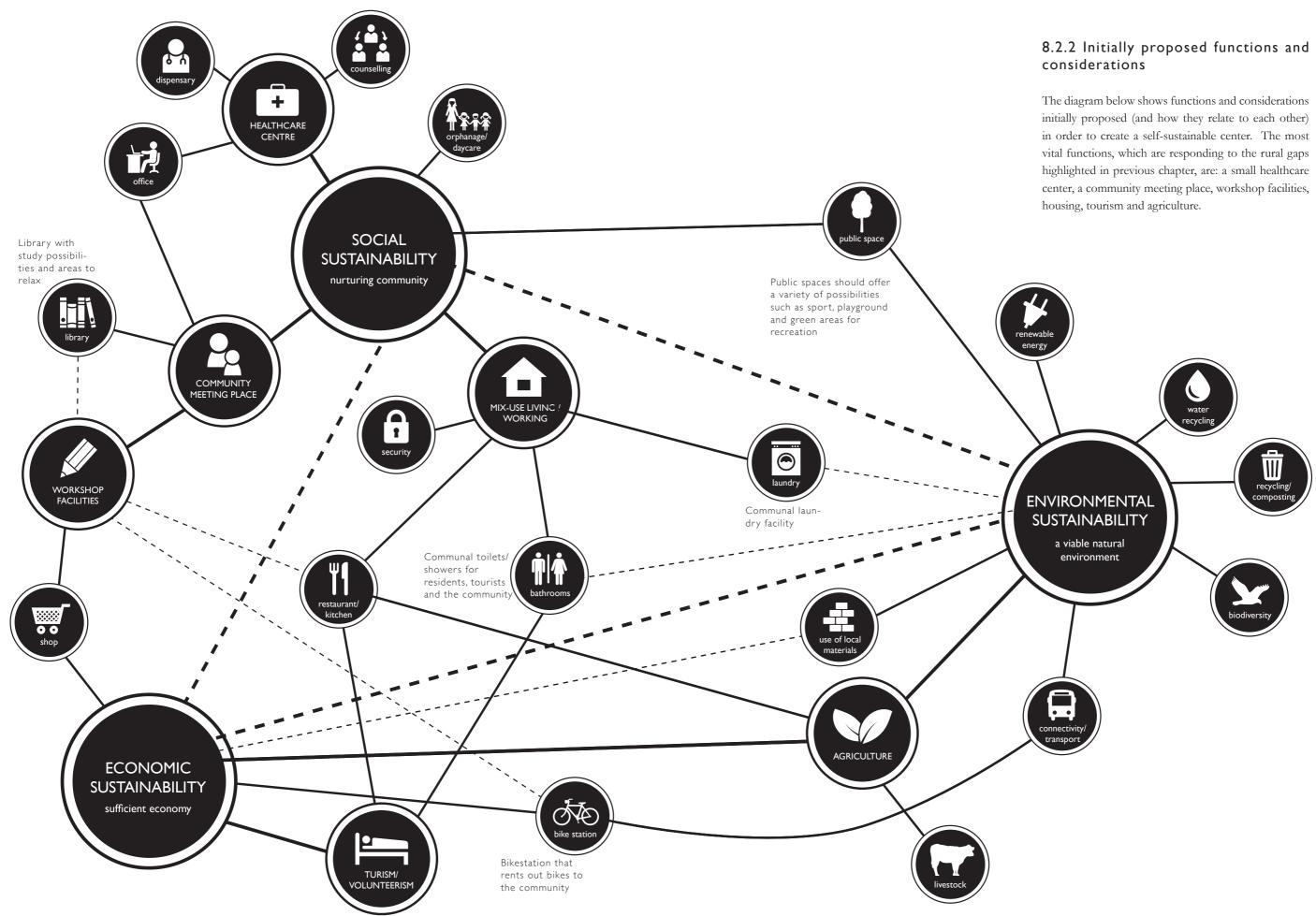
Investments in public programs, such as rainwater collection, reed bed wastewater treatment and biogas facilities, are proposed in RUF's various projects (Bolchover & Lin, 2014:176). The design of the women center will, in a similar manner, apply different measures to make sure that the center will run efficiently. The objective of self-sustainability means that the center in the future should be self-sufficient in terms of both electricity and water - i.e. create an as small ecological footprint as possible.

Knutson states that the environmental considerations implemented in any project should be optimized to local conditions, customs and constraints. The climate in Kenya simplifies and eases the enclosure systems of buildings. Walls, insulation, windows and doors are often eliminated when not necessary for reasons such as privacy and security (Knutson, 2011:24-26). Meanwhile, electricity in Kenya is both expensive and unreliable (Knutson, 2011:25-26). Alternative sources of renewable energy are required to make self-sustainability a reality at the center and to protect the environment. The site's location close to the equator creates great possibilities and the design should optimize the sun utilization at the center. The high solar radiation (with constant levels throughout the year) provides an ideal setting for solar power and hot water as well as natural lighting of the buildings. But, careful considerations must be made, and thoughtful design strategies applied, to provide protection from too much sunlight or glare.

It is vital to make sure that there is enough water at the center. Various methods, such as rainwater harvesting and wastewater treatment, should be implemented. Rainwater harvesting should reassure farming possibilities all year around and filtration systems to reuse wastewater and utilize rainwater for daily use must be investigated and developed.

Ecological sanitation systems must also be included in the design. Ecological sanitation is, together with agriculture, very suitable in peri-urban areas and small towns (Tannerfeldt & Ljung, 2006:103). Since pit latrines bring various issues, compost latrines should be considered as an option. All of the waste at the center should be recycled.





8.3 PRESERVING RURAL QUALITIES

As discussed previously, Bolchover and Lin argue that many traditional buildings and methods have been abandoned in favor of modern alternatives in rural China (Bolchover & Lin, 2014:147). In a similar manner, I argue that the area of Obambo is under transition modern buildings are being constructed and traditional abandoned. In line with RUF's projects, the women center must work to protect the area and allow it "to evolve rather than being subsumed by urbanization" (Bolchover, Lin & Lange, 2016:12). While rural areas are becoming rapidly urbanized, Bolchover, Lin and Lange state that many projects have started to re-insert rural qualities back into urban areas (Bolchover, Lin & Lange, 2016:12). Instead of creating a possible future need of re-inserting rural qualities (such as farming) into the urban fabric, these qualities must be preserved and maintained in Obambo. And instead of letting urbanization erode the rural identity of the area, it must be protected.

In previous chapters it has been established that the physical environment plays a vital role in relation to place identity. Schmidt argues that we must remain locally anchored to not compromise our identity in a globalized world (Schmidt 2002:2). In line with Schmidt, I argue the importance of promoting the existing qualities in Obambo to preserve the local identity of the area. The previous chapter discussed the insertion of some functions with more urban character to fill the rural gaps identified. How can the design fill these gaps at the same time as rural qualities are preserved?

As discussed in the theoretical chapter, Knutson argues that there are three key factors that must be taken into consideration in any design project: the environmental factor (local environmental considerations and the regional climate), the social factor (social and cultural considerations i.e. cultural context and social expectations) and the construction factor (local construction methods and established practices). These three factors, or criteria, are equally important in the establishment of a localized design process. They must be designed specifically to the place in consideration, in balance with global design standards and quality criteria (Knutson, 2011:21-22 & 30).

The design proposal of this project must, in a similar

manner, customize a center for the local circumstances in Obambo, and nowhere else. The design should create a center in harmony with its locality at the same time as providing functions lacking in the area. The new functions must be carefully inserted, while rural qualities are protected. The project must work with existing features and add to the qualities in the area rather than replace them. Hence, preserve the rural character, avoid a loss of local identity and counter the challenge of a possible 'placeless geography'.

Identifying rural qualities

The site inhabits many different rural qualities. The most important ones became evident during the workshops with PWG. The farming of the area is one of the main qualities and the design must guarantee farming possibilities in the future - to preserve the area's identity and reassure the center's self-sustainability. The women appreciate the breeze from lake Victoria and they consider the view of the lake as one of the most important qualities to protect. Another important aspect of the rural context is the advantage of space - if the area becomes urbanized the center must guarantee open areas and public space, while allowing incremental densification. The architecture and topology are other important components contributing to the area's identity and they must be taken into consideration.

8.3.1 Vernacular considerations

As discussed in the theoretical chapter, Virmani argues that rural communities have had the ability to preserve important knowledge and skills that have sustained the world for centuries (Virmani, 2016:70). In agreement, Knutson states the importance of considering local methods and practices already established. He argues that it is vital to work with local practitioners and learn through their existing methods. Such collaborations and transfers of knowledge should guide the process. They are significant in order to reach relevant design approaches, establish construction practices that are locally appropriate, and help guide the selection of materials and suitable sources for these (Knutson, 2011:21 & 28-29).

This master project does not comprise the actual construction of the center; it merely provides a design proposal and suggestions for possible future construction. In line with Knutson's arguments, I want to highlight the importance of collaborations with local practitioners in the construction of the new women center - local expertise should guide as much as possible of the construction. The Lous have traditionally had the knowledge to build their environments and the construction used to be a communal activity (Achieng' Abonyo, 2005:3-4). By inviting the community into the construction process the aim is to spread existing local knowledge, generate work opportunities for the community and respect the traditional Lou way of communal construction. It should be noted that, as a result of various future collaborations and inputs, the design proposal would most likely go through various alterations before and during construction.

Knutson states that traditional communities in Kenya have always used natural materials in their immediate environments for construction, which has resulted in buildings well integrated with its surroundings and nature (Knutson, 2011:29). In line with Knutson (2011:26), I argue the importance of preserving and including the landscape and surrounding environment in the design. The slope of the site should thus be incorporated and the breeze from the lake should be utilized. The project should apply a sensitive approach, assuring that the center will be characterized by the culture it is designed for. By respecting local resources and methods the design should result in a center that is well connected with its surroundings and relates to existing buildings.

The buildings neighboring the site are small and scattered, whereas the new center needs to be large in order to fit all the required functions. Even if the functions are divided into various buildings, these must be rather closely placed in order to fit on the site, and some of the buildings still require rather large sizes. In other words, in order to fit all required functions the center is going to be relatively dense compared to surrounding areas. The design should thus aim to blend the rather large and dense center with the surrounding landscape. This goal is very similar to that of RUF's while designing the village of Jintai. Their aim was a village with aesthetic qualities derived from the "materiality of its surround-

ing landscape, allowing it (as in the most traditional of villages) to blend into and become an integral part of its environment" (Bolchover & Lin, 2014:177).

Meanwhile, the women do not like the traditional architecture of the area, they want modern buildings. The women are, for example, against round buildings - they find them hard to furnish and belonging to the past. How is it possible to design a modern center that fulfills the women's design preferences, while considering the historical environment and local traditions? RUF's prototype house in Shijia Village, discussed previously, has served as vital inspiration in order to find a solution for this challenge. Bolchover and Lin state, "as a result of the investigation into the modern village vernacular, the project was conceived to represent an architectural attempt to consciously evolve vernacular house construction in China" (Bolchover & Lin, 2014:172). RUF's design of the prototype house combines vernacular ideas with modern and existing technologies - it brings together old and new and offers suggestions on how to include both modern and traditional features. Existing technologies are added to an improved and the design makes sure that the use of, for example, biogas and rainwater collection is possible (Bolchover & Lin, 2014:170 & 172).

In line with RUF's prototype house in Shijia Village I argue the importance of considering and applying vernacular characteristics and methods, in combination with modern features and technologies. When redesigning a brick school in Tongjiang Village, RUF highlighted the importance of a design that responds with the context. But, they also aimed for an architecture that was not "overly nostalgic or vernacular in nature" (Bolchover & Lin, 2014:116). As the women of PWG like modern alternatives, I aim for a design in line with this - a design that does not create overly nostalgic rural expressions.

On the other hand, the center should relate to existing buildings and the environment of the area. A vital feature for the local architecture is a black stone, often used in construction. This is a material that is found on the site and during the workshops it became evident that it is a material that the women appreciate. The aim is to use as environmentally sustainable materials as possible in the design - hence the stone on the site as an obviously important option. The design should minimize the use of concrete and wood. Bamboo, on the other hand, can be farmed in the area and could be substituting wood. The use of steel is difficult to avoid - the women prefer this material for the roofs and it is also important in order to guarantee the stability and safety of the center. But, when possible, other materials should be used. Stone and bamboo could for example be used as substitutes and green roofs could alternate corrugated steel on several buildings.

It is my belief that the best option - both in order to ensure environmental sustainability and to preserve local techniques and identities - is to work with what is already at the site. In addition to the stones, another important feature of the site is the existing farming terracing. If the terraces were reused and restored, the stability of the land would be improved and farming possibilities increased.

During the workshops with PWG it became apparent that the women appreciated courtyard structures and that these were important features to include in the design of the center. As discussed in previous chapter, the huts were placed in a circle around a common court-

yard in the traditional Lou homestead. The circle shape has been replaced with the square and rectangle in most modern constructions and layouts, but the placement of houses among a common courtyard has survived. References of such structures can be found in various settings, both rural and urban (Achieng' Abonyo, 2005:3, 7 & 24, Anyumba, 1995:35). One good example of the functional and social character of the common courtyard was found in Dunga Beach during the field study in Kisumu (see picture below). The traditional Lou courtyard was a vital feature of the homestead and worked as the main area for several activities (Achieng' Abonyo, 2005:3). The courtyard in Dunga Beach was, in a similar manner, very active and included different daily activities such as playing and working. It has been of great inspiration for the project.



COURTYARD IN DUNGA BEACH Photo: Tilda Kristersson

8.4 INCREMENTAL DEVELOPMENT

In line with previous chapter, Jernsand and Kraff argue the importance of a process that is connected to the situation and the context. It must be allowed constant changes and the situated knowledge (i.e. the place, people, timing and local circumstances) should indicate what actions to take (Jernsand & Kraff, 2014:240). They call for, "innovative ways of approaching the process itself, permitting it to be participatory and changeable" (Jernsand & Kraff, 2014:226). In agreement, I argue the importance of a sensitive process that is highly related to time, is allowed constant changes, and has the possibility to include various narratives in the making of the place.

As discussed in the theoretical chapter, Lin argues that villages are loosing their collective identity, and asks how this - and other consequences of rural urbanisation - can be addressed through design? As a response, he argues the importance of more flexible models for the development of village life (Lin, 2016:73-74 & 77). Accordingly, Hehl asks for a model that allows "dynamic incremental processes and at the same time directs urban growth in a more sustainable way" (Hehl, 2016:40). As discussed earlier, the Eden project aims at a design approach based on an open framework that clearly



SCHOOL IN TONGJIANG VILLAGE (Source: https://www.archdaily.com/252725/tongjiang-recycled-brick-school-rufwork)

structures urban growth in the future (Hehl, 2016:40-41). In line with Hehl I argue the need of "setting the frame for future urban growth" (Hehl, 2016:41).

RUF's design approaches often demonstrate alternative scenarios for future village development. Many of their projects are built on flexible processes, which enable different scenarios for growth (Lin, 2016:73-74 & 77). For example, while designing the recycled brick school in Tongjiang Village, RUF applied a comprehensive incremental approach that aimed to create a prototype for sustainable rural development. Bolchover and Lin state that, "by providing an infrastructure for possible uses, the school and the village can adapt the space according to their future needs" (Bolchover & Lin, 2014:116). The success of the women center requires a similar approach. In line with Bolchover and Lin, I argue that buildings must be allowed various possible uses in the future. If a function is no longer needed, the building must be adaptable to the new situation. As the center continues to grow (and the amount of inhabitants increases), more functions must be able to be added. The center must, in other words, promote a development that is careful and lets the area mature step by step.

If more housing possibilities are needed, the process must ensure the growth of the center in a sustainable way. Examples could be vertical expansions and multi-purpose spaces. As mentioned in the theory, UN-Habitat states that progressive housing options is a beneficial strategy (UN-Habitat 2014:109). In line with UN-Habitat's guidelines, the center should offer varied alternatives to create different investment possibilities for the center and the women. The needs and characteristics of the households may change over time - it is important to offer the women possibilities of extensions of their housing units. The design of the center must be flexible enough to allow such development and enhance opportunities for the households and the center to evolve - making sure that changing needs and goals are incorporated. Promotion of self-construction and incremental housing is, according to Tannerfeldt and Ljung (2006:136), vital for pro-poor urban development.

In order to describe their process in Tongjiang Village, Bolchover and Lin use the example of a somewhat over scaled library or meeting room. They state, "rather than prioritize a singular function such as a library, art room, or assembly hall we decided to allow the school to determine its program". They emphasize the potential of, for example, simple environmental strategies and diversity of spaces, in order to create a school that is "robust and adaptable enough to withstand the potential transformation of the surrounding context" (Bolchover & Lin, 2014:116). This argument is in line with the vision of the PWG center and the discussion on rural resilience in previous chapter. I argue the need for the design to responds to the forces of transformation within the context in order to protect rural qualities and promote a sustainable development.

There are several other examples of RUF's projects where they have worked with similar approaches. In Qinmo village, RUF developed an incremental process by implementing a series of insertions such as a community center, a school, a library and various public spaces "as part of the transformation of the entire village" (Bolchover, Lin & Lange, 2016:11). While designing a school in Mulan Village, they envisioned a school with different shared spaces open to the community to use. Bolchover and Lin argue that as the urbanization "begins to expand and encroach on the village, through the provision of these common, shared areas, the school

can become a communal focal point and active site for discussions, meetings, study, play, or relaxation" (Bolchover & Lin, 2014:158). Another example of a similar strategy is RUF's work with a school in Yongxin village. Their strategy "engaged with the unpredictability of the urbanization process in the design of a walled enclosure that preserves the inner, collective life of the school despite possible future changes to its context". Further they state, by "embracing the speed and unpredictability of the urbanization process, this school design prototype can be implemented in either rural or urban contexts" (Bolchover, Lin & Lange, 2016:11).

The mission of PWG's project is, in a similar manner, to create a strategy for incremental change that can allow the center to evolve into a viable community able to withstand and adapt to the possible future urban expansion. If the future expansion of Kisumu town (discussed in chapter 7.1.2 Urban expansion) would extend to Obambo and the women center, the design should be able to adapt to these forces, ensuring sustainable growth and protect rural qualities and the identity of the area. In other words, it is important that the development of the center is sensitive and very flexible, to allow for the process to change and take different turns according to changeable local circumstances. In order to develop such incremental process the project should be built in phases - a time phasing that has the possibility to adapt according to a changing context. The phases should be established with PWG. During construction and use of the center the phases should be constantly evaluated and improved – in collaborations with the PWG and the community in the area.



SCHOOL IN QINMO VILLAGE (Source: https://www.archdaily.com/378261/qinmo-village-rural-urban-framework)



SCHOOL IN MULAN VILLAGE (Source: http://www.rufwork.org/index.php?/project/08-mulan-primary-school/)



SCHOOL IN YONGXIN VILLAGE (Source: http://www.rufwork.org/index.php?/project/02-jian-secondary-schools/)

8.5 CONCLUSION OF ANALYSIS: STRATEGIES

It has been established that the future for villages can vary a lot - some face the risk of flooding, some will run out of water and others could be abandoned. Grahame Shane states, "designers have to be aware of many different strategies and have to choose carefully how to intervene as there are ethical and environmental questions that have to be faced". The ethical dimensions include everything from choice of material to the consultative aspects of the process (Grahame Shane, 2014: 187). Through the above discussions I have extracted four main strategies, which relate to the mission and initial objectives of the project. These strategies can be seen as a conclusion of the analysis and they guide the design of the center.

Strategy I: Embrace Multiple Functions

Through the above analysis, rural gaps have been identified and the objective of self-sustainability further discussed. The first strategy of the design proposal, 'Embrace Multiple Functions', responds to both objective 2 and objective 3. In order to close the rural gaps identified and become self-sustainable, the center must provide several functions lacking in the area. It needs to be considered as a totality, comparable with a small village, which has the possibility to spread opportunities to the surrounding community.

Strategy 2: Invite the Community

Throughout the analysis I have argued the importance of participation in the process. Objective 1 is to include participatory measurements through the whole project and into the future. This is embodied by the second strategy, 'Invite the Community', which highlights the importance of a center that is open and accessible to everyone. The center should offer possibilities for the surrounding areas and through these invite and include the community. There should be several possibilities for people to participate in the construction of the center, as well as in daily activities when the center is completed.

Strategy 3: Optimize Existing Resources

The analysis has highlighted the importance of local identity and vernacular architecture - it has discussed the importance of preserving local techniques and materials. The third strategy, 'Optimize Existing Resources', includes these concerns in the process. The strategy highlights the importance of working with what is on site and reuse existing resources. The design should optimize resources, in terms of everything from use of local materials to the knowledge and techniques of the rural community.

Strategy 4: Protect rural resilience

The analysis has also discussed the possibility of a future where the urban expansion of Kisumu reaches Obambo and the site. The importance of incremental development in relation to such has been highlighted. The fourth strategy, 'Protect Rural Resilience', works with preserving rural identity in case of urban expansion, at the same time as lacking functions are added. At the initial stage the center should act as an urban influence in a rural society - meaning that qualities and facilities of urban character must be added to create rural opportunities and resilience. In the case of further urbanization in the area, the center should act to preserve rural qualities. The center must, in other words, be designed both to induce urban opportunity in a rural environment, and to preserve rural qualities and ways of life in a possible urban future.



EMBRACE MULTIPLE FUNCTIONS

In order to close the rural gaps and become self-sustainable the center should be considered as a totality and embrace several functions.

INVITE THE COMMUNITY

The center should invite the community to participate. It should be open and accessible to everyone and create possibilities for the surrounding areas.



With vernacular architecture, environmental advantages and economical prosperities in consideration the design should optimize existing resources.

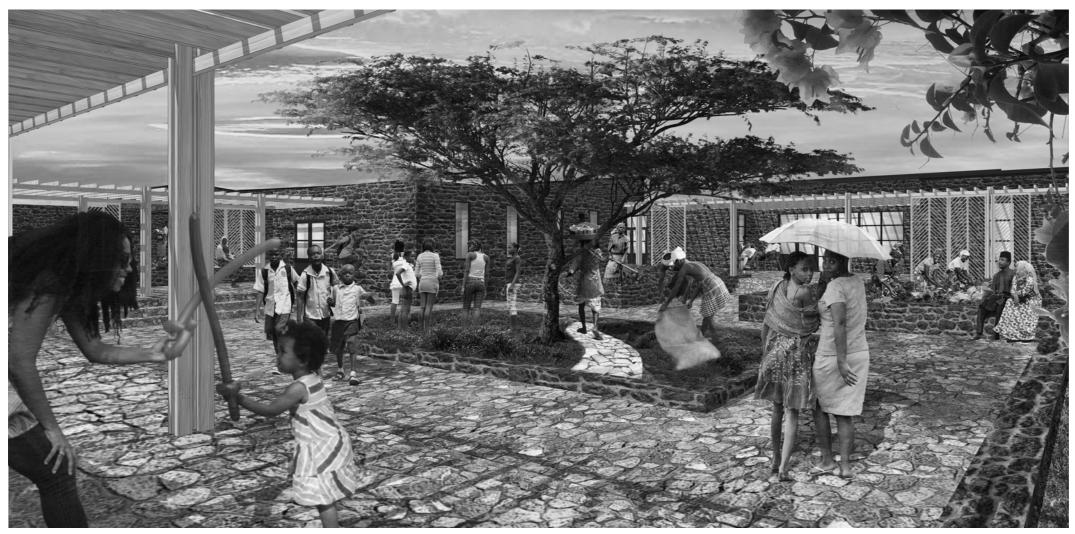


Functions must be added to create rural opportunities and resilience. In the case of further urbanization in the area the center should act to preserve rural qualities.



DESIGN

9.0 DESIGN PROPOSAL



THE ACTIVE SQUARE



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This chapter presents the design proposal for PWG's rural women center. The first part presents an axonometric of the final women center. The design is based on the four strategies presented in previous chapter: I Embrace multiple functions; 2 Invite the community; 3 Optimize existing resources; 4 Protect rural resilience. I have worked with several tools in the design process in order to achieve my strategies; these are presented in the second part of this chapter. Movements and open spaces are described in the third part, whereas functions and activities are presented in the fourth. A zoom-in on buildings and natural elements follows and the chapter ends with a presentation of proposed phases of development.

9.1 AXONOMETRIC OF FINAL DESIGN PROPOSAL



9.2 TOOLBOX

The tools have been used throughout the process and have served as important strategic starting points. The tools are explained individually, but it should be noted that many of them are overlapping.



ENHANCE EXISTING LEVELS

Enhancement of existing levels applies to the whole site - from restoration of existing terraces, to design and placement of the buildings.



TAKE ADVANTAGE OF THE VIEW

One goal with the enhanced levels is to take advantage of the view as much as possible, ensuring a nice environment all over the site.

VERNACULAR CONSIDERATIONS

Vernacular considerations - such as building heights, design elements and the use of local materials - are vital in order to create a center that is correspondent with its surroundings.

ACCESSIBLE AND SECURE

The center must both be accessible and secure – the boundaries of the center must be designed to be inviting at the same time as they assures the security of the center.



PRIVATE AND RURAL TRANSITIONS

Transitions - from public to private and from urban to rural - are important in order to ensure social places for everyone and blend the center with its surroundings.



OPEN, INVITING AND SAFE PLACES

Everyone should feel welcome and safe at the center, which means that a network of attractive places is vital - there must be a range of different types of public space.



EASY ORIENTATIONS

Since there are many different functions at site, easy orientation is an important component of the design.



DEDICATE LAND TO FARMING

The design must dedicate land for farming in order to protect rural qualities and preserve farming possibilities in the future.



MICROCLIMATE, NATURAL VENTILATION AND LIGHT

Buildings must be carefully designed to create a good microclimate and solutions for natural ventilation and lighting are vital in order to create nice indoor environments.

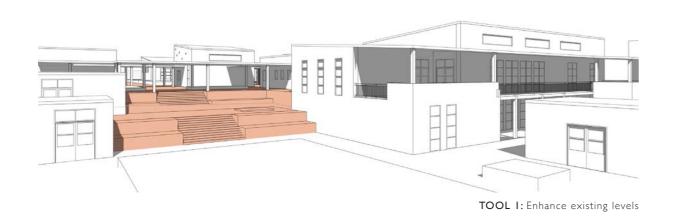


DRAINAGE AND RAIN HARVESTING

In order to work with the massive amounts of rain in the area, drainage is a vital component of the site. As a mean to be self-sufficient rain harvesting is incorporated.



9.2.1 Applying the tools



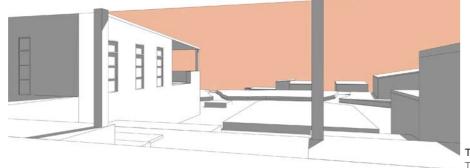
Tool I: Enhance existing levels

RUF's design of the Mulan Primary School and Educational Landscape Project incorporated the slope of its site in the design. Instead of removing or encasing the slope in concrete, RUF saw it as an opportunity to define a programmatic landscape (Bolchover, Lin & Lange, 2016:9). The design of this project works with the landscape in a similar manner. Rather than attempt to flatten the site, its natural slope is incorporated in the design in line with strategy 3 (Optimize existing resources).

The first step of the design proposes restoration of existing farming terraces, which will improve agricultural possibilities, the drainage of the site and the stability of the land. The design works with the slope of the site throughout the center. In other words, where there are no existing terraces to restore, the topography will be manipulated and terraced (through cutting and fill-

ing earth) into various levels with a mean height difference of around one meter. Enhancing existing levels will generate a unified yet unique expression of the site, contributing to the identity of the place.

As discussed in the analysis, the design should result in a center that is well integrated with its surroundings and relates to existing buildings. The buildings at the center are placed on a variety of levels, which responds to the surrounding area and local way of building. The diversity of levels integrates the buildings with the slope and creates a center that disrupts the spatial properties of the surrounding landscape as little as possible. Large portions of the main community building are for example concealed in the slope. In this way the design minimizes the visual size of the buildings - and keeps a focus on the empowering features of the center rather than the buildings themselves.



TOOL 2: Take advantage of the view

Tool 2: Take advantage of the view

The view is considered one of the most important rural qualities to protect and the variety of building levels ensures that it is preserved. The buildings should, when possible, be placed in a direction that enhances the view of the farmland below and Lake Victoria. During the site studies the place with the best view was located. This location has been important for the design and has been incorporated in various ways. First of all, the slope of the site has been manipulated most at this location; a height difference of around three meters creates a central square with amazing views. The buildings situated in the landscape below are incorporated into the terracing in order to blend them with the landscape and assert



Tool 3: Vernacular considerations

As argued throughout this project, vernacular considerations (such as local materials, building heights and other design elements) are important in order to design a center that corresponds with its surroundings and is environmentally sustainable. Vernacular elements are also vital in order to protect and preserve rural qualities and expressions of the area, especially if the urbanization of Kisumu one day engulfs Obambo.

The use of local materials (mainly the black stone often used in the area) has been one of the most important vernacular features of the project and creates a center in harmony with its surroundings. The use of local ma-

the view from above. The central square is situated at a straight line from the main entrance – the view can thus be seen at a distance while entering the center.

The larger manipulation of the slope also creates an edge along which the largest building of the center - the main community building - is placed. The location is strategic and creates the possibility to blend the large building with the landscape (the two-story building is partly "hidden" in the slope). It also creates opportunities for the building itself, such as the possibility of a nice view.

TOOL 3: Vernacular considerations

terials is discussed further in chapter 9.5.1 (Use of materials). Another important vernacular consideration is made in relation to building heights. The buildings in the area are low - only a few are above one story. The design of the center has similar characteristics. Only a few buildings at the center are above one story and if so they are designed to integrate with the slope. Further, as discussed in the analysis, during the workshops with PWG it became apparent that courtyards - or central meeting places - were important features to include in the design. These also have local reference. Various courtyard structures are applied throughout the center.

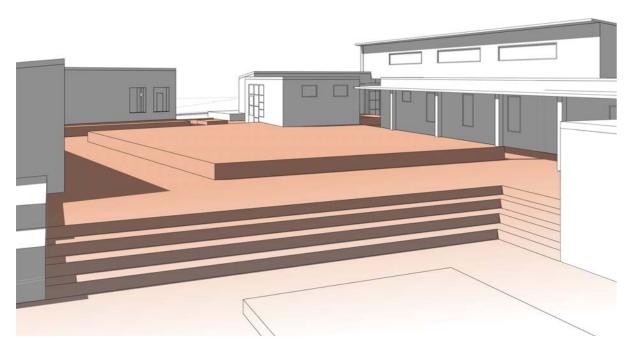
Tool 4: Accessible and secure

The center needs to be gated for security reasons; safety is one of the most important aspects for the women. At the same time, the center should be open and accessible to everyone - there should be no mental barriers. Various possible future scenarios must be taken into consideration - there is a possibility that security measures (such as fences or walls) will not be needed to the same extent in the future. Either way, the center must be allowed to grow without strict boundaries that limit its development. Hence, the current need of a gated center must be allowed flexibility in the future (for example by possible removal of fences or walls) without interrupting the layout and cohesion of the center.

With possible future changes in consideration, and the current need to create a secure and inviting center, a lot of design effort has been put on the exterior edge of the center. By working with the buildings as the edge, the design limits the use of a wall or fence. The design proposal puts various buildings at the edge of the site in order to create a secure place within, without creating feelings of exclusion. Focus is put on the buildings facing the main road to the north and these have main entrances to the road in order to invite people in. Meanwhile, it is important to create a vivid interior of

the center. The buildings therefore also have entrances facing the inside, where they are opening up towards two main squares. In this way the buildings form part of a thickened edge, or a buffer, that frames the center. It ensures security, simultaneously as it generates an active front towards the street. It invites people in and frames open public spaces within the center.

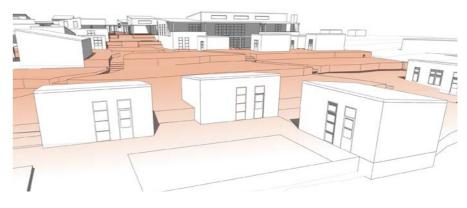
If buildings would frame the whole center it would interrupt the landscape too much. The structure of the edge thus changes further down the site, where the center has a more rural character with farming terraces and a livestock shelter. The aim is that these more rural parts should be completely blended with the surrounding agricultural landscape. The best option in order to create such experience would have been to have no fencing at all. But, as the whole site currently needs to be gated, another strategy is applied: the structure of the security at the lower parts of the site is flexible and modest. A half-wall, often integrated into the terracing, is used and a top-fence ensures security without interruption the view. The fence and the freestanding walls could be removed in the future - ensuring the possibility of extensions and an uninterrupted landscape.



TOOL 4: Accesible and secure

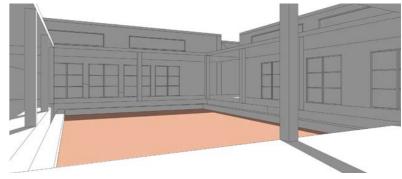
Tool 5: Private and rural transitions

The design creates social places for everyone - people living on site as well as guests - and for all types of occasions and activities. The open spaces at the center have various uses and characters depending on their location. In order to create privacy in a very public sphere, one main tool is to keep the design more public towards the main road and more private towards the fields in the south. In order to preserve rural qualities and create a center that corresponds with its surroundings, a transi-



Tool 6: Open, inviting and safe places

Through the manipulation of the slope and the enhancement of the various levels, a series of outdoor spaces are created, stretching from the main road down to the south edge of the site. Several courtyards and squares - inserted throughout the site - are primary elements of the design. These open spaces have different functions, uses and characters, which are related to the functions of their surrounding buildings. For example, the 'active square' by the main commercial buildings has functions such as a possible marketplace, and the 'calm



tion from urban to rural character is also applied. The design keeps a more urban feel towards the road and a more rural towards the south - which creates a smooth transition to the farmland below. Beyond the main staircase, located by the central square, terraced planting areas gradually slope down to the south border of the site. You could say that the large staircase resembles an invisible line where the parts of the center with more urban character smoothly transition to rural.

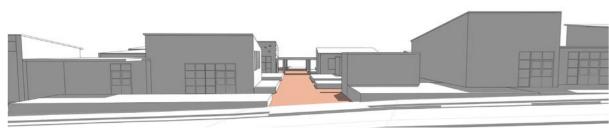
TOOL 5: Private and rural transitions

square' by the hospital is envisioned as a place to relax. In line with RUF's project in Shijia Village, the aim is to set an intimate relationship between outdoor public space and the interior of the buildings, both in a visual and functional way (Bolchover and Lin, 2014:160). The design proposal connects functions with each other and organizes the site as a network of open spaces. This network is described further in chapter 9.3.1 (A network of open spaces).

TOOL 6: Network of open, inviting and safe places

Tool 7: Easy orientation

The many functions of the center are spread throughout the site. Easy orientation is an important component of the design in order to create a cohesive center that ensures a good and connected environment. The layout (and orientation) of the center can be described through its arrangement around a central core, which stretches from the main entrance and down to the farming terraces at the south edge of the site. The central core, the network of open spaces, and the buildings themselves, connects the various functions at the center and help to create easy orientation. There are several inter-linkages within the center and the programme of the site is both visually and spatially connected. Visual connections are important. For example, the visual links between the main entrance and the central square connects the site and guides visitors to an information hub. The central core is described further in chapter 9.3.2 (A central core).

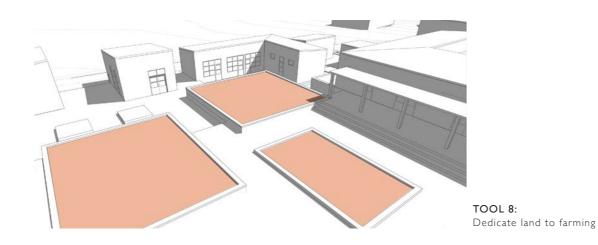


TOOL 7: Easy orientation

Tool 8: Dedicate land to farming

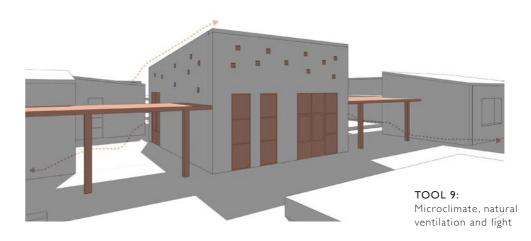
Dedication of land to farming is very important in order to protect the rural and preserve farming possibilities in the future. Meanwhile, there are a lot of functions needed at the site, which requires a rather dense arrangement of buildings. One challenge was thus how to preserve rural qualities while building a rather dense center. Considerations have been made - some existing farmland is removed in order to make place for more

commercial functions towards the main road. The terrace farming, as well as vertical farming, compensate for this loss. But, it is important to dedicate land to farming all around the center, including the new constructed areas with more urban character. There should be farming all over the site: along the roads, on squares, between houses and on walls and pergolas.



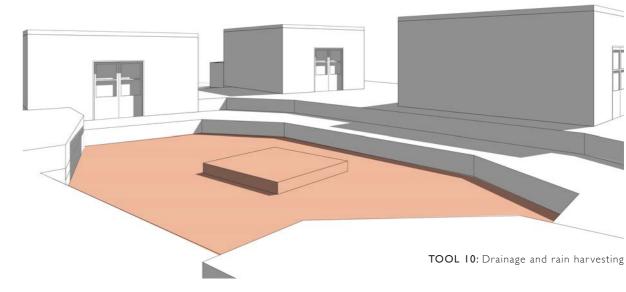
Tool 9: Microclimate, natural ventilation and light

The enhancement of the slope does not only create a nice view and blend the buildings with the landscape; it also offers other strategic benefits. It creates a possibility to take advantage of the breeze from the lake for natural ventilation - the variety of levels creates



Tool 10: Drainage and rain harvesting

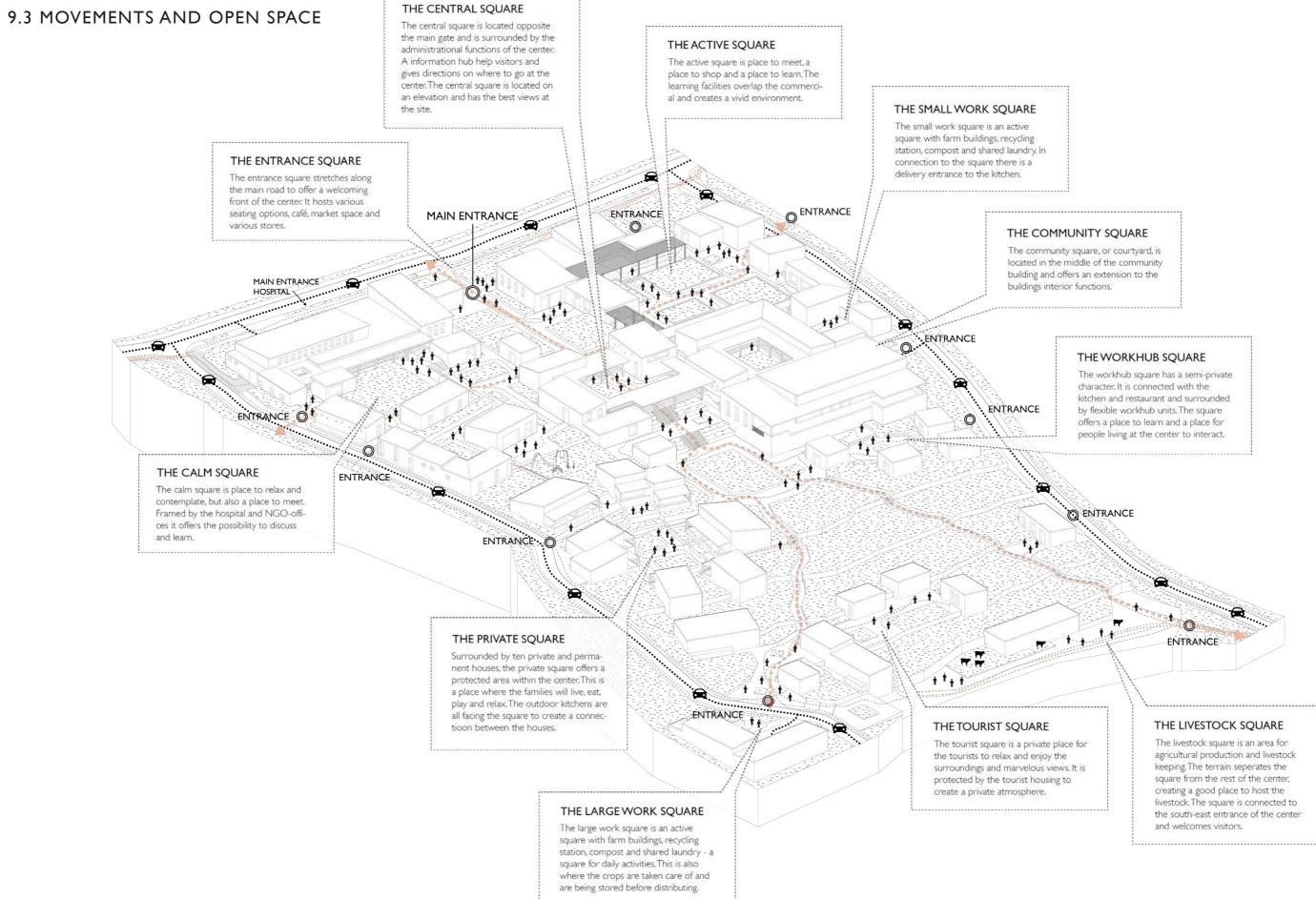
Flooding during rain season is one major challenge of the site. Various strategies are applied in order to cope with this. Drainage of the site is a vital component in order to work with the massive amounts of rain in the

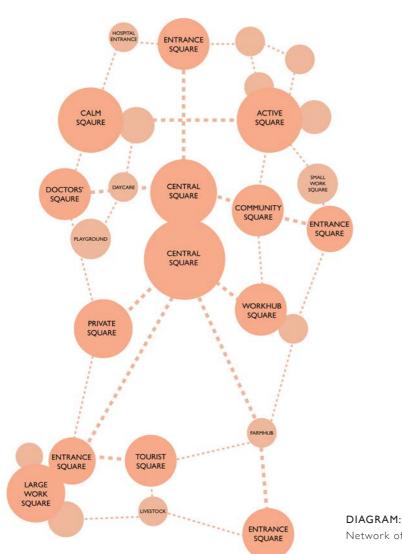


possibilities for good site and building ventilation. The buildings are placed to encourage cross ventilation and a nice microclimate. The buildings must be comfortable to spend time in and offer practical solutions, such as good natural light and ventilation.

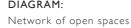
area. There is also an importance of storing water for use during dry season and as a mean to be self-sufficient rain harvesting is incorporated.

DESIGN





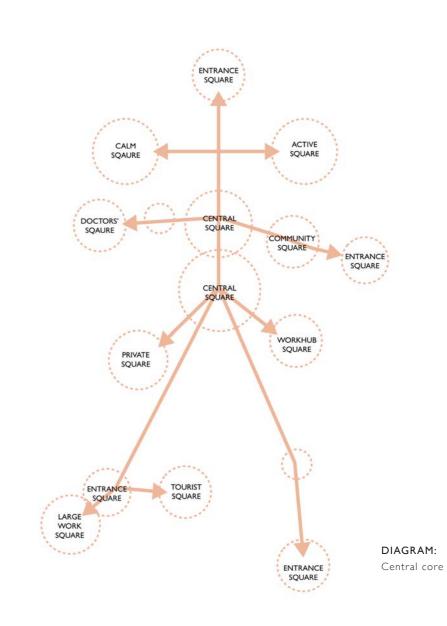
DESIGN



9.3.1 A network of open spaces

It is vital that everyone feels welcome and safe at the center. The design must incorporate a mix of attractive places of relevance - both for the center itself and for surrounding villages. There are thus a variety of public spaces at the center - indoor as well as outdoor - calm as well as active. There are, for example, larger multipurpose squares and squares that are characterized for work and agriculture, smaller shaded areas, a playground, courtyards of different sizes and various possibilities for outdoor classes and workshops. The courtyards and squares within the center vary in size and width to create different spaces optimized for various activities. The courtyards are designed to provide comfort and privacy between buildings. Focus is put on the connection and transition from indoor to outdoor - many functions overlap and stretch from interior to

exterior. The design proposal connects functions with each other and organizes the site as a network of open spaces. In other words, it creates a series of inter-linked open spaces and a relating network between various central meeting places.



9.3.2 A central core

As mentioned, the layout (and orientation) of the center can be described through its arrangement around a central core that stretches from the main entrance down to the farming terraces at the south. The central core first splits close to the main entrance. The split leads you either to the main commercial functions and the active square to the left, or to the healthcare functions and the calm square to the right. If you continue straight on the central core you will reach the central square. The visual and physical links between the main entrance and the central square connects the site - it leads visitor straight to the main community building, administration offices, and information hub that are framing the central square. If you continue straight on the main core you will reach a lower level where the core splits and takes you in four possible directions. To your left

you have two options. Option one leads you to work hub buildings and the larger community building, with an entrance to the kitchen and restaurant. The second option to your left takes you down the terracing - with a farm hub and livestock shelter on your way - to the southeast entrance of the center. The first option to the your right takes you directly to the private houses of the women. The second option to your right leads you down the terracing - you will reach tourist housing, the main work square and the entrance to the southwest. The description of the layout of the center through its central core aims to highlight the main directions of the center. But, there are several other inter-linkages within the center; the above-described splits are overlapping and the programme of the site is visually and spatially connected in various ways.



The central square

The central core stretches through the central square in the middle of the center. Administration offices and an information hub are framing the square to the west, and the community building and library to the east. There is a large staircase leading down from the central square to a lower level. The staircase offers planting areas and multiple seating possibilities and could thus be used for events, lectures or larger outdoor community meetings. A big farming area is located at the middle of the lower level and the terraced planting areas gradually slope down the site to its south border.

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PERSPECTIVE I: The central square

The calm square

Framed by the healthcare center and NGO offices, you find the calm square. Enclosed by the buildings, the square offers a safe place with possibilities to discuss and learn. It is envisioned as a place to relax and contemplate, but also as a place to meet. The character is public and open, but with a variety of spaces within that creates possibilities for more private meetings. The square offers shaded spaces and several seating possibilities (around a larger planting area), which could be used as an outdoor waiting area for the healthcare center. The main part of the calm square is located on the same level as the healthcare center, ensuring accessibility. The square is also connected to smaller squares on lower levels. A wide staircase takes you to a square surrounded by NGO offices. The steps offer additional seating opportunities and could work as a place for outdoor meetings, classes and workshops. Another staircase brings you to a smaller green square framed by temporary housing for doctors working at the center.





PERSPECTIVE 2:

The calm square

PERSPECTIVE 3: The doctor's square DESIGN





DESIGN

The active square

The active square is situated in connection to the commercial functions along the main road. It is a place to meet, a place to shop and a place to learn. The square is located on different levels, creating a variety of places within the same square. Multiple buildings with various functions are framing the active square - there are several commercial functions, as well as rental offices and housing. The community center frames the square to the south. The front steps of the center provide seating possibilities and pergolas provide shaded spaces.

The community square

The main community center is divided into several buildings surrounding a courtyard - the community square. The various buildings of the community center host different functions, such as classrooms and a library. As described earlier, the aim of the design was to create an intimate relationship - visually and functionally - between exterior and interior. Buildings and outdoor areas are thus often visually and spatially connected throughout the site. For example, the library is connected both to the community courtyard and to the central square - both of these squares can serve the library as spaces for studying. The community square creates an open-to-air meeting space that is directly accessible from the community center and connects its various buildings - it could be seen as a room within.



PERSPECTIVE 5: The community square

The work squares

There are two main works squares at the center. The work squares are active squares with farm buildings, recycling stations, composting, as well as shared laundry facilities - they are places for daily activities at the center. The smaller work square is situated in connection to the community building, while the larger work square is located at the southwest corner of the center. This is where the crops are taken care of and are being stored before distributing.

The private square

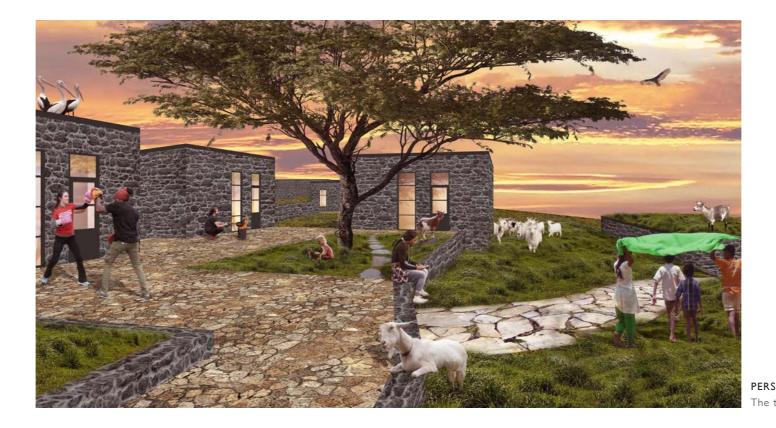
Surrounded by the ten permanent houses of the women you find the private square, which offers a protected and private area within the center. This is a place where the families of PWG will live, eat, play and relax. The outdoor kitchens are all facing the square to create a social connection between the houses. The private square hosts kitchen gardens where the families can grow herbs and other plants for daily use.



PERSPECTIVE 6: The private square

The tourist square

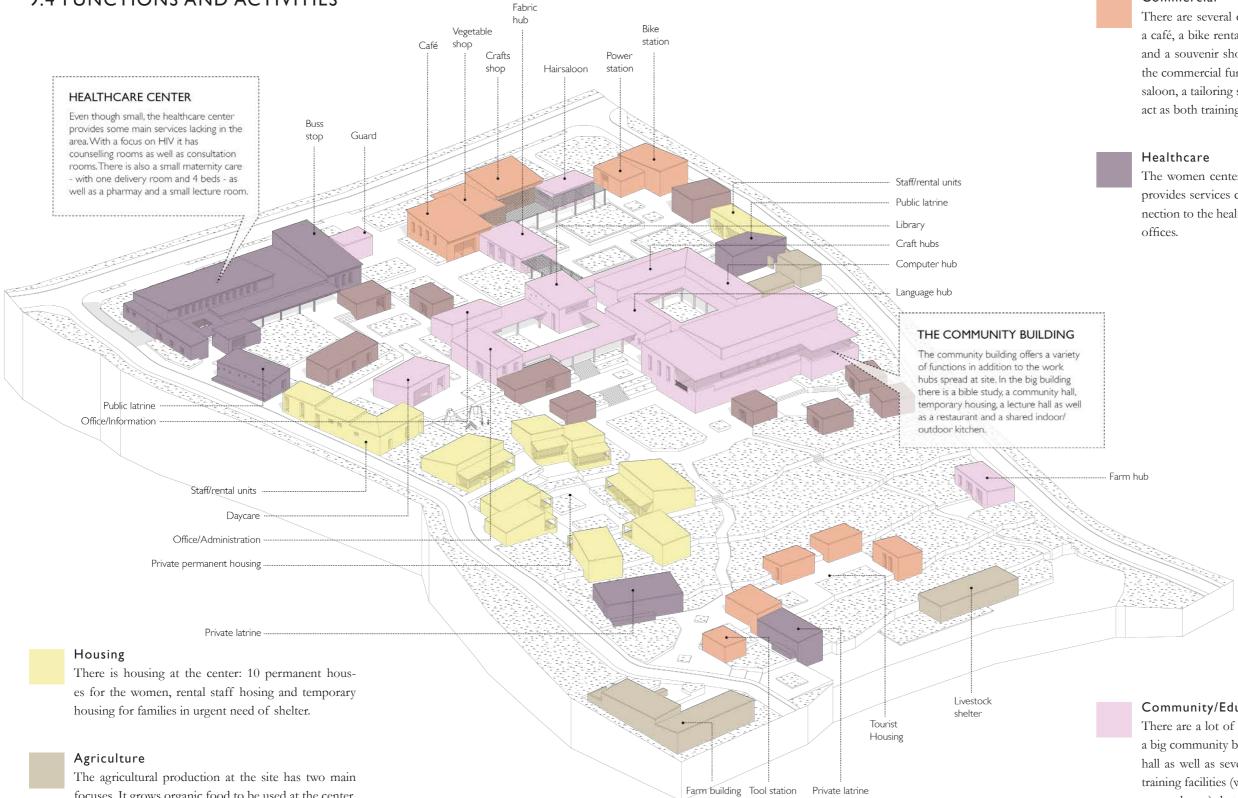
The tourist square has a private character and is surrounded by tourist housing. It is dedicated visitors of the site and offers a protected area for recreation and other activities connected to tourism. The square is imbedded in the farming terracing and offers a nice view of the surrounding farmlands.



''I am staying in Kibera for just a temporary [sic], because I have no other place to go and settle or start rebuilding my life again. But I rather prefer to go and when I have a land somewhere I can go and start my life'' - Hellena Moraa.

PERSPECTIVE 7: The tourist square DESIGN

9.4 FUNCTIONS AND ACTIVITIES



focuses. It grows organic food to be used at the center, reassuring self-dependency. Excesses will be sold at the vegetable store at the center or at the local market in Obambo town. The second focus is to, at larger scale, produce bamboo. Bamboo is used for smaller constructions at site, but it will also become one of the main future incomes of the center.

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DESIGN

Commercial

There are several commercial functions at the center: a café, a bike rental and repair shop, a vegetable shop, and a souvenir shop. Many of the work hubs overlap the commercial functions. There is, for example, a hair saloon, a tailoring store, and an electricity shop, that all act as both training hubs and ways to generate income.

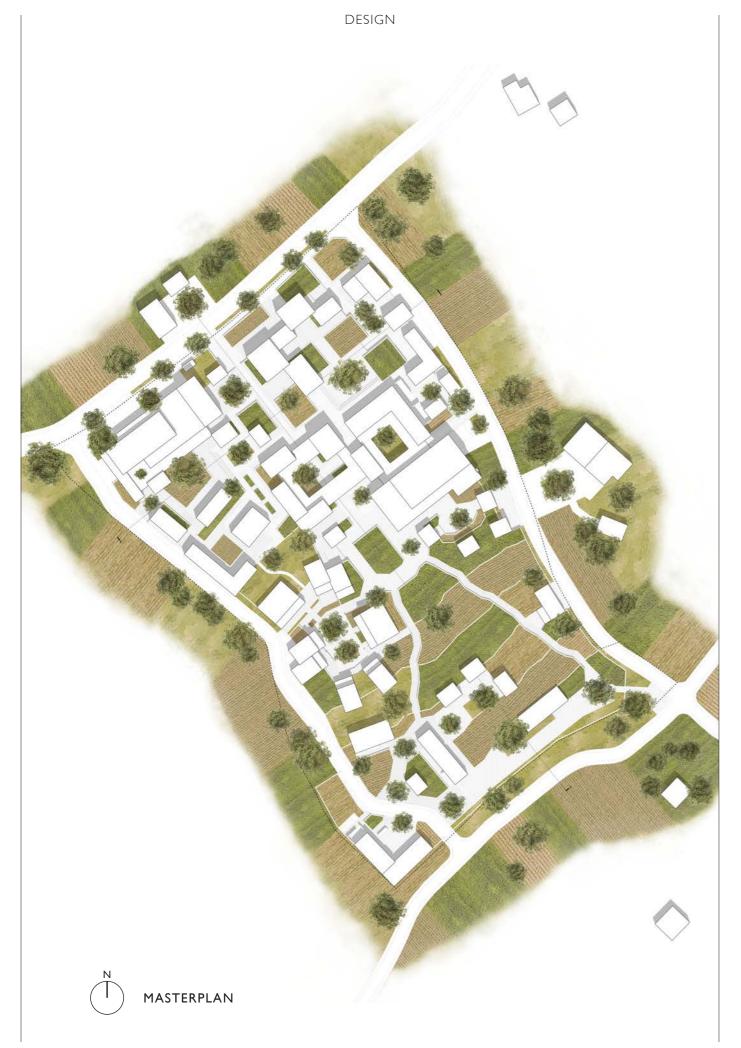
The women center has a small healthcare center that provides services currently lacking in the area. In connection to the healthcare center there are several NGO

Community/Education

There are a lot of community functions at the center: a big community building, a daycare, a library, a lecture hall as well as several work hubs. The work hubs are training facilities (with everything from farming to language classes) that are used by the community.

Rental

There are several rental and flexible units to offer possibilities for people to come and open up an office or a store. These could also become future housing options.



9.4.1 The center in detail

There is land dedicated to farming along the main road - important in order to relate the center to the surrounding agricultural landscape and ensure farmable land all around the center. Meanwhile, buildings are facing the road creating a somewhat urban front of the center. The functions of these buildings are of more urban characters. First of all, the design highlights the importance of the healthcare center to be placed along the main road; it must be as accessible as possible. It is important to define the building as a public institution. The main entrance, facing the existing road is located at the same level as the road – making sure the healthcare center is accessible to everyone. A small buss stop ensures accessibility.



Healthcare center and the calm square

The task was to design a rural healthcare center capable of supporting the surrounding areas, with a special attention to HIV positive women. The healthcare center offers programs for HIV treatment with possibilities for testing, counseling and group therapy. A pharmacy guarantees access to drugs and a small maternal care ensures safe deliveries. The healthcare center also hosts a small lecture hall where NGOs and doctors can inform the public of, for example, malaria prevention (see box 2 for more examples). Programs for gender violence recovery are vital and the center offers legal advice services.

The healthcare center is opening up towards the inside of the center and the calm square described earlier. The placement of counseling and group therapy facilities is critical in order to make sure that abused women feel safe and protected. The counseling is located in connection to the healthcare center by the calm square, but is secluded and have separate entrances. An entrance gate is located in connection to the counseling, making private entries possible. The counseling rooms frame a small courtyard, which creates additional meeting space for group therapy. It is a semi-private space within the healthcare center – it is somewhat separated from the public sphere and activities of the calm square. NGO offices, temporary housing for doctors, and a daycare are located in connection to the healthcare center.

Commercial activities are placed along the main road to create an active front of the center. They create a vivid street and invite the community by offering functions lacking in the area. There is for example, outdoor-seating in connection to a small café, a hair saloon and a bike repair shop. Since there is already a large covered market in Obambo Town, such will not be incorporated at the center. But, smaller possibility to sell products from the organic farming at the center is needed. A small store selling vegetables is thus available along the main road, with a small covered area for outdoor display facing the road. The active square also has the possibility to temporarily host larger markets and events if needed.

The commercial activities and the healthcare center stretch along the whole north edge of the site. As mentioned previously, these buildings are all connected and have entrances both towards the road and the inside of the center. The commercial functions are facing the community center and create the active square in the middle. The community center thus frames the active square to the south.



The community center is divided into various buildings surrounding the community square, or courtyard. The south side of this courtyard is facing a larger community building. From the courtyard you enter the larger community building on its second floor. This larger building contains various functions. First of all, it contains a dormitory. This is aimed mainly at women that are in urgent need of shelter. For example, if a woman in the area is ostracized from her home, she and her children can come and stay in the dormitories as a temporary solution. They will get education and help to find other housing possibilities, either close by, or in the city if this is their aim. If they would prefer to stay at the center there are also some more permanent rental options available. Depending on the need, the possibility

of building additional permanent housing at the center could be vital in the future. Visiting students and teachers that participates in educational workshops, or volunteers that are expected to stay long-term, could also be hosted in the dormitories (in addition to the more typical tourist housing at the center).

The connection to nature is an important part of the design. The design creates links between interior and exterior with courtyards, high ceilings and single loaded rooms with various openings to create natural ventilation. The larger community building is designed to be as open as possible. The building contains a larger room (the event space) that is flexible in character and offers various possible uses. It could be used as an as-



sembly hall with the possibility to host public events, but it could also function as a learning space, or an extension to the library, which is located in connection to the community center. Both the north and south side of the event space are equipped with high windows, which when opened generate a relationship between interior and exterior. The event space could stretch into the exterior courtyard, creating a larger room that blurs the boundaries between interior and exterior. During the workshops with PWG the women highlighted the need of public showers. The community building will thus contain public shower facilities as well as toilets.

From the event space you reach the ground level of the larger community building through a central staircase.



At the ground level you find another large open area that is multipurpose. It can, for example, be used as a learning space or as a canteen for the nearby kitchen. The large kitchen works as a community kitchen for everyone living at the site and for use by the restaurant and café. In connection, an outdoor kitchen creates a semi-private meeting place for social gatherings and cooking workshops. The ground level of the larger community building also contains a more formal meeting room with the possibility to host large community meetings and lectures. The ground floor opens up to the south with large windows and faces the workshop square.

The women center works as an educational hub. One of the main programs of the center is its use as a demonstration eco-farm, teaching various agricultural techniques and eco-household methods. The center will experiment with testing new plant options and economically profitable products, which could result in new markets and incomes for the center as well as for the surrounding communities. On the terraces below the community center there are various functions, such as a farm hub to host workshops on agricultural techniques and a livestock shelter. Located against the southwest corner of the site you find the larger work square with its agricultural buildings and a tool-hub where the community can borrow tools and where repair services generate income for the center.

The permanent houses of the women are located within the terracing, surrounding the private square. The houses are all facing the square, creating a safe environment. In connection to the houses there are private shower and toilet facilities. In a similar manner, the tourist housing is embedded in the terracing, with its own shower and toilet facilities.



Box 2: Possible lectures at the center

- Lecture: HIV awareness / counselling
- Lecture: Malaria prevention
- Lecture: Human rights and gender equality
- Lecture: Teaching •

Box 3: Training hubs / overlapping facilities

Language hub:

- Workshop: English
- Workshop: Swahili

Computer hub:

- Workshop: Computer
- Workshop: Business / administration

Crafting hub:

- Workshop: Crafting baskets
- Workshop: Crafting jewlery

Fabric hub:

- Workshop: Tailoring
- Workshop: Weaving
- Commercial: Professional tailoring •

Hairsaloon:

- Workshop: Hairdressing
- Commercial: Professional hairdressing

- Lecture: Compost toilets
- Lecture: Water harvesting
- Lecture: Traditional culture

Kitchen:

- Workshop: Cooking
- Housing: Used by residents of the center
- Commercial: Used by the restaurant and the café

Bikestation:

- Workshop: Biking
- Commercial: Bike rental and repair services

Electricity hub:

- Workshop: Solar energy
- Commercial: Solar lamps rental service

Tool hub:

- Workshop: Carpenting
- Commercial: Tool rental service

Farm hub:

• Workshop: Organic farming techniques

9.5 BUILDINGS AND NATURAL ELEMENTS

9.5.1 Use of materials

Initially, there were two main building materials considered - black stones and bricks, both regularly used in construction all over the area. When analyzing the site, it became apparent that the black stone was prevalent at the actual site. There were piles of stones ready for construction and there were a lot of stone in the ground that would have to be removed during construction. During site analysis, some houses in the area - built with this material - were visited. The stones seamed to be used for several reasons. It is or course local and thus cheap. Further, the thick walls cools down the interiors at the same time as they shade windows and openings. If constructed so that the stones are ejected out of the walls they have the possibility to shade the façade.

The design of the buildings at the new center brings together old and new and applies and upgrades various local technologies. Vernacular techniques and traditional attributes - such as the stones - are combined with more modern aesthetics and methods. As a very sustainable option, the black stones are used as the main construction material throughout the center. They are used for the facades and to create the terraced topogra-

phy. The material allows the center to gain the qualities of the traditional buildings of the area. It relates the center to the surroundings and takes advantage of local knowledge and techniques. In other words, the use of the black stone creates a cohesive center that responds with the local context and creates a unique identity.

The second main material initially considered was brick. The material is used for thinner indoor partitions at the center, where the stones would have been too large. Bricks need to be burned, which does have some negative aspects in relation to the climate. But, the advantages of the material are many. Bricks could possibly be made out of the soil at the site, involving the community in construction (similar to the production of bricks did at The Women Opportunity Center in Rwanda). If the soil is not valid for the production of bricks, they will be bought locally. In a similar manner, if it becomes apparent that the stones at the site are not enough for the construction, there are a lot of options of buying the material very close to the site - reassuring minimal transportation at the same time as supporting the local economy.



LOCAL MATERIALS

There are two main types of roofs used in the design. During the workshops it became clear that the women prefer corrugated steel in favor of more traditional roof materials (such as thatched grass). Corrugated steel is thus used for the roofs on larger buildings at the center. The material has its advantages and disadvantages. It is relatively cost-efficient and long lasting - it does not have to be replaced in the near future. It is not a historical traditional material, but it can be seen on many buildings in the surroundings today. Steel is usually not a very good material in hot climates, since it stores heat within the buildings. But, the large sloped steel roofs at the center are constructed with two parallel steel sheets, placed with a gap that lets air circle between them. Compared to a roof with a single sheet of steel, this structure has advantages - it provides acoustic insulation from rainwater, reduces heat and creates a nice indoor climate.

Another option investigated is green roofs, which are going to be applied on several buildings. Green roofs create a great indoor climate - they cool down the buildings when the weather is hot and help buildings retain heat when it is cold. One reason for the use of green roofs in the design is their ability to blend with the surrounding landscape. The optimal design solution would apply as many green roofs as possible, but since the construction of these is more expensive than other options, considerations had to be made regarding which buildings to apply these roofs to. The main conclusion is that buildings where people live have the most use of green roofs, whereas buildings where merely daily activities take place do not have the same requirements. The construction of green roofs on larger buildings is more complicated and expensive, hence the use of corrugated steel on these. During rain season green roofs are also good in terms of their ability to absorb water, reducing the risk of flooding at the center. On the other hand, they absorb the water rather than collect it. The large steel roofs are multifunctional and are used as a means to collect rainwater. It should be highlighted that the various uses of different roof materials could be altered later in the process. For example, if green roofs show to be easier constructed than expected, more of these could be applied later in the construction.

Other sustainable alternatives were investigated. To use bamboo as a roof material was one of them. Since bamboo could be farmed on site it would have minimal

impact on the climate. On the other hand, the women do not like this material for the roofs. They think it resembles the old ways and looks unstable. Bamboo roofs would have to be replaced quite frequently and since the center should become self-sustainable, I find importance in including minimal features that requires money to replace in the future. For example, what would happen if the roofs would need to be replaced and the crops were bad during the same year? It could lead to a situation where the center could not afford to mend a broken roof, which of course would be devastating. In other words, bamboo is instead only used on smaller constructions that are not as vital to the structure as the roofs, do not require as much material, and could easier be replaced if needed. For example, bamboo is used to create pergolas all around the center and bamboo screens protect the interiors from excessive solar gain and glare. Bamboo is used frequently in the design - it is also used for flooring and ceilings as well as other interior features such as doors and partitions.

9.5.2 Ecological sanitation and waste management

Usually, toilets used in the area are in the form of pit latrines that brings various issues. These are often built in small huts with dirt pits, no running water and a vigorous smell. In order to increase natural ventilation, the design of the toilet facilities at the center incorporates gaps between walls and roofs, as well as perforations in the walls, to allow fresh air to circulate. As a mean to create self-sustainability, ecological sanitation is incorporated at the center, which has low costs and environmental benefits. Ecological sanitation "means sanitation that saves water, does not pollute and returns the nutrients in human excreta to the soil" (Tannerfeldt & Ljung, 2006:104). Instead of using the regular pit latrines, compost toilets are installed at the center. The basic features are simple. Urine is separated from feces and disease organisms are eliminated, after which the urine is used as a valuable nutrient in agriculture. By using the natural processes of decomposition and evaporation, feces are converted into useful fertilizer (Tannerfeldt & Ljung, 2006:104). There are two public toilet facilities at the center, as well as one facility in connection to the tourist housing and one for private use.

The design creates an ecological cycle and a zero-waste management structure for the center. All waste at the center is separated for reuse and recycling. Household waste is used to feed the livestock at site, and the manure produced by these is used as nutrition in agriculture.

9.5.3 Taking advantage of the elements

The climate in Kisumu creates possibilities of extensive natural ventilation. As discussed previously, the orientation of the buildings at the center takes advantage of the breeze from lake Victoria to cool down courtyards and other open spaces - it encourages cross ventilation and a nice microclimate. Open-to-air spaces, such as courtyards, offer a mix of places suitable for the climate and improves cross ventilation further.

In order to protect the environment and assure self-sustainability sources of renewable energy are required. As discussed previously, the yearly levels of high solar radiation provide an ideal setting for solar power, solar hot water and natural lighting (Knutson, 2011:25). Solar panels are installed to supply the center with electricity. These are mainly attached to the larger steel roofs. The requirement of solar power influenced the design of the roofs, which are optimized for the location and use of solar panels. A learning hub for electricity teaches various methods and rents out solar lamps to the community.

The design works to protect the interiors from too much sunlight and glare, without compromising the possibilities of natural lighting and ventilation. Roofs and openings of the buildings are thus designed to ensure cross ventilation and natural lighting. Natural ventilation is enhanced through small perforations in several walls. There are overhangs on most of the buildings that protect the facades from direct solar radiation. Courtyards, porches and pergolas provide shaded places (private as well as public) for social gathering throughout the center and protect the interior from low sunlight angles. In addition, external shading-devices protect the interior from excessive sunlight - the overhangs support bamboo-screens that diffuse the sunlight. Bamboo-screens are also attached directly to windows. Louver systems and openable windows ensure natural ventilation and possibilities to control the interior climate.

As discussed previously, flooding during rain season is one major challenge of the site. The use of green roofs takes care of some of the excessive water, but this strategy is limited in relation to the amount of rain in the area. Restoration of the existing terraces is one important intervention to avoid erosion. All outdoor surfaces are permeable and channels, to direct the water, are installed around the site. The water channels follow the slope and are integrated in the design in various ways, creating an interesting environment around the site.

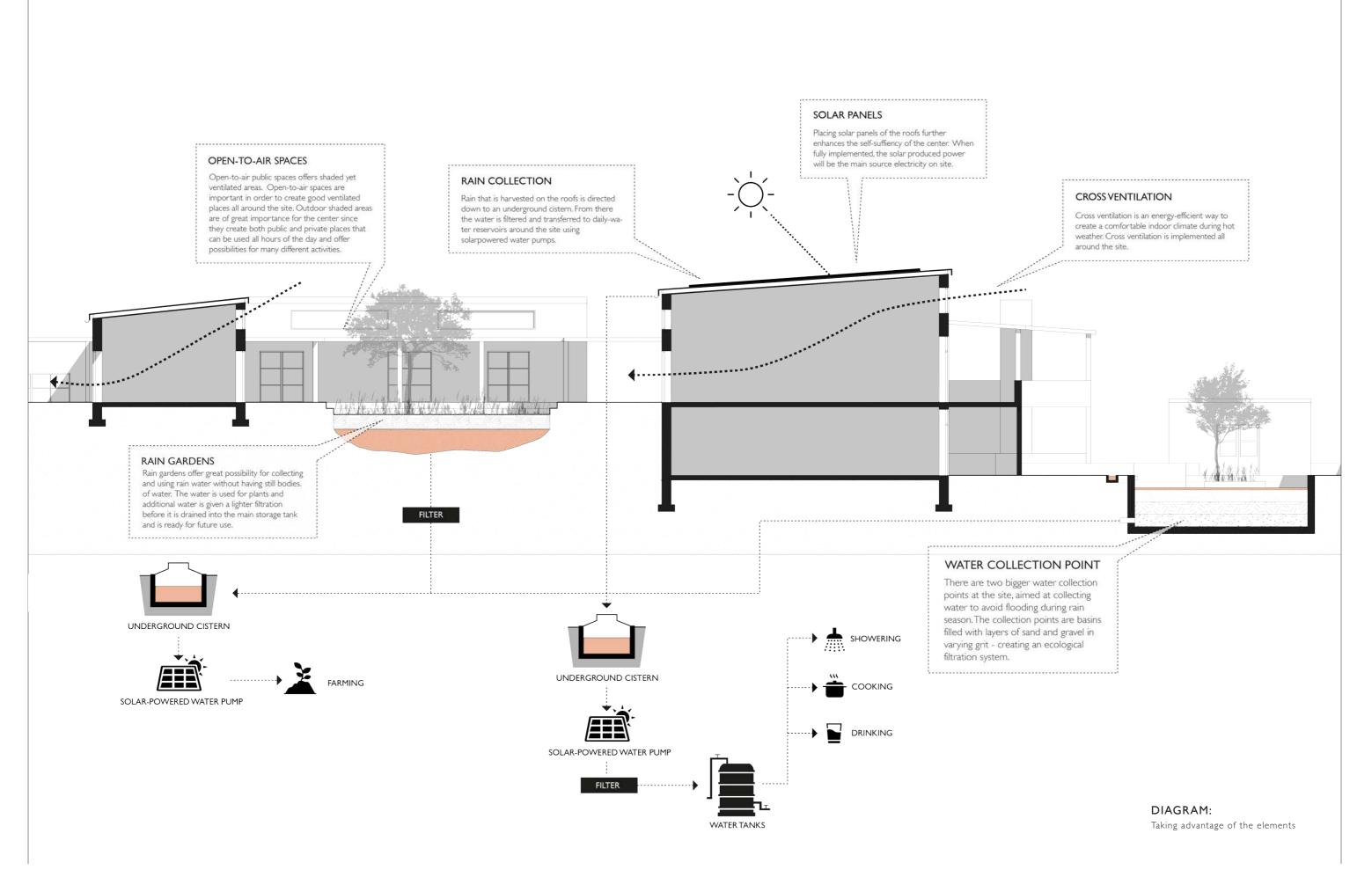
The aim of self-sustainability means that the center in the future should be self-sufficient in terms of water. Rainwater harvesting is a vital feature in order to reach such goal. The water channels ensure that water reaches greenery, and excess volumes are directed down to rain gardens or collection points. The channels thus branch and split to create the various collection points at low levels of the site.

The site is located in a high-risk malaria area, which

brings complications that must be taken into consideration. The doors and windows of the houses on site are equipped with a mesh screen to ensure that mosquitos cannot enter. Because of the risk of malaria in the area, the collection points are not filled with water during a long time. Underneath the collection points there are reed-bed filtration systems, which filter the water and remove toxins before it is guided to underground water tanks for storage. The water is now ready to be distributed for farming. The stored water and the irrigation channels within the farming terraces are of great importance for the agricultural production, especially during dry season.

As described earlier, the wide shed roofs provides valuable possibilities in terms of rainwater collection. These are used to guide and collect water that is filtered before being stored in septic tanks. This water is then used for various daily activities around the site, such as showering and cooking. Grey-water recycling systems are applied in order to treat and recycle the water for reuse in agriculture.

It should be highlighted that these solutions are rather conceptual. In order to create systems that work and actually could be constructed at the center, the concepts must be further developed by engineers.



9.6 PHASES OF DEVELOPMENT

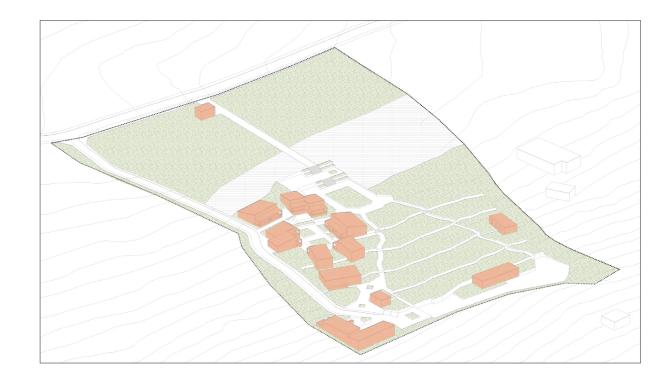
The development and construction of the center is arranged in a way that will get the center running as soon as possible - while adding functions along the way. Construction will start with some parts of the center, during time these will be added to and developed to create a vivid center. The center will grow into a learning hub and social meeting place for the community.

As discussed previously, Jernsand and Kraff highlight the importance of a process that is emphatic and changeable. They describe the aim of a process highly connected to the situation and context - it must be allowed constant change (Jernsand & Kraff, 2014:240). The design of the women center proposes various phases, as one example of possible development. But, in line with Jernsand and Kraff, I argue the importance of a sensitive process.

It is thus emphasized that the future of the PWG center should have a changeable character. The future of the center must be established with the community and promote a very flexible development that allows various turns according to local circumstances. For example, as discussed earlier, if a design or method appears to be unsuitable (in relation to for example local workmanship or costs) during construction, the process must be able to adapt. Another example of this flexibility could be that a proposed function no longer serves its purpose (maybe a similar function has been established close to the center). It must in such case be allowed to transform into something else. In other words, the proposed phases will most probable change during time and design revisions will be implemented throughout the process.

PHASE I YEAR I-3

The first construction phase starts with the 10 permanent houses where the women of PWG will stay with their families. Community participation is a foundational element from the start of construction - in this phase the knowledge of the women is vital to include in decision-making. The surrounding community is invited for various initial workshops and is given the possibility to participate in construction of the center. The women get to know the area and create a social base where they do counseling and inform about the new center as well as HIV. The main farm buildings are built and the reconstruction of the terraces starts - farming is the main source of income. The first road is constructed and the site is fenced in, with a guardhouse at the main entrance. The first solar panels are installed and a compost toilet facility built. The water in the existing well is used for farming.





PHASE 2 YEAR 3-8

The main community building is constructed during phase 2. This means that most of the workshop facilities and administration buildings are completed. The community is involved in construction as well as several workshops and lectures. Temporary housing is constructed and the population of the center grows quickly. The population boost brings a demand to improve and add public facilities. The restaurant and community kitchen opens, as well as public showers and a public toilet facility. Farming is still the main source of income and the construction and restoration of the terraces is now completed. More solar panels are installed on the big roofs and an underground water tank is constructed underneath the community building - rain harvesting represents the main source of water. Some of the community functions start to generate income and farming is well developed and productive. Tourism also starts - volunteers and other visitors are hosted in the community building. The second road is constructed and a bus stop added along the main road.



DESIGN

3

PHASE 3 YEAR 8-11

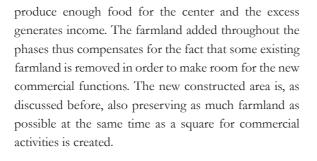
The center is now well known in the area and regularly used by the community. Phase 3 is mainly focused on the construction of the healthcare center, which offers a range of new possibilities for the community. In addition, NGO rental offices are constructed around the calm square, which creates a protected area for discussion and informative meetings. The community is using many parts of the center and the new healthcare center offers new possibilities for participation. Some rental housing units are constructed, mainly for doctors and nurses working at the healthcare center. The small daycare center is placed between the healthcare center and the permanent houses. This offers opportunities for people living on site, visitors to the healthcare center, as well as others in the community in need of childcare during work hours. At this phase there is still a need for security and the site is thus gated.



PHASE 4 YEAR 11-15

At this stage the center is well developed and the women and the community are in charge of most aspects of it. All the participatory elements have resulted in a strong sense of community and the area is becoming self-evolving. When phase 4 is completed, a network of open spaces creates various possibilities for an educational landscape. The center invites the community in different ways and allows use of outdoor as well as indoor spaces - open to everyone. The community is involved in the center with administration, workshops and labor at site.

Commercial activities have taken place long before phase 4, but there is now a need of more and better commercial buildings. Hence, this phase includes construction of the main commercial functions as well as additional workshops (such as hair salon and fabric hub). A bike station is now available to ensure good commute possibilities. The center is well established and has the foundation for more permanent tourist housing. Farming is productive all over the site and

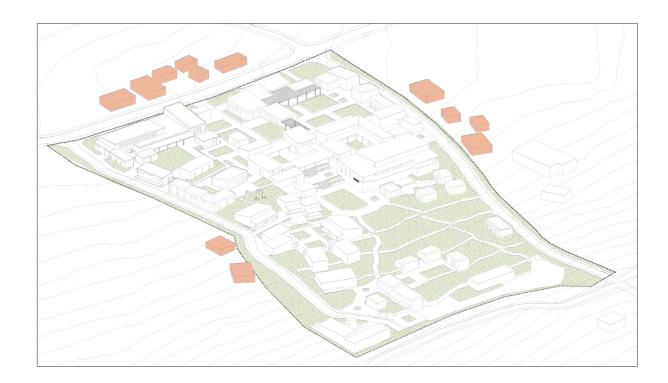




PHASE 5 YEAR 15-

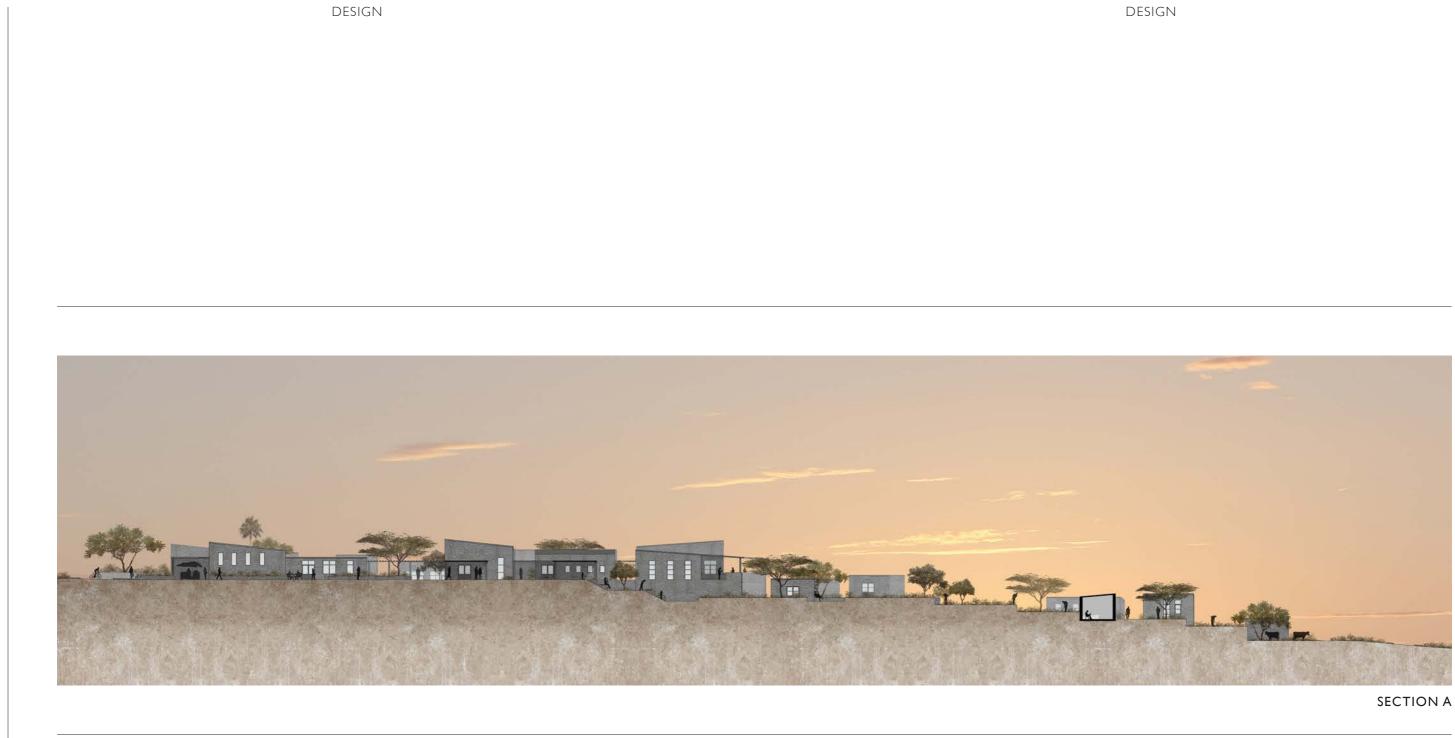
The final phase is a vision of what could happen after the construction of the center is completed. If urbanization has reached the area at this time, the center would function as a protectant of rural qualities and local traditions (such as building expressions, nice outdoor environments and farming possibilities). New roads are being constructed to assure easy access to the center and the surrounding farmlands. There is no longer a need to gate the center - people are free to come and go as they like. Farming, tourism and production - among other sources of income - are generating enough money to keep the center running. Water and electricity demand is fully supplied by on site means. The center is now self-sufficient and administration and maintenance is completely in the hands of the women and the community.

The community has gained skills from the workshops and participation in construction and people start to implement the same methods for themselves. The center could be seen as a tool for the people living in the



surrounding area - it supports them to improve their lives. The center generates new possibilities - additional needs are evolving and new possible sources of income for the community are appearing. If new functions are needed it is in the hands of the community to add these - with the support and knowledge from the center. Hence, there will possibly be additional buildings constructed in the neighboring plots.

As space within the center becomes limited, there are possibilities for vertical extensions and the roofs can become more multifunctional, including for example roof top gardens. The goal is that the production of bamboo will increase and the farmable land at the center might not be enough in the future. In such case, the agricultural program could be extended to farms outside the center. Land on other farms could for example be rented, or the farms could become part of a farming collective initiated by the center. In either case, this would boost the economy in surrounding areas.



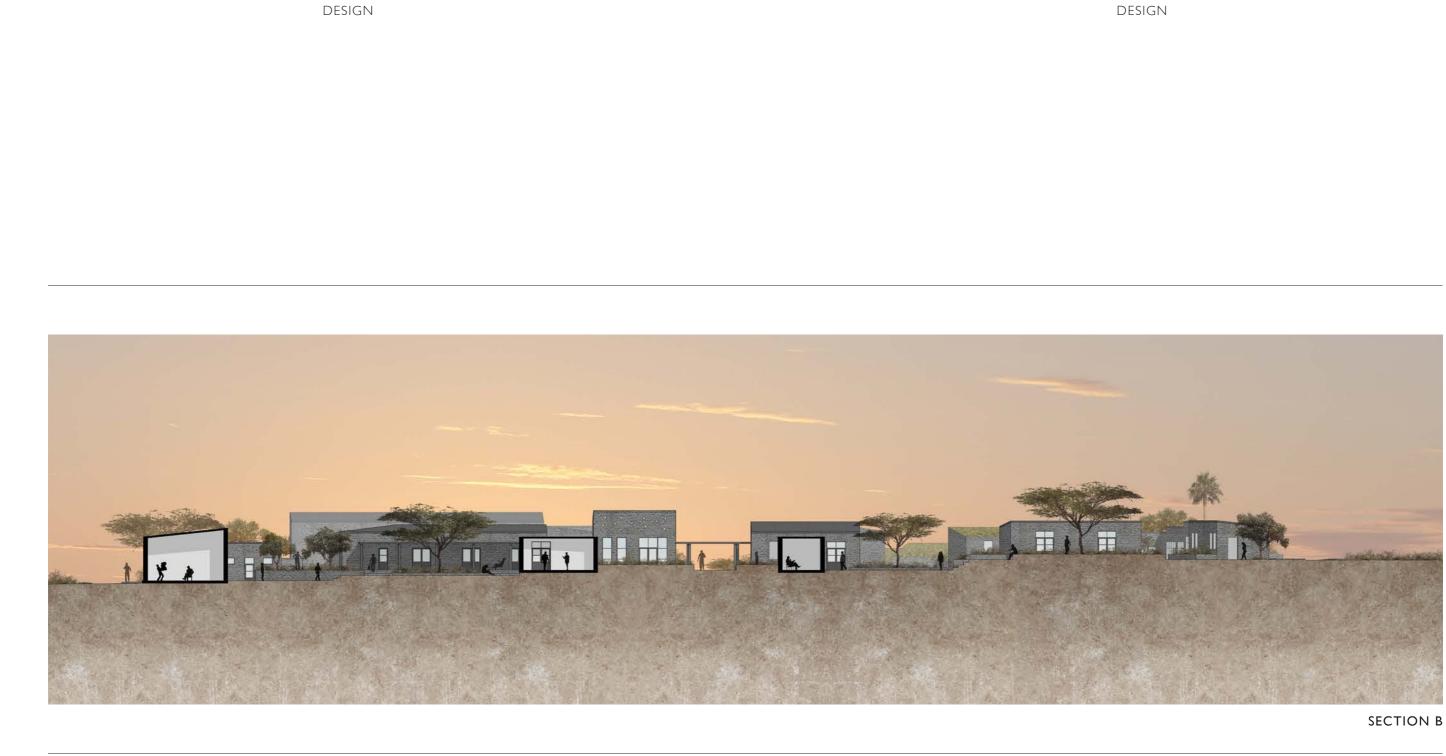




Photo: Christian Als (Source: https://christianals.com/photo-stories/the-shadow-city/



IO THE FUTURE

This chapter starts with a short discussion of the future role of the urban planner/designer. The chapter, and the project, end with a brief conclusion of the project's and PWG's future goals with the center.

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"There is obviously no one single, simple future for the rural, urban, or rurban village in the near or far future" (Grahame Shane, 2014:187).

10.1 THE FUTURE ROLE OF THE PLANNER/DESIGNER

Bolchover, Lin and Lange argue that designing in the shifting rural context puts new challenges to the role of architects and their methods (Bolchover, Lin & Lange, 2016:8). In agreement, Hague and Jenkins state that globalization has brought change to the role of the urban planner/designer. They state the importance of wider analysis of existing economic and political contexts. This means that the urban planner needs to develop new and specific analytical skills, which bring new demands both to the planner and to the education of urban planning and design (Hague and Jenkins, 2005:209 and 223).

As mentioned previously, this project is built on a belief that transdisciplinary studies are important in order to meet the challenges of rapid urbanization. I argue that comprehensive approaches - including the connection between urban and rural issues - are necessary. There is a need for a dialogue and a constant relationship between different academic fields as well as between academia/ research and practice. Wider analysis and more transdisciplinary approaches have the possibility to contribute with vital inputs to any project. Jernsand and Kraff argue, in a similar manner, the importance of opening up connections between different fields - by combining knowledge from different disciplines, new ways of working will be possible (Jernsand & Kraff, 2014:240).

Hague and Jenkins argue that there must be a focus on participation and negotiation as key planning and design tools. Urban planners/designers must step outside their traditional roles and develop skills to engage the community in the development process (Hague, 2005:181 & 223). In line with Hague and Jenkins, I argue the importance of enhanced participation. Planning and design processes must be more adaptable and create the basis for rural and urban development through a focus of participation and place identity (Hague & Jenkins, 2005:209, 222 & 223).

10.2 THE FUTURE AIM OF THE PROJECT

This project resulted in a design proposal for PWG's rural women center in Kisumu County, Kenya. Through PWG's participation in the design process I gained knowledge about their lives and their goals with the new center. I hope that this design proposal is in line with their vision of the center.

I have argued the importance of an on-going partnership with PWG. The project aimed to discuss the design with the women during the whole process, but follow-ups with the group have, as discussed, been limited for several reasons. It should be highlighted that the final design proposal will be thoroughly discussed with the women and changed according to their wishes before possible future construction of the center. I view PWG as any other client and I will hand over the drawings to the women - they are allowed to use them as they like.

The goal is that the center in the future will be constructed. The site investigated for this project has only been "theoretical", meaning that it has worked as an example for the possible center. But, there is no possibility to construct the center at the site. The goal for PWG is to find and buy another site in Kisumu County, with similar characteristics and to construct the center at this new location. For the center to be successful at the new site alternations of the design must be imple-

mented and the design must correspond with the new circumstances. As discussed in the delimitations of this project, I argue that extended research and participation should take place before construction and include various groups that did not participate in the current project. Examples of such groups are children, men and the community around the new site. I argue that such extended studies, with inputs from additional groups, are important in order to create a center where everyone feels welcome.

As discussed earlier, the envisioned women center could be described as a small community or a small prototype for future rural development. Even though only in form of a Master project, the design of the women center aimed to take on a holistic approach and result in a proposal that hopefully could work as an example for the development of additional future rural PWG centers in Kenya. The goal is that there will be several centers with similar characteristics around rural Kenya. Or, in the words of PWG: "eventually new branches of Power Women would exist in many rural communities and the stigma would be decreased all over the country" (PWG, 2018: Online).

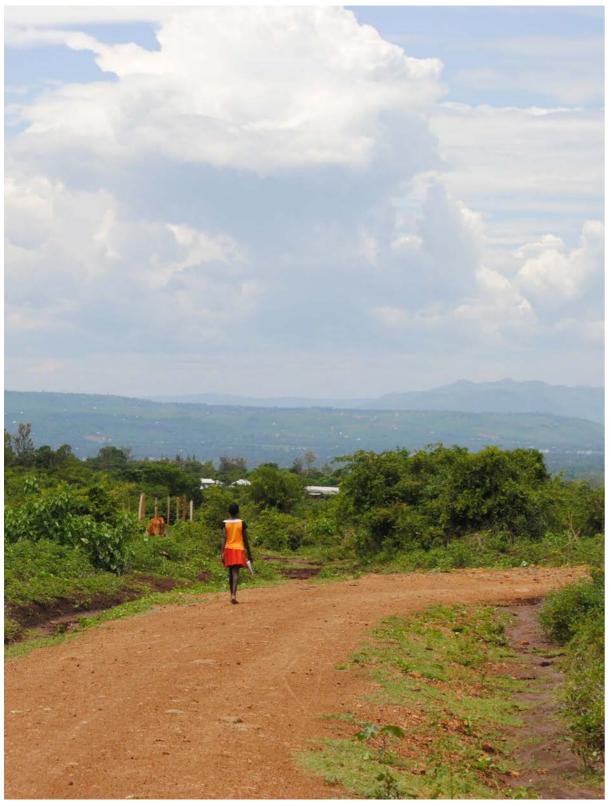


Photo: Tilda Kristersson

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APPENDICES

Appendix 1: Interview guide Appendix 2: Workshop temp Appendix 3: Questionnaire

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Background

- Where in Nairobi are you living at the moment?
- Do you have access to water, electricity, sanitation etc.?
- What are you working with?
- Are you married? •
- Do you have any children?
- Where did you grow up?
- Did you grow up with your parents?
- How long did you go to school?
- How was it growing up in a rural community?
- When did you move to Nairobi? ٠
- Why did you move to Nairobi?
- Do you still have relatives and a place to stay in the rural area?
- Is it easy to visit the rural area, how is transportation?
- What is the biggest difference between your life in the rural area and your life now?
- What is your goal(s) for the future?
- Where would you like to live if you could choose?
- If in rural area, why do you want to move back?

The new women center

- What are your initial thoughts about a new center? •
- Where would you prefer to have the center if you could choose? (In what area, district?)
- Would you prefer the center to be located in a city, village (or close to one of them) or "in the middle of nowhere"?
- How do you think that people in the rural are will react to a new center? (Will they welcome or reject it?)
- How do you think that can you work to make sure that people will like the center?
- What is the traditional architecture of your people?
- What material/building style would you prefer?
- What function should the center have?

APPENDIX 2: WORKSHOP TEMPLATES

Workshop I - Initial group discussion

Aim: Conclude the individual interviews and discuss the outcomes of them. This includes discussion of possible locations of the new women center within Kisumu County as well as the importance of various functions. The aim is also to start a more design specific discussion regarding for example vernacular architecture and different materials. The workshop will be conducted in order to gain an understanding of the main objectives important for the following field study to Kisumu.

01_Location: Discuss possible locations in Kisumu

- Which of the following is the best location for the new women center?
- Why is this the best location?
- Is it important that it is close to Lake Victoria and why?

Locations to discuss (mentioned during individual interviews): Obambo, Ahero, Kajulu, Riat

02_Functions: Discuss possible functions

- Are the following functions important?
- Why and in what way?
- Are there any additional functions to add?

Possible main functions (mentioned by the women during interviews):

- Healthcare centre
- PWG shop
- Counselling workshops / training
- Agriculture / food production
- Tourism / volunteer possibilities
- Kitchen / restaurant
- Daycare /orphanage •

Possible additional functions (not specifically mentioned during interviews):

- Community meeting place
- Water recycling / harvesting
- Culture / library
- Public / outdoor space

- Communal toilets / showers •
- Office •
- Communal laundry facility
- Recycling / composting •
- Market possibility
- Security

03_Design: Discuss culture, vernacular architecture and materials

- What is good with Lou houses?
- Is there anything from these that we should use in the design of the center?

Main features / materials (mentioned during individual interviews):

- Square house
- Bricks or blocks for walls
- Iron sheets for roof

04 Conclusion: Summarize the workshop

• What should I look for / focus on in Kisumu?

Workshop 2 - Community Workshop in Obambo

Aim: Reality Studio's aim with the workshop was to get feedback on their interactive concepts for the site and map the skills of the community. This is there workshop guide. The goal was also to gain an understanding of the community's conceptions of traditional, natural and new building materials. Reality Studio conducted the workshop in a way where the stakeholders identified what they would like to do at the site and what products they would like to buy.

01 Introduction: Introduction of Reality Studio

Reality Studio presents who they are and why they are there. David Omondi introduces the site and the possible farm. The participants are given name tags.

02 Activities: Explain more about the project in connection to activities

Go through the packages (Reality Studio came up with different activity-packages) one by one. Give every participant one color each and hand them stickers in these individual colors.

Pictures - Show pictures of the following activities:

- · Meeting with neighbors (discussing farming and collaborations)
- Rest and relax
- Spend time with family on the farm
- Take your kids to play
- Sell your farm products to Akili organization
- Learn about nutrition, seasonal farming, crop rotation, permaculture and alternative crops
- Bring manure to the site
- Work at the farm with agriculture
- Borrow tools from the Akili organization (tool library) farming tools, building tools etc.
- Participate in cooking workshop
- Eat locally produced food from the farm
- Work at the farm with administration
- Exchange your crops for knowledge
- Work at the farm with construction
- And maybe some more? •

Questions:

- What do you want to do?
- What would you be willing to pay for?

03 Skills: Get to know more about the skills of the community

Pictures - Show pictures of the following skills:

- Construction
- Guiding •
- Carpenter
- Weaving
- Farming
- Crafts
- Driving matatu / tuk tuk / boda boda
- Painting
- Teach others
- Cooking
- Computer / technical skills •
- Singing

Questions:

- What do you have experience in? •
- What do you like to learn? •
- What could you contribute to the Obambo farm?

04_Perception of materials: Learn about material / design preferences

• What are the local materials that are being used?

Draw a building on the blackboard and ask about what materials are usually used for the various parts of the building: foundation, floor, walls, roof, ceiling, windows, doors, fence, rainwater and shading.

Visionary and concept ideas:

- Choose your favorite picture and explain why?
- Choose one you don't like and explain why?

Show photos of the main character of the concept and the visionary ideas. All participants choose one picture and describes why.

Workshop 3 - Field study presentation

Aim: Present the findings from the field studies in Kisumu. This means presenting the "theoretical" site and discussing positive and negative aspects of it. Find out more regarding the preferable location of the site and present the vernacular architecture and material of the area. Also present the findings from Rwanda with a focus of the Women Opportunity Center. This workshop will mainly present the findings and discuss the basics of them. The findings will be discussed and evaluated further in Workshop 5, where they will be related more to design and interactive tools will be used in order for the women to take part of the design process.

01_Introduction: Present the overall findings of Kisumu and Rwanda

Make a short presentation starting with Kisumu, including Reality Studio, meetings (SWAP, FACES, Anne and David) and the site. Explain the meeting with David (Akili) and the concept of the "theoretical" site. Describe the workshop with the community and discuss the need of additional future community workshops, including the women. Also explain the meeting with George and possible future collaboration. Continue to present the field study in Rwanda. Make a short presentation of ASA and the visit to the Women Opportunity Center (further explanation of all research will follow later in the Workshop).

02 Obambo: Present and discuss the location and functions of Obambo

Location of Obambo:

Start by showing Picture 1 "Location Obambo" and explain the location in relation to Kisumu - transport possibilities, proximity to airport and the lake. Also explain that the city of Kisumu might expand to Obambo and that people from town seems to have been starting to by land.

- Is the location in relation to Kisumu good and why? - Is it too far/too close?
- Is the distance from the lake good and why? Is it too far/too close?
- Is Obambo rural "enough" or would you prefer to have the center in a more rural location?
- What is best/worst with the location?

Functions in Obambo:

Continue by showing Picture 2 "Functions Obambo" and present the various functions of Obambo.

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- Is the size of Obambo town good?
- Are there enough functions and what to you think is missing?

03 Site: Present and discuss the site

Location Site:

In this part start by presenting the location of the site in Obambo etc. by showing Picture 1 "Location Site". Describe distance from the center of Obambo (ca. 15 min walk) and distance to the lake (ca. 1-2 km). Mention that it will probably not be possible to use water from the lake, explain connectivity and amount of neighbors. Explain again that there is no possibility of actually using this site; it will only work as a "theoretical example".

- Is the location in relation to Obambo good and why? - Is it too far/too close?
- Is the distance from the lake good and why? Is it too far/too close?
- Is the surroundings/neighbors good and why? -Would you like to have the center in an area with more neighbours?
- What is best/worst with the location?

Characteristics Site:

Continue by showing Picture 2 "Characteristics site" and Picture 3 "Plan + Section". Present the main characteristics by referring to the pictures. Explain the breeze from the lake, the slope of the site, the size, agriculture possibilities as well as the stones in the ground.

• What do you think about the site? - What is good/ bad and why?

04_Design : Introduce and discuss the architecture and materials in the area

Architecture:

This part is mainly for presentation and introduction of some vernacular architecture in the area (this will be discussed further in following workshops). Some sort of discussion would of course be beneficial. Start by showing and explaining Picture 1 "Vernacular Architecture".

• What do you think about the buildings? - Are they good/bad and why?

Materials:

This part is also mainly for presentation and introduction of materials in the area (this will be discussed further in following workshops). Some sort of discussion would of course be beneficial. Show and explain Picture 2 "Vernacular Materials".

• What do you think about the different materials? -Are they good/bad and why?

05 Rwanda: Present and discuss the findings from Rwanda

The Women Centre:

Start by showing Picture 1.1 and 1.2 "The Women Opportunity Centre". Present the main objective of the center as well as the various functions within it.

- What do you think about the center? What is good/bad and why?
- Which functions do you think are the most important and why? - Are there any important functions missing?
- Do you think we can use inspiration from the center in our project? - What would this be?

Other projects:

This part is mainly for presenting the various projects visited. Start by showing and explaining Picture 2 "Other Projects". Some discussion would of course be good, but the projects will also be discussed further in following workshops.

- What do you think of the projects? What is good/ bad and why?
- Which do you like the most?

- Do you think we can use inspiration from these in our project? - What would this be?
- **06_Conclusion:** Summarize the workshop

Summarize the workshop shortly and ask some questions. Introduce the concept of the next workshop.

- What did you think about the things I have shown you? - What was the best/worst?
- Is there anything else you would like to add?

Workshop 4 - Skills and activities

Aim: The first part of this workshop will be very similar to the part of skills in the workshop in Obambo - the goal is to understand what kind of skills the women have, in construction but also in other areas. The second part will discuss activities at the center. These are more "zoomed in" than previous functions discussed and aims at getting a deeper understanding of possible smaller workshops and which activities to prioritize.

01 Introduction: Introduce the basics of the workshop

Introduce the colors and stickers; give every participant one color each and hand them stickers in these individual colors.

02 Skills: Get to know more about the skills of the women

Show pictures of various types of skills and let the women put stickers on what they know how to do (circle), what they would like to learn themselves (question mark) and what they would like to teach others (star).

Pictures - Show pictures of the following skills:

- Counseling / awareness
- Construction
- Guiding
- Carpenter
- Farming
- Crafts (baskets / bracelets etc.)
- Driving car / riding a bike
- Painting
- Business / administration
- Cooking
- Computer / technical skills
- Cleaning / laundry
- Teaching children
- Tailoring / Weaving
- Hairdressing
- English
- Do you have any to add?

Questions:

- What do you have experience in?
- What do you like to learn?
- What could you teach others?

03 Activities: Look deeper into activities

Pictures - Show pictures of the following activities:

- Meeting with community
- Rest and relax •
- Spend time with family/ take your kids to play •
- Learn about nutrition, seasonal farming, crop rotation, permaculture and alternative crops
- Learn about water harvesting / compost toilet •
- Participate in cooking workshop •
- Eat locally produced food from the farm
- Grow fruit / have trees
- Work at the center with administration
- Work with the construction of the center
- Work at the restaurant in the center •
- Work with cleaning the center •
- Work with counseling •
- Work with guiding (the tourists) •
- Work with agriculture / take care of livestock
- Work with teaching in workshops •
- Work with daycare •

Questions:

- What do you want to do / what is most important for you?
- What do you not want to do?

04_Conclusion: Summarize the workshop

Summarize the workshop shortly and ask some questions. Introduce and hand out the questionnaires and explain the concept behind them. Also briefly explain the concept of the next workshop.

- What did you think about the things I have shown you? - What was the best/worst?
- Is there anything else you would like to add?

Workshop 5 - Design preferences

Aim: This workshop can be more related directly to the design and aims at understanding the women's design preferences. The first part will discuss different materials and construction details further and develop an understanding of what the women like regarding different design solutions in general and why this is good or not. For example, what materials can be used in order to make the women feel as comfortable as possible and why are some materials good and others bad according to them? This aims at gaining an understanding of the culture and how the women use space (further developed in questionnaire and workshop 6). The second part regards design preferences at the bigger scale. There are many possible outcomes and variables from such exercise and the main goal is to understand how the women interpret the space at the bigger scale.

01_Introduction: Introduce the basics of the workshop

Start with collecting the questionnaires and go through them briefly / see if the women understood them correctly. Start the actual workshop by introducing the different steps of it. Introduce the colors and stickers again; give every participant one color each and hand them stickers in these individual colors.

02_Materials, construction details and design elements: Learn more about materials and the women's design preferences

Part 2.1: Show pictures of various types of materials, construction details and design elements and let the women put stickers on what they like (heart), think is okay (square) and don't like (X). Gather and go through all the photos. Ask follow-up questions such as:

• Why is this good/bad?

Part 2.2: This part is more about visionary and concept ideas. Show pictures of various types of designs and ask the women to pick their favorite and put a heart on it. Also ask them to pick the one that they like the least and put a X on it. All participants choose one good and one bad picture and describe why.

- Choose your favourite picture and explain why? What is it that you like most about this one?
- Choose one you don't like and explain why? Why is it that you don't like this one?

If there are photos that no one has picked, go through them and ask some follow-up questions about them such as:

• Do you like/not like this one?

03_Design preferences at the bigger scale: To understand how the women interpret the space at the bigger scale

This part will again be related to design and different activities at the bigger scale. It is different from workshop 1, in this case the activities will be discussed further and it is important how the activities are related to each other. This part of the workshop will be based on a site model. The site is shown very basically with proximity to the lake and the closest neighbors. The women will be given 3D volumes and will be asked to arrange them in the way that they prefer. Every volume represents a certain activity in a very easy and understandable way (each volume have one color and text).

The modules:

Blue: HIV Healthcare and hygiene

- Dispensary
- Counseling (3 modules)
- Latrine building (3 modules) •
- Shower facility (2 modules)
- Shared laundry

Green: Tourism and guests

- Restaurant / canteen
- Café
- Bedrooms for tourists
- PWG shop
- Vegetable shop / market
- Reception

Yellow: Living

• 10 houses

Pink: Community center

- Large community building
- Office / administration
- Workshops (6 modules)
- Daycare
- Library

White: Agriculture

- Building for livestock
- Existing greenhouses (3 modules)

Draw: Outdoor space

- Public community space
- Private garden
- Agriculture

During and after the exercise, try to start a discussion with questions such as:

- Why is it good that this building is placed here?
- Why is this good compared to that etc.?

The way the women arrange the volumes will give initiatives for the design. The goal is to understand, for example, how the functions are relating to each other according to the women, and which functions should be in which location. Where do they want the healthcare center and where do they want cultivation areas etc.? The exercise can also tell if they want to have privacy and be far from each other or if they want protection and be very close together. It can tell about the relation to nature, if the houses for example are arranged in a line because all the women want to have the view of the lake. Or instead maybe they want them to be arranged around a center courtyard, so that they have a protected space within.

04_Conclusion: Summarize the workshop

Summarize the workshop shortly and ask some questions. Explain the concept of the next workshop.

- What did you think about the things I have shown you? - What was the best/worst?
- Is there anything else you would like to add?

Workshop 6 - Concluding design challenges and possibilities

Aim: This workshop aims at discussing and problematizing various design challenges and possibilities starting with the responses from the questionnaires and home visits. There are simple elements that would improve the design according to the way the women live and use space. The goal of this workshop is thus to try to understand how they use space, what the challenges and the possibilities are. It is important to include all various features in the design, through discussion of current challenges (how they live right now), challenges in the rural (how they live in the rural) and future possibilities (how they would like to live). The goal is for the design to be characterized by the culture it will be designed for. The workshop is also a way to give the women (through pictures) a deeper understanding of suggestions and design options.

01_Introduction: Introduce the basics of the workshop

Start the workshop by introducing the different steps of it.

02 The challenges, discussion of the questionnaires: Discuss the challenges of their lives in Kibera today

This part of the workshop will discuss the findings from the questionnaire and the different problems with the women's current living conditions in the slum. It starts by summarizing the questionnaires and see what the main challenges and goals are. There will be follow up questions regarding the questionnaires in order to, in the best way possible, try to understand how the women organize their work and their day. Try to understand how they use the space, what do they sit on, how do they sit etc. Also try to understand what the necessities are of HIV sick people, what are they lacking. The goal is to find things that can be supported by the design or the research.

Go through the questionnaires through the following categories and ask follow up-questions:

Lack of living space / Lack of privacy:

- What is the biggest problem with staying in a small house?
- Do you think that lack of privacy is an issue? In what way?
- Where do you spend most of the time in your house?
- How many of you have some sort of partition between living area and sleeping area?

For the last question most of you answered that in order for you to feel comfortable sleeping 2-3 people would be in the room in addition to yourself...

- First of all, you understood that this is in addition to yourself?
- Secondly, is this the number you would prefer to share the room with or is this the maximum number of people that can sleep in the room for you to be comfortable?

Latrines in poor condition:

• What is the biggest problem with the latrines and their condition?

Showers in poor condition:

- How many of you uses shared showers?
- What is the biggest problem with the shared showers?
- If you don't use them, how do you clean yourselves at home? And what is the biggest problem with this?

Lack of proper laundry area:

- Where do you wash you clothes? Inside or outside the house? Where in the house?
- How do you wash your clothes? How much water, soap etc.?
- Where do you dry your laundry? Is there any problems with this?
- What is the biggest problem with where and how • you wash your clothes?

No kitchen:

- So, you are usually cooking with charcoal?
- What are the problems with cooking with charcoal?
- What are the problems with cooking inside? Are

there any risks of cooking with charcoal inside the house?

- Many of you prioritized a separate kitchen quit high on the list of things to add, why is that?
- What are the problems with not having a separate kitchen?

Poor indoor climate:

- Someone explained that it is too cold during cold season and too warm during sunny season. Is this the case for all of you? Why is this?
- How is the ventilation? (How is the ventilation while cooking?)
- Do you think there is enough daylight in your houses?

Water and electricity:

- When you say water in the house, do you mean tap water?
- Why is this so important?
- If you have a good shared latrine and shower is water in the house still very important (except for in the kitchen)?

Security:

- For the ones that do not feel safe at home, can you explain that further?
- What is the most important in order for you to feel safe? What kind of security?

HIV:

- So not many of you feel sick very often because of HIV? How often do you feel sick and for how long?
- What activities are good when you feel sick?
- What is missing in your house more than food in relation to HIV? What could be helpful to include in the new design?

The PWG building:

- How are the areas where you work? Are they good?
- Most of you have said that you feel comfortable in the building. What could be added in order for you to feel more comfortable?
- Most of you think the building is too cold, some too warm. Can you explain this further?
- Most of you think that the daylight is enough, some of you don't. Can you explain this further?
- Someone mentioned that the ventilation is not

good enough, someone thought it is. Can you explain this further?

The New Center:

- How do you think colors would have an impact on the feelings or well being of women going to the center?
- If you visited another women center, how big was it, how many rooms did it have, and what kind of program was done in the rooms?
- To feel comfortable study where would you go?
- Is there anything else that is important that I should think of? Is there anything else that can help me understand how you use space?

03 Challenges in the rural area: To understand and discuss the challenges in the rural context

The new context might help to solve some problems, but it might also make other things more difficult. When you come from an urban environment and you go to a rural environment, it's not always positive. You have a lot of space, but you will also lack other things. Discuss these kinds of problems with the women.

• What do you think will be the biggest challenges in the rural area?

Topics to discuss:

- Accessibility, roads and transport
- Proximity to water/lack of water •
- Lack of electricity
- Lack of basic amenities, such as grocery shopping, bank, health care etc.
- Business opportunities

It is important to include as many of these infrastructures as possible in the design, since there is a lack of them in the surroundings.

04_Possibilities: Present and discuss solutions for services, functions etc.

This part will discuss how the problems can be solved in the rural area. This will in parts be in the form of a presentation. The main goal is to see how the activities the women do now in the slum could be reinterpreted in the rural area. For example, if they have problems in the slum where they do the activities, how do you solve those problems in the rural context?

Show pictures of where they live now and highlight some of the problems as well as suggest solutions show different slides of various design solutions. Show photos of solutions for various functions and services currently lacking. Show different solutions of the same function as well as different colors and materials (for example for the toilet). This should try to start a discussion and aims to really understand the women's preferences. It will go deeper and more specific into the discussion on materials, compared to workshop 3 and 5.

Show photos of the current problems in Kibera, in relation to the categories below and follow these with possible design solutions, options and questions:

Lack of living space / Lack of privacy (Show photo page 1):

Try to get an understanding of how big rooms need to be and what kind of shape they would have. From the answers they give, you can understand how much space would they actually use and how they interpret the space.

- What kind of sleeping arrangements do you like?
- What kind of materials can you put to make it • more comfortable sleeping / living?
- What is important for the bedrooms?
- What is important for the living area?
- What kind of functions should the living area have? (Dining, resting, etc.)

Latrines in poor condition (Show photo page 2):

They will probably not have running water and can't afford to put flushing toilets. The point is to understand for example what kind of materials to use to make them more comfortable for the women and easy to clean.

• What kind of toilets would you like to use?

What is important for the toilets? •

Showers in poor condition (Show photo page 3):

- What kind of showers would you like to use?
- What is important for the showers?

Lack of proper laundry area (Show photo page 4):

- What kind of laundry area would you like to use? •
- What is important for the laundry area?

No kitchen (Show photo page 5):

From the answers they give the goal is, for example, to understand how much space they would actually use for the kitchen to cook.

- What kind of kitchen would you like to use?
- Can it be an outside kitchen (with roof)?
- What is important for the kitchen?
- What kind of appliances would you use in the kitchen?
- Would you prefer to cook with electricity rather than charcoal?
- In the rural area where do you usually have the kitchen?

Poor indoor climate (Show photo page 6):

Show different solutions of ventilation and daylight and see what the women think about them.

Water and electricity (Show photo page 7):

Show different solutions of solar/wind power and water harvesting and see what the women think about them.

Note: These kinds of questions are not related directly to how you are going to design it, but how they are interpreting the space in order for you to understand their way. Through all of these questions you should not really give them too much options, because you have always to understand that you are the designer and you are the one that have to solve their problems through design.

05_Conclusion: Summarize the workshop and all collaborations

Summarize the workshop shortly and ask some questions.

- What did you think about the things I have shown you? - What was the best/worst?
- Is there anything else you would like to add?

This part will not only conclude the current workshop but all the workshops and collaborations.

- What did you think about the work we have done together?
- Which workshop did you like the most?
- Is there any more questions or something you would like to add?

Explain what the process will look like in the future. It will of course end with a great thank you!

Y	/our full name:
D	Date:
	How old are you?
	Where did you grow up? (Province, County, Village)
	Did you go to school Yes No
	- If not, why?
	- If yes, for how long?
	When did you become a part of Power Women Group (PWG)?
	What are your skills?
	Are you / have you been married? Yes No
	- When did you get married?
	Do you have a husband today? Yes No
	- If not, what happened?
	Does your husband support you? Yes No
	- If yes, how does he support you?
	- If yes, what activities does he support?
	- If no, why no <u>t?</u>
	If you feel sick what would your husband do?
	Is he also HIV positive? Yes No
	Where did he grow up? (Province, County, Village)
	Did he go to school Yes No
	- If yes, for how long?
	What does he do for a living?
	What skills does he have?
	Would he come and live with you at the new women centre in Kisumu? Yes No

	 If older / finished school – do they still live with you? If older / finished school – are they married? 	
	 If older / finished school – are they married? How many of them are HIV positive? 	
	How many of them would come and live with you at the new women centre in Kisumu?	
	Do you have grandchildren? Yes No	
'our grandchildren	How old are they?	•••••
lchil	Do / did all of them go to school? Yes No	
rand	 If not, how many of them didn't and why? If yes, for how long? 	
ur g	If yes, for now long? How many of them are HIV positive?	
٨٥	 How many of them would come and live with you at the new women centre in Kisumu? 	
[
	Are you taking care of any orphans? Yes No	
	How old are they?	
ans	Do / did all of them go to school? Yes _No	
pha	- If not, how many of them didn't and why?	
Orphans		
Orp	- If yes, for how long?	
o	- If yes, for how long?	····
0		
	How many of them are HIV positive?	
	 How many of them would come and live with you at the new women centre in Kisumu? 	

APPENDI®ES

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•	Do you own your house? Yes No	
•	Is your house in Kibera?	
	- If yes, where (in what area)?	
•	How big is your house?	
•	How many rooms is your house composed of?	
•	How many people live in your house?	
•	Do you have electricity in your house?	
•	Do you usually cook with electricity or charcoal?	
•	Do you usually cook inside the house?	
	- If yes, is the kitchen a separate room? Yes No	
•	Do you have water in your house? Yes No	
	- If not, how far do you have to walk to get water?	
	- Is this distance too far or okay for you? Too far Okay	
•	Do you have your own toilet / latrine? Yes No	
	- If no, how far do you have to walk to get to a latrine?	
	- Is this distance too far or okay for you? Too far Okay	
	- What is the condition of the latrine (is it good/clean)?	
•	Do you have your own shower / washing area? Yes No	
	- If no, where and how do you clean yourself?	
	- What is the condition of the shower / washing area (good / clean)?	
•	Do you have your own laundry area? Yes No	
	- If no, where and how do you make your laundry?	
	- What is the condition of the laundry area (good /clean)?	
•	Do you feel safe in your house? Yes No	
	- If not, why?	
	- What is the most important for you in order to feel safe in your house?	
•	What are the main materials of your house?	
•	Is your house too warm / too cold?	
•	What is the most important thing missing in your house?	
•	What of the following functions is most important for you to add to your house? Put 1-6 (1 is most important)	

	When do you usually wake up in the morning?
	What is the first thing you do in the morning?
	When do you leave your house in the morning?
	Where do you go when you leave your house (PWG / work)?
	How do you usually get there? (Walk, Matatu, other way)
	- Do you feel safe on your way?
	- If not, why don't you feel safe?
	How long does it take you to get there from your home?
	How many days a week do you spend at PWG?
	How many hours do you usually spend at PWG / day?
	What do you usually do at PWG?
	When do you usually leave your work or PWG in the evening?
	How do you usually get home? (Walk, Matatu, other way)
	- Do you feel safe on your way?
	- If not, why don't you feel safe?
	When do you usually get back home in the evening?
	What is the first thing you do when you get back home?
	What more do you do at home in the evening?
	When do you usually go to bed?
	What do you usually do during the weekends?
	What do you do for fun / what makes you happy doing?
	When did you find out that you are HIV-positive?
	How often do you need to take the drugs?
	How often to you need to go to the clinic?
	How far away from your home is the clinic?
	Do you often feel sick because of HIV?
	- If yes, for how long do you usually feel sick?
	• When you feel sick because you have HIV, do you just need to rest / sleep or what are the activities you feel
	like to do or not?
	What is the main thing missing for you in relation to HIV?

•	Do you think that the PWG building is big enough? Lagran Yes
•	- If no, why?
•	- What kind of room would be most important to add?
•	What of the following rooms do you think would be the most important to add? Put 1-6 (1 is most important)
	Kitchen Latrine Room to rest Extra training room Daycare/orphanage Separate PWG store
•	Do you think that the building has enough functions? \square Yes \square No
•	- If no, what kind of functions would you like to add (ex. training)?
•	Do you feel safe in the PWG building? Yes No
	- If not, why2
•	- If yes, what is the main reason?
•	Do you feel that the building is too warm / too cold?
•	Is there enough daylight?
•	Do you feel comfortable in the building?
•	- If yes, what is the main reason for this?
•	- If not, what is missing?
•	Do you think colours are important in the new center?
	- If yes, why?
	- Do colours make you feel happier?
	- Do colours make you feel more safe?
•	What of the following functions is most important for you in the new center? Put 1-6 (1 is most important)
	Dispensary Agriculture Tourism Training workshops Daycare/orphanage Fence / Security
•	What of the following is the most important for you to have in the new center? Put 1-6 (1 is most important) Shared kitchen / Private kitchen Market possibility Library Playground Compost toilets
•	What of the following is the most important for you to have in the new center? Put 1-3 (1 is most important) Goat Bicycle Extra bedroom (in your house)
•	What of the following training possibilities do you think is most important? Put 1-6 (1 is most important)
	Tailoring Computer English Cooking Hairdressing Business
•	If you need to go to the toilet during the night, how far would the toilet be for you to feel comfortable?
•	To feel comfortable sleeping how many people would be around you in a room?





