

# Let it flow!



## Capacity development in Bunda's water system

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*'We are not arriving in the country with girders, bricks, cranes, and construction blueprints, ready to hire natives to help build the factory we designed. Instead, we should be arriving with resources to motivate the natives to design their own factory and to help them figure out how to build and operate it themselves. Every bit of technical assistance that displaces a comparable capability on the part of local society should be regarded as a two-edged sword and treated with greater caution. Above all, the outsiders need to avoid the temptation to speed up the process by running the factory themselves.'*

Francis Fukuyama

# Preface and acknowledgements

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This thesis is the final part of my MSc degree in International Development Studies at Utrecht University. Between February and May 2010, as part of my programme, I did research in Bunda, Tanzania on capacity development in the context of Bunda's water system. This topic was an assignment from SNV, Netherlands Development Organization, who is responsible for delivering capacity development within the Lake Victoria Water and Sanitation Programme (LVWATSAN). This programme by the United Nations Human Settlements Programme (UN-HABITAT) is run in more than a dozen of towns surrounding Lake Victoria.

Capacity development is an elusive term, but one of the hot-topics in contemporary development cooperation. It is argued to be the missing ingredient in development assistance so far, but there is much debate how it should be implemented then. It was therefore also that this research introduced me to systemic thinking, and the implications of this thinking for capacity development practices. A few organizations developed this systemic perspective towards CD and thereby enlarged the theoretical body of this perspective. It is therefore also that my research looks at the system of actors that have a role or responsibility in improving the water situation in Bunda. It is argued by systemic thinkers that only by approaching the system as a whole, effective capacity development is able to take place. Promoting this new perspective towards CD is also strived for through this thesis.

Most of all, the experience of the past internship underlines the fact that development is something done and achieved together. Collaboration, support and motivation are keywords for development work, as well as for the past research and the formation of this thesis. All those three elements emerge in a joint process, where two or more people strive for a shared goal. Although the past internship was strictly speaking my own project, I was able to lean on others if necessary. And, for sure, I would never have reached the end without the support of all those people around me and I am very grateful for what they did.

First of all, thanks goes to the supporting organizations in Tanzania. SNV that gave the internship opportunity and supported through the weeks in the field, and also enabled me to join the development business during the Inception Phase in Kenya. I am especially grateful to Maganga and Rinus for their feedback and assistance when I once more got stuck. However, thinking back to SNV also reminds me of learning the first words Swahili, nice lunches in the banda and feeling at home with the drivers, supporting staff and other advisors.

My stay in Bunda would never have been such a success without the everyday support of BUWSA. It was an interesting stay within an African organization and it really marks an important learning period during this study. First remembrance of BUWSA is the abundance of Swahili greetings I was introduced to everyday and finally all learned, and even expanded with 'mambo zain'. I felt at home and am especially grateful to Mr. Swai and Mr. Jumanne for sharing their office, and Mr. Opatu for showing me all the shortcuts of Bunda, assisting in appointment making and most of all, translating the Swahili speaking respondents.

One of the most rewarding elements of the internship was going with other students. I would like to say thanks to Stefan for our friendship and always topping up our credit to stay in touch through too expensive phone calls. But also Dominika, Nico and Dominik, together, and with help of Kuleana, we made our stay a very nice experience. Study-related assistance I especially received from Dr. Annelet Broekhuis. She supervised me during this internship, and especially while struggling with thesis writing. Thanks for all the helpful comments and even checking my thesis during holidays.

Entering the personal sphere, I am grateful for so many people thinking of us, praying for us and staying in touch through 2010's technology. Thanks for all the posts on our blog, it was always a joy opening internet. Special thanks go out to my parents and my brothers for their support, phone calls and e-mails, and even keeping our administration up-to-date. However, also my family-in-law is worth mentioning here for donating African blood into my veins. It will always remain unclear if I would ever have taken this opportunity without you.

However, there is only one person who really enabled me to do this internship and continually supported me, even by going with me and taking care of our daughter in the challenging atmosphere of the African tropics. Arienke, I really enjoy it that we made it together and it was a tremendous experience, presumably in a long list of foreign travels. Many thanks, and you should be rewarded with a statue, and I already did it, in my heart.

And to Jet, you are special to me!

Job Lok

Ede, March 2011

# Abstract

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Capacity development is, as a development tool and approach, used by many organizations working in development cooperation. It aims at improving capacities of actors, organizations and institutions in developing countries. However, effective capacity development is dependent on many different variables. It seems to be difficult to design a capacity development process that has sustainable impact. The LVWATSAN Programme of UN-HABITAT also offers capacity development to the stakeholders in the towns that receive assistance. This is emphasized because investments in hardware are the first side of the coin. The necessary flipside to sustain the hardware investments is capacity development. The specific town under research is Bunda. This is a secondary town, part of the LVWATSAN Programme. This thesis seeks to identify the capacity of Bunda's water system and the contribution that capacity development can make to contribute to an improvement of this capacity. It turned out that there is space for improving the capacity of Bunda's water system. However, there are serious questions whether the capacity development process within LVWATSAN is able to contribute to improving the capacity of Bunda's water system.

Key words: capacity development, systemic perspective, water system

# Contents

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- PREFACE AND ACKNOWLEDGEMENTS..... III**
- ABSTRACT .....V**
- CONTENTS.....VI**
- ACRONYMS AND ABBREVIATIONS .....VIII**
- 1. INTRODUCTION ..... 1**
- 2. DEVELOPING CAPACITY: THEORY AND APPROACH ..... 4**
  - 2.1 DEFINING CAPACITY AND CAPACITY DEVELOPMENT..... 5
    - 2.1.1 *Defining capacity*..... 5
    - 2.1.2 *Defining capacity development* ..... 6
    - 2.1.3 *The birth of the CD approach – standing on the shoulders of others*..... 7
  - 2.2 SYSTEMIC AGAINST REDUCTIONIST PERSPECTIVE TOWARDS CD..... 9
    - 2.2.1 *Reductionist perspective* ..... 9
    - 2.2.2 *Systemic perspective*..... 10
    - 2.2.3 *Evaluation* ..... 11
    - 2.2.4 *Back to ‘capacity’*..... 12
  - 2.3 DIFFICULTIES WITH APPLYING CD IN DEVELOPMENT COOPERATION PRACTICES ..... 14
  - 2.4 CAPACITY DEVELOPMENT WITHIN LVWATSAN ..... 15
  - 2.5 CONCLUDING REMARKS - SYSTEMIC CAPACITY ..... 16
- 3. METHODOLOGY ..... 18**
  - 3.1 RESEARCH OBJECTIVE AND QUESTIONS ..... 18
  - 3.2 SYSTEMIC ACTION INQUIRY - RESEARCH PHASE 1 ..... 20
  - 3.3 CONCEPTUAL MODEL ..... 23
  - 3.4 RESEARCH PHASE 2..... 25
    - 3.4.1 *Semi-structured interviewing* ..... 26
    - 3.4.2 *Semi-quantitative tool* ..... 28
    - 3.4.3 *Participatory observation*..... 28
  - 3.5 SYSTEMIC CAPACITY - FROM RESEARCH TO THESIS ..... 28
  - 3.6 LIMITATIONS TO THE RESEARCH..... 31
- 4. REGIONAL CONTEXTUAL FRAMEWORK..... 32**
  - 4.1 NATIONAL CONTEXT ..... 32
    - 4.1.1 *Development picture*..... 32
    - 4.1.2 *Decentralizing back and forth* ..... 33
  - 4.2 WATER SECTOR IN TANZANIA ..... 35
  - 4.3 BUNDA TOWN..... 37
    - 4.3.1 *Local Government Authorities*..... 38
  - 4.4 LAKE VICTORIA WATER AND SANITATION PROGRAMME ..... 39
- 5. RESULTS: CAPACITY OF BUNDA’S WATER SYSTEM ..... 40**
  - 5.1 WATER SUPPLY ..... 40
    - 5.1.1 *Operating aspects of BUWSA* ..... 40
    - 5.1.2 *Human capacity of BUWSA* ..... 41

5.1.3	<i>Additional water figures for Bunda</i> .....	42
5.2	BUNDA’S WATER SYSTEM - STAKEHOLDERS AND THEIR INTERRELATIONS.....	43
5.3	SYSTEMIC CAPACITY ANALYSIS FOLLOWING THE 7S-MODEL .....	44
5.3.1	<i>Shared values</i> .....	44
5.3.2	<i>Structure</i> .....	45
5.3.3	<i>Sub-systems</i> .....	48
5.3.4	<i>Strategy</i> .....	49
5.3.5	<i>Skills</i> .....	50
5.3.6	<i>Staff</i> .....	51
5.3.7	<i>Style</i> .....	51
5.4	CONCLUDING REMARKS - POSSIBLE DIRECTIONS FOR INTERVENTIONS .....	52
<b>6.</b>	<b>RESULTS: CAPACITY DEVELOPMENT PROCESS</b> .....	<b>54</b>
6.1	CRITICAL SUCCESS FACTORS AT THE SUPPLY SIDE - CAPACITY BUILDING CONSORTIUM .....	54
6.1.1	<i>Appropriate design</i> .....	54
6.1.2	<i>Long-term engagement</i> .....	58
6.2	CRITICAL SUCCESS FACTORS AT THE DEMAND SIDE - BUNDA’S WATER SYSTEM .....	59
6.2.1	<i>Joint agreement</i> .....	59
6.2.2	<i>Ownership &amp; demand-driven</i> .....	61
6.2.3	<i>Change agents</i> .....	61
<b>7.</b>	<b>DISCUSSION - CAPACITY DEVELOPMENT</b> .....	<b>63</b>
7.1	UN-HABITAT’S LAKE VICTORIA WATER AND SANITATION PROGRAMME .....	63
7.2	SYSTEMIC PERSPECTIVE .....	64
<b>8.</b>	<b>SYNTHESIS AND CONCLUSIONS</b> .....	<b>66</b>
	<b>LITERATURE</b> .....	<b>68</b>
	<b>ANNEXES</b> .....	<b>73</b>
A:	LIST OF INTERVIEWED PEOPLE, INCLUDING THEIR ORGANIZATION AND FUNCTION .....	73
B:	BUNDA TOWN MAIN DISTRIBUTION NETWORK MAP .....	74
C:	CAPACITY DEVELOPMENT PLAN DESIGNED BY THE CBC, MARCH 11, 2009. ....	75
D:	SYSTEMIC ACTION RESEARCH METHODOLOGY - LVWATSAN CAPACITY BUILDING PROGRAMME .....	82

# Acronyms and abbreviations

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AM	Adaptive Management
BTA	Bunda Township Authority
BUWSA	Bunda Urban Water Supply Authority
BWS	Bunda's Water System
CB	Capacity Building
CBC	Capacity Building Consortium
CBO	Community Based Organization
CD	Capacity Development
CSO	Civil Society Organization
DC	District Council
DED	District Executive Director
DTO	District Trade Officer
ECDPM	European Centre for Development Policy Management
GoT	Government of Tanzania
GOVNET	Governance and Capacity Development Network
HoD	Head of Department
ID	Institutional Development
IMF	International Monetary Fund
KADETFU	Kagera Development and Credit Revolving Fund
LED	Local Economic Development
LGA	Local Government Authority
LGRP	Local Government Reform Programme
LVWATSAN	Lake Victoria Water and Sanitation Programme
MD	Managing Director
MDG's	Millennium Development Goals
MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania (National Strategy for Growth and Reduction of Poverty)
NAWAPO	National Water Policy (2002)
NETWAS	Network for Water and Sanitation
NGO	Non-Governmental Organization
NRW	Non-Revenue Water
OD	Organizational Development
ODA	Official Development Assistance
OECD-DAC	Organization for Economic Cooperation and Development - Development Assistance Committee
PMO-RALG	Prime Minister's Office - Regional Administration and Local Government
PRSP	Poverty Reduction Strategy Paper
RP	Reductionist Perspective
SAI	Systemic Action Inquiry
SAR	Systemic Action Research
SNV	Netherlands Development Organization
SP	Systemic Perspective
TDPO	Township Development Planning Officer
TEO	Town Executive Officer
UNESCO-IHE	Institute for Water Education
UN-HABITAT	United Nations Human Settlements Programme
WB	World Bank



# 1. Introduction

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“There is a lot to do, but we are not organized. We need someone to push us together”  
Mr. Cyprian Oyier, Bunda District Executive Director

Water, the most urgent needed resource for people’s everyday life, should be accessible for everyone who is in need of it, either through a pipe or by a pump. Water should flow to fulfill people’s needs to drink, wash and clean themselves. Flowing does not only refer to water or other liquids able to flow. The psychologist Mihály Csikszentmihályi (1990) invented the term to describe “*the mental state of operation in which a person in an activity is fully immersed in a feeling of energized focus, full involvement, and success in the process of the activity*”. Flow refers to a very positive feeling someone can have, when he uses all his capacities to undertake an activity and this combines with a positive attitude. Everyone is able to enter such a state of mind, using his own capacities to fulfill a specific task or activity. It is also possible to create flow within an organization. When everyone is devoted to his specific task and collaborates with his colleagues, an organization can flourish, giving the employees a flow. These two types of ‘flow’ come together in capacity development processes for organizations working in the water sector. By increasing the capacities of organizations and actors involved, they will deliver better services and increase the water service delivery. This capacity development process will ultimately lead to a feeling of flow, because organizations and actors are devoted, collaborate and jointly strive for an improvement in water service delivery.

SNV is an international development organization based in the Netherlands that aims to build capacities of people and organizations in developing countries, in order to improve their performance, which, in turn, will contribute to a better livelihood of communities in developing countries. The Lake Zone Portfolio of SNV, based in Mwanza, is mainly involved in tourism, livestock, water & sanitation, education and accountability (van Klinken, 2010). SNV is involved in the capacity building programme of UN-HABITAT’s Lake Victoria Water and Sanitation Programme (LVWATSAN) that aims to improve the situation regarding water and sanitation in secondary towns around the Lake Victoria. Together with four other international development organizations (UNESCO-IHE, GWA, FCM, NETWAS), SNV aims to build the capacities of the stakeholders within the water system of those respective towns. Through building these capacities, it is envisioned that the community will also benefit, because the stakeholders are better able to deliver basic services.

One of the towns around the Lake Victoria targeted within the LVWATSAN Programme is Bunda, a secondary town in the northwest of Tanzania, shoring the Lake Victoria. In Bunda, water flows in limited proportions to the community, while the availability of water is enormous, thanks to a very high water table and plenty of surface water. However, access to water is more problematic, not to speak about the quality of the water. Although water scarcity is not critical in Bunda, severe problems exist around the distribution of and access to water. Bunda’s growing population, as well as the geographical location of Bunda within the Lake Victoria basin, request to invest in a properly working water system. Water should be made accessible to the community, though it should also be secured that the environment is not burdened by the water use and the behavior of community towards sanitation and environmental conservation. The situation regarding water, sanitation, solid waste management and environmental conservation, made UN-HABITAT decide to include Bunda in the LVWATSAN Programme.

The five international development organizations (called the Capacity Building Consortium, hereafter: CBC) contribute to the final objectives of the LVWATSAN Programme, by developing the capacity of the water system as a whole. The definition ‘capacity’ refers to the way the water system in Bunda works. As Box 1.1 describes, capacity is much broader than the hardware or the actual water provision. All efforts made by individuals and organizations, as well as legislation and laws, determine how the water system works, and, in turn, how water is provided to the community. The water service delivery is thus a derivative of the working of Bunda’s water system (BWS). The CD Process of the CBC aims at

**Box 1.1 - Bunda’s Water System (BWS)**

*This definition refers to all components determining the water service delivery and water circle. It thus includes software as well as hardware. The sum of competencies and functioning of actors and different responsible organizations, pipes and pumps, community behavior, pricing mechanisms, formal and informal institutions, legislation and laws. This is the context in which this research takes place and the BWS will also be approached as much as possible as one whole system, rather than its respective parts, because the ultimate capacity also comes about in the synergy between all these different elements of Bunda’s water system (see more in-depth chapter 2, 4).*

improving the capacity of BWS, in order to improve the water service delivery to Bunda's community. BWS is organized in a specific way, with strengths and weaknesses. Developing the capacities can happen in many different ways, based on the existing situation. It is possible that the CBC will focus on through training individuals, promoting collaboration, emphasizing on human resource management or creating necessary by-laws. There are numerous intervention opportunities ultimately leading to an improving of the water service delivery.

Capacity development is a process that can take many forms and many different interventions are part of it. However, in most of these processes, people are involved as actors. Whereas it concerns the repairing of pumps or the creation of by-laws, people are the key to the way these processes take place. The same applies to BWS. There is a wide range of people involved in the BWS, often being part of an organization. These people and organizations are referred to as the stakeholders in BWS (see box 1.1).

There are some facts available about the water service delivery in Bunda, though the capacity of BWS is unclear. For effective capacity development (CD) which contributes to the working of BWS, it is necessary to know where to start the CD process. This research, together with the efforts undertaken by the CBC, aims to get an insight in the working of BWS, in order to investigate which capacity development can contribute to an improvement of the BWS. The CBC started this research process in March 2010, when they did an capacity assessment inquiry in Bunda. This inquiry gave already much insight in the capacity of BWS. Based on the findings of this inquiry, the CBC designed a Capacity Development Plan, which indicates the interventions to be undertaken to improve BWS. This inquiry has been the first phase of this research.

The second research phase is, in two ways, a follow-up to the inquiry of the CBC. The second research phase is firstly designed to receive a deeper understanding of the local situation in Bunda and the capacity of BWS. Secondly, the second research phase aims at investigating whether the CD Process as designed now, will be able to contribute to BWS. The research question is therefore:

*What is the capacity of Bunda's water system and to what extent is the capacity development process, within the Lake Victoria Water and Sanitation Programme, able to contribute to an improvement Bunda's water system?*

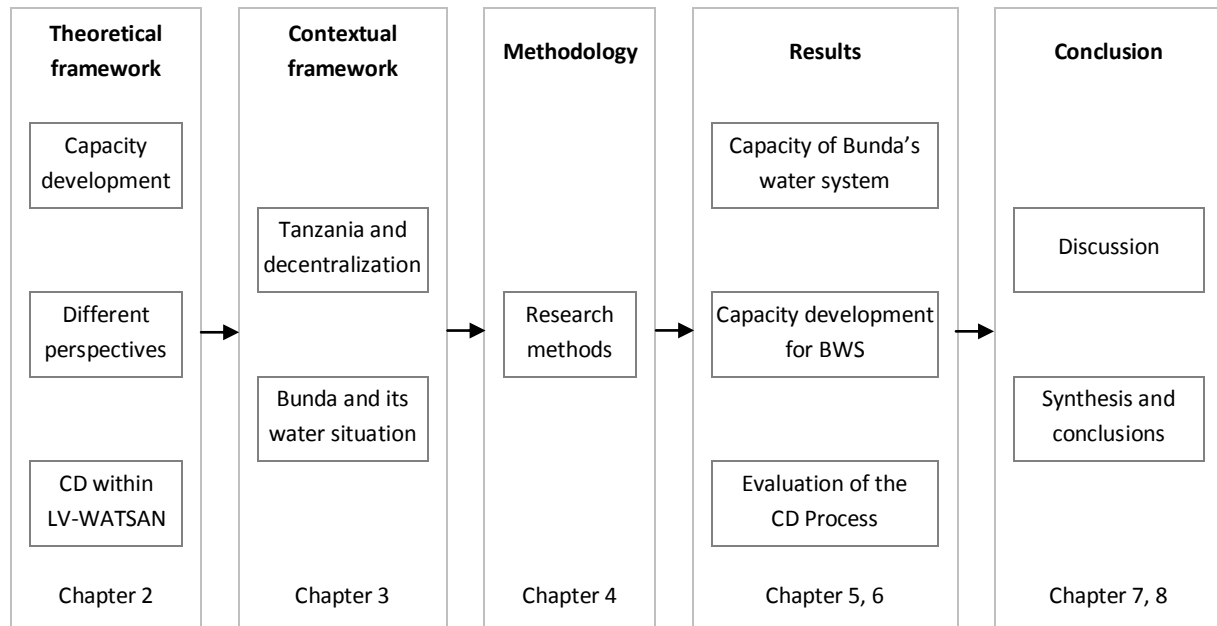
The research question is two-folded, as it firstly focuses on the existing capacity of BWS, while the second focus is to what extent capacity development can contribute to an improvement of this water system. These sub-questions cover a broader set of questions to be answered, as will be explained in detail in the methodology chapter:

- What is the existing capacity of BWS? Which stakeholders are involved in this system? Which strengths and weaknesses can be identified, that make BWS perform the way it does? What is the perception of different stakeholders of the systemic capacity? What is the capacity of BWS in terms of water service delivery?
- How is the CD Process within LVWATSAN designed? Which specific interventions are proposed by the CBC to develop the capacity of BWS? To what extent are these interventions necessary and relevant according to the stakeholders in BWS? What is the quality of the designed CD Process, based on some indicators? Will the CD Process as designed now be able to lead to a successful outcome?

This research serves as an in-depth study of the local situation in Bunda. The working of the BWS is assessed and possible capacity development opportunities will come up. It should be emphasized here that this research primarily focuses on the topic of capacity development, within the context of BWS. It is assumed that this CD Process will in turn lead to an improvement in water service delivery. However, the research mainly deals with the topic of the capacity development process of the CBC.

The structure of this thesis is shown in figure 1.1 on the next page. This first chapter introduced the research. The second chapter will cover the theories regarding capacity development, while the third chapter will provide a thorough explanation of the methodology of this research and its relation with the theories provided in chapter 2. The methodological chapter will serve as a base to present reliable and valuable results in chapter 5 and 6. In between, the fourth chapter addresses contextual relevant information. The seventh chapter will discuss the findings and put them in the context of the contemporary debate on the problems faced in development cooperation. The conclusions of this research will be presented in chapter 8, together with some recommendations that 'flow' out of this research.

Figure 1.1 - Structure of this thesis



The fieldwork took place in Bunda, Tanzania. The supervision during the process came from advisors from SNV, though their office was in Mwanza. The host organization for the internship period has been the Bunda Urban Water Supply Authority (BUWSA). This 'semi-public' (in transition to private) organization is the supplier of piped water for Bunda Town. They delivered me a very proper working place, and although I had to adapt to their working style it worked out quite well after some time. And, BUWSA is very close to the fire, which offered many opportunities to get an insider perspective of Bunda's water system.

## 2. Developing capacity: theory and approach

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“CD is a process that serves as a catalyst, to speed up, or improve the work to be done in a proper way”

*Mr. Jumanne Tubert, Technical Manager BUWSA*

Many international development organizations declare capacity development (CD) being a major business, an important way of giving development assistance (Blokland et al, 2009). These international development organizations are increasingly involved in programs and processes aiming to improve the capacity of a multitude of recipients. Participants involved in these capacity development programs can be multiple, such as public or private organizations, individuals, NGO's, CBO's, or often, a constellation of these different recipients. Approaching different recipients together is often emphasized (SNV, 2007), because it connects different stakeholders working in the same field, and is likely to build joint ownership among the different recipients of CD activities. Moreover, opportunities for improvement through CD often emerge where people work together and jointly strive for a shared goal (Burns, 2007). Despite the promising opportunities of CD as a way of giving development assistance, academic literature also points out that effective capacity development is difficult and hard to reach. This chapter starts with an elaboration on the emergence of capacity development within the development cooperation practice, its principles, characteristics and meanings.

Criticism on the temporary capacity development approach increasingly comes from systemic theorists. They criticize traditional development cooperation, because it assumes the reality as being easily changeable through capacity development plans, filling capacity gaps. Systemic thinking, in contrast, assumes the reality as being complex, difficult to understand and rather im-

possible to be engineered in a preferred way. Byrne (1998) underlines this systemic nature of reality and criticizes more traditional, reductionist, perspectives on the world: *“Once we can predict, we can engineer the world and make it work in the way we want it to (...). The trouble is that much, and probably most, of the world doesn't work in this way. Most systems do not work in a simple linear fashion”*. A discussion opens up whether the design of capacity development processes and the assumptions behind those processes are correct. Systemic thinkers argue that a new perspective to capacity development is necessary, in order to better adapt to the complexity of reality (Burns, 2007).

### **Box 2.1 – Capacity development process**

*This definition refers to (inter)national development organizations engaging in a process of developing capacities of a multitude of recipients.*

The CBC also adopts this systemic perspective towards capacity development during their activities in the LVWATSAN Programme. These organizations argue that the systemic perspective influences the capacity development process in a positive way. The systemic perspective has been guiding in the design of this research as well. This chapter will elaborate as well on the systemic perspective towards CD more in-depth. The methodological implications of the systemic perspective will be explained in chapter 3.

Capacity development processes as mentioned in the previous paragraph are generally labeled as capacity building. This can take place in many different ways, with even more objectives. Critics would say that CD can mean almost anything regarding development work. Although it indeed has different meanings, it is also a specific field in development cooperation that receives more attention ever since the beginning of the 1990s (Blokland et al., 2009). Donors and NGOs are increasingly involved in capacity development projects and processes. Encouraged by the generality of the terms ‘capacity’ and ‘capacity development’, this chapter aims at explaining what it exactly is, its history, urgency and practice. Different approaches will pass the revue, of which the systemic perspective towards CD will receive extra attention. Section 2.1 will elaborate on the definitions of capacity and capacity development and mention how these concepts are interpreted for this research. The following section, 2.2, points out different approaches to CD, the systemic perspective and the reductionist perspective. These perspectives both have their advantages and are both followed in the ‘development industry’. The final section of this chapter will present on the approach to CD within the LVWATSAN Programme. Ultimately, the objective of this chapter is showing the difficulty of fulfilling the conditions of CD in development cooperation.

## 2.1 Defining capacity and capacity development

Capacity development processes as they are known today, emerged during the end of the 1980s (Lusthaus et al., 1999). These years marked the disappointment of the neo-liberal approach, including the SAPs. The economic and financial assistance given by donors was not able to deliver results as desired. New problems emerged, requiring for new approaches towards development cooperation. The capacities of institutions and stakeholders received extra attention as drivers of growth (Potter et al., 2003) and in many sectors of society; a need for capacity building was identified. The water sector as well experienced many difficulties because its well functioning is dependent not only on the quality of its infrastructure but as well on the capacity of involved organizations for water supply and the individual capacity of water users. These capacities were assessed as being too limited and had to be strengthened (Alaerts & Kaspersma, 2009). Strong institutions and proper social behavior are as important as the infrastructure itself (Blokland et al, 2009). Not surprisingly, the water sector was one of the first sectors where the need for capacity development and was identified and focused development programs were introduced, next to investments in hardware to improve sustainable access to water (Alaerts et al., 1991).

From the 1990s onwards, capacity development is in the heart of many projects and programs in development cooperation. According to development workers in the field, it is not possible to overestimate the necessity, urgency and positive impact of CD (van Klinken, 2010). It is sometimes brought up as a sine qua non, the indispensable and essential condition for effective development work, the missing ingredient; and without it, development is not able to take place (Yocarini, 2007). Although this is a heavy statement, capacity development has proved its value, because it is already in the heart of development work for years, and it is not another new wheel invented in the development business, that shall fade away in a few years. In addition, there is more debate about 'how' to undertake CD practices, than 'if' it should be done. CD has become 'the way' to do development (Blokland, 2009; Potter et al., 2003)

Capacity development is regarded as a container or umbrella concept. Many activities fit in the same box and wear the CD label (Morgan, 1998). A massive body of literature tries to define 'capacity' and capacity development. This is reinforced by the fact that many different disciplines use the term 'capacity'. From business administration to metaphysics, they all deal with the issue of capacity. The research at stake here distillates its knowledge mainly from development cooperation literature, realizing this literature is influenced by other disciplines. In the development cooperation debate, there is no common definition of capacity and capacity development. A range of definitions is in use, although more consensus on the connotation of the concept of CD grew during the last decade. In 1998, the International Working Group on Capacity Building, part of UNDP, found that 60% of the development organizations did not have an explicit approach to capacity development (IWGCB, 1998). Nowadays, most organizations have definitions and guidelines towards capacity development (Blokland et al. 2009).

### 2.1.1 Defining capacity

Capacity development processes start with identifying already existing capacities and capacities to be developed. Identifying these capacities is done, based on a picture of what is capacity. Capacity can be defined in different ways, leading to different capacity development processes. This research therefore starts with identifying the term 'capacity', in order to guide this research. Different definitions of capacity emphasize different elements. Simply stated: capacity refers to the ability of an entity (organization, individual, system) to function and to achieve objectives (BusinessDictionary, 2011). It can be split up in various dimensions, capacity in terms of quality of involved human resources (knowledge, skills, attitude), capacity in terms of physical and material resources, financial resources, or relations with other entities in a system. Below are some of the definitions used in development cooperation, and commonly repeated by others:

- Capacity is the ability of individuals, groups, institutions and organizations to identify and solve problems over time (UNDP, 1993).
- Capacity is the ability to perform appropriate tasks effectively, efficiently and sustainably. This implies that capacity is not a passive state, the extent of human resources development for example, but part of an active process (Hildebrand and Grindle, 1994).

- Capacity is the emergent combination of attributes that enables a human system to create development value, the overall ability of a system to perform and sustain itself: the coherent combination of competencies and capabilities (Zinke, 2006).
- Emergent properties, such as capacity, come from the dynamism of the interrelationships in the system. The challenge is not so much to build or enhance them as it is to unleash them or find ways to encourage their emergence (Morgan, 2005).
- Capacity: the capability of a society or community to identify and understand its development issues, to act to address these, and to learn from experience and accumulate knowledge for the future (Alaerts & Kaspersma, 2009).
- Capacity comprises well-developed institutions, their managerial systems, and their human resources, which in turn require favorable policy environments, so as to make the water sector effective and sustainable (Delft Declaration, 1991).

The above definitions show that capacity has many different elements but focus all on ‘intangible’ matters and refer to the emergent combination of individual competencies and collective capabilities that enables a system to create value over time. In other words:

- Capacity can be distinguished on different levels. Up from the individual to a system or constellation of actors. In addition, some argue that capacity starts in the dynamics where individuals and organizations are in interrelation with each other
- Capacity is about being able to bring something a step further, although the extent differs. Solving problems over time is different from creating sustainable solutions. Learning from these experiences is another step further.
- Capacity comes about when actors utilize their capabilities in a process. It is not a passive state. It refers to a process in which actors are involved rather than their abilities at a certain moment.
- The last definition specifically speaks about the water sector. This definition stresses different elements (institutions, management, policy), but also makes clear that the interrelations between these are very important.

Capacity refers to the ability of actors to take up a process of change on different levels (individual, organization, system) as well as in the dynamics of the interrelations between these different levels. This last element is very important, especially for systemic thinkers. They argue that the ultimate capacity comes about in the interrelationship of individual competencies and collective capabilities. Individuals and collectives are linked in one system and it is within such a human system that capacity emerges and develops (see for further explanation section 2.2). The example of Bunda in the following paragraph is used to illustrate this definition of capacity.

The working of the BWS depends on different actors and organizations, network of pipes and pumps, processes and institutions, formal as well as informal. All these different components at the local level, together determine the working of BWS and, as a derivative, the state of water service delivery. The capacity of BWS is determined by the sum of all different parts. It is therefore the challenge to find out how this capacity emerges and to find ways to encourage their emergence (Morgan, 2005). Capacity does not only refer to the competencies of specific actors, but also to the existence of the piped water network or the capabilities of the community towards environmental preservation. All these elements together form the capacity of BWS.

### **2.1.2 Defining capacity development**

Capacity development in development cooperation has to do with activities and interventions geared to extent and improve the capabilities of human systems in developing countries. Capacity development refers to (inter)national development organizations engaging in a process of developing capacities of a multitude of recipients (UNDP, 1997) It is, again simply stated, a type of approach in development cooperation derived from theoretical ideas from both the human development and institutional development theory, but with post-development elements.

Coming up with a definition of CD is even more difficult than defining capacity. *There are about as many definitions of capacity development as there are organizations to support it (Yocarini, 2007, p. 72), ranging from ‘developing core skills and*

*competencies* to 'enhancing the ability to evolve and adapt to change' (Hailey and James, 2006, p. 3). It is an umbrella concept referring to many activities (Morgan, 2008). Using it as an umbrella concept has both positive and negative consequences. On the positive side, many people see CD as an integrating force that brings together a large number of stakeholders believing that CD is an important part of the development puzzle. On the negative side, CD has taken on many connotations and meanings and is used as a slogan rather than as a term for rigorous development work (Lusthaus et al, 1999).

Out of the multitude of definitions found in the literature, the following summing up is made. The bullets refer to the most important principles, found among the objectives in capacity development processes and programs. There seems to be an emerging consensus that CD involves the following key principles. These are:

- Long-term engagement - It is commonly acknowledged that, if to be done sustainably, CD is a long-term process. This is rather conflicting with the fixed time span and project nature of the development business. CD practitioners show much criticism for this short-term result-driven approach of donors and multi-lateral agencies (Alley & Negretto, 1999; Nelson & Tejasvi, 2009). The deliverer of CD is the first one responsible to secure the opportunity of long-term engagement, where it concerns their contribution, but also from the recipients.
- Contributing to sustainable social and economic development – the 'teach a man to fish' metaphor is mostly reflected in this bullet. CD is used as an approach to sustainable development because it equips people to take up a process of change themselves (Dia, 1996; Lusthaus et al, 1999).
- Demand-drivenness - Unless local actors understand and own the CD process, any gains from capacity building are likely to be very short lived (Alley & Negretto, 1999; Burns, 2010)
- Enhancement and strengthening of existing capacities - Rather than establishing new structures and bringing capacities from outside, it is stressed that CD has to build on 'what is', rather than 'what isn't' (Taylor & Clarke, 2008; Blokland et al, 2009; Burns, 2010)
- Appropriate design and joint agreement on the interventions - The CD organization should make sure that the design of a CD process is done carefully, just as it is necessary that the local actors agree on the issues raised, in order to foster ownership and collaboration (CIDA, 2000; Blokland et al, 2009).
- Broad-based participation and integration of activities at various levels to address complex problems - As much stakeholders as possible should be involved in the CD process, to create a broad threshold, but also to get as much insight as possible in the working of existing processes (CIDA, 2000; UNESCO-IHE et al., 2008; Burns, 2010; Baser & Morgan, 2008)

The above principles are often mentioned in relation to the CD practice. These are guiding principles in order to achieve effective capacity development. Most of the development projects and programs dealing with capacity development refer to these principles, although the degree to which it fits differs. In former years, NGOs tended to focus on development of organizations, while the WB and IMF focused more on the developing institutions. The United Nations placed itself somewhere in between, by focusing on the strengthening of sectors (Lusthaus et al, 1999). These days, the distinction between the various foci has blurred (Baser & Morgan, 2008). The capacity building consortium (CBC) within the LVWATSAN Programme also refers to most of the principles presented above. The last three principles are especially guiding in the CD approach of the CBC. This is also reflected in the methodology, especially section 3.2 and 3.3.

### **2.1.3 The birth of the CD approach – standing on the shoulders of others**

Capacity development as a way to do development work came up in the 1990s. CD as an approach towards development is also positioned within the range of development approaches, derived from development theory. This enables an analysis of the CD spectrum of tools, means and intervention levels. In the practice of development cooperation, CD emerged as an approach in the 1990s, standing on the shoulders of its predecessors, but not only. The birth of CD is also, as usual, caused by disappointment over earlier approaches that were not able to deliver the results expected. In general, it is a response to *widely acknowledged shortcomings in development assistance over the past fifty years, e.g. the dominant role of donor-led projects and inadequate attention to long-term 'capacity' issues. A consequence of these shortcomings has been limited sustainable impact in priority areas such as poverty reduction* (CIDA, 2000, p. 1).

Capacity development thus arose partly out of disappointment, but it is not a complete new invented wheel. The former practice in development cooperation, getting out of fashion, made it possible for capacity development to emerge as a new development approach. These predecessors all influence the interpretation of CD as known today. The most important predecessors are shown in table 2.1.

Table 2.1 – Predecessors of capacity development

	Term	Associated meaning
1950	Institution building	<ul style="list-style-type: none"> <li>- Objective: to equip developing countries with basic inventory of public sector institutions required to manage a Programme of public investment</li> <li>- Focus: design and functioning of individual organizations, not broader environment or sector</li> <li>- Imported or transplanted models from developed countries were often used</li> </ul>
1960	Institutional development	<ul style="list-style-type: none"> <li>- Shift from establishing to strengthening institutions</li> <li>- Focus: still on individual institutions and not a broader perspective</li> <li>- Tools were expected to help improve performance</li> </ul>
1970	Development management	<ul style="list-style-type: none"> <li>- Objective: to reach special public or target groups previously neglected</li> <li>- Focus: delivery systems public programs, governmental capacity to reach target groups</li> </ul>
1980	Human resource development	<ul style="list-style-type: none"> <li>- Development is about people</li> <li>- Stresses importance of education, health, population</li> <li>- Emergence of people centered development</li> </ul>
1990	New Institutionalism	<ul style="list-style-type: none"> <li>- Focus: broadened to sector level (government, NGO, private)</li> <li>- Emphasis on networks and external environment</li> <li>- Attention to shaping national economic behavior</li> <li>- Emergence sustainability issue and move away from project focus</li> <li>- Emerged in 1970s through field of institutional economics</li> </ul>
2000	Capacity development	<ul style="list-style-type: none"> <li>- Emerged in the 1990s as an aggregate of many other development approaches</li> <li>- Re-assessed the notion of technical cooperation (TC)</li> <li>- Stresses importance of ownership and process</li> <li>- Has become “the way” to do development</li> </ul>

Sources: Lusthaus et al. 1999; Potter et al., 2003

The distinction between various approaches in development cooperation over time is not always clear. Especially institutional development and CD are closely related, just as human development and organizational development are close. However, CD is distinct from institution building approaches that entailed starting from scratch to build institutions based on the models used in the donor countries. CD is a response to the “*structural and functional disconnect between informal, indigenous institutions... and formal institutions mostly transplanted from outside*” (Dia, 1996). *Capacity development draws on the lessons of fifty years of experience, fostering approaches that are more systematic, integrated, and where the process is owned by the responsible country, organization or stakeholders* (CIDA, 2000, p. 1). Through the descriptions of the different predecessors, it becomes visible is an approach fitting in the focal points of contemporary approaches: bottom-up, participatory, alternative, and human development (Potter et al, 2003).

#### Means and ends

If there is one important distinction to be made between different CD interventions, than it is on the topic of means and ends. Some interventions use capacity development processes to achieve other development results, for instance an improvement in basic service delivery. CD is then used as a development tool, to enter another stage of service delivery. Other projects and programs aim at developing the capacities of an organization or institution as an end in itself. Capacity development then does not have a specified goal and implicitly it is assumed that this capacity development will in turn lead to all sorts of improvements and development. CD is in this line used as a development objective. This distinction is more or less the common split between means and ends (CIDA, 2000; Baser and Morgan, 2008).



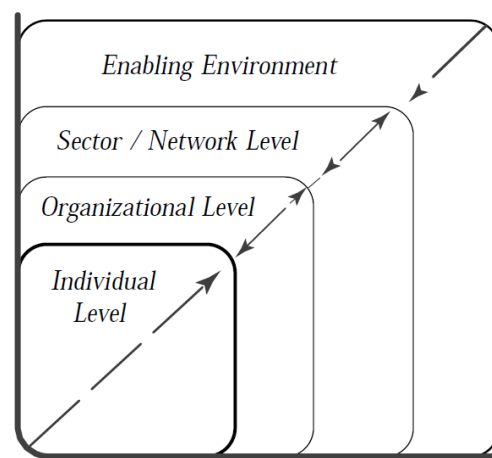
The development business generally adopts the first policy towards capacity development. CD is used as a tool to reach another objective (Morgan, 2005). The same applies for UN-HABITAT, also aiming at improving water supply and sanitation coverage through CD. Using CD as a tool to reach another objective makes it easier to monitor the impact of the CD intervention. The evaluation of the LVWATSAN Programme will also focus on concrete measures. This enables a better analysis of the impact of the CD process. There are also CD processes that have ‘increased capacity’ as objective. These processes are difficult to evaluate because ‘increased capacity’ is rather hard to measure (Yocarini, 2007). It is argued that the latter policy is better able to deliver sustainable results in the long term, while the former approach is more a quick-win strategy. In addition, development cooperation still focuses very much on delivering concrete results, which is in contrast with an effective approach towards capacity development.

## 2.2 Systemic against reductionist perspective towards CD

The theory about capacity development can be split up in two different perspectives towards CD, already touched upon in section 2.1. The different definitions of capacity and capacity development fit in these different perspectives towards CD. The first is the reductionist perspective (RP). This is the traditional way of approaching CD and is practiced very much in the development business. The systemic perspective (SP), in contrast, is newer and less known, though receives much attention in recent years. The difference between the two perspectives lies mainly in their view on the complexity of reality, which will be explained more in detail in the following sections.

The terms ‘reductionist’ and ‘systemic’ are abstracted from Baser & Morgan (2008). Reductionist tends to have a negative connotation, though this is not true. Reductionist is used to distinguish from systemic, which focuses on interrelatedness. The theories and practice of these two CD perspectives differ, due to the different interpretation of capacity itself. The systemic perspective is also worth mentioning because it is used by SNV as a whole, and by the CBC within the LVWATSAN Programme (see sections 2.4 and 3.2).

Figure 2.1 - Different levels for CD interventions



Source: CIDA, 2000, p. 8

### 2.2.1 Reductionist perspective

The different perspectives differ in their view of reality. The label ‘reductionist’ already explains the heart of this perspective. It cuts up reality and the processes taking place in different levels. “Human activities can be broken up into their component ‘parts’ or elements (e.g. roles, structures, resources) and then analyzed from the perspective of the behavior of and the forces acting upon each one” (Morgan, 2005). Moreover, the findings at the part level tell something significant about the whole system. Explanation of the whole comes from the cumulative properties of the parts. Figure 2.1 explains the RP very well, and such figures are found in many CD literature. The different levels are key to the figure, though it is acknowledged that they are related. However, the focus here is more on the parts than their interrelationships (CIDA, 2000).

The following bullets explain more in detail the elements that shape the RP:

- Reality is split up in different levels of analysis. It is assumed that knowledge about the whole derives from the knowledge of the separate parts. Different from the SP, the RP assumes that the total is equal to the sum of the parts.
- Capacity development takes place on the different levels. Designing level-specific CD interventions will lead to preferred outcomes on that level. These interventions do not influence the other levels, neither positive, nor negative. The different parts are autonomous while changes take place.

- The RP argues that cause and effect are in direct relation with each other. This also enables the RP to design level-specific interventions. Input and output are in direct relation with each other, making it possible to directly intervene on a specific capacity issue.
- The direct input-output relation also leads to the belief that it is possible to monitor the effectiveness of interventions based on goals and objectives (as also explained in 2.1.3).

CD according to the RP is often about fixing things that do not work properly. This improving happens based on the image of a giant clock that can be fixed in order to improve results. Replacing broken parts and installing improved components, such as skilled staff, will in turn lead to a better performance. Terminologies used in line with the RP are definitions, such as planning, control, order, efficiency, standardization, and prediction (Baser & Morgan, 2008). One of the most famous applications of reductionist thinking as a whole is the logical framework, introduced to development cooperation in the early 1970s and still used by many international development agencies (Morgan, 2005). A Logframe is helpful in clarifying information though is also static and reductionistic (Burns, 2007).

Within the RP two main foci for capacity development can be distinguished: organizations or institutions. The organizational development (OD) stresses the importance of strengthening the capacity of specific organizations. This view refers to improvements in the ability of public sector organizations to perform their tasks. OD can target governments or NGOs as well as other CSOs and CBOs (Lusthaus et al, 1999). Institutional development (ID) on the other hand builds on the ideas of 'new institutionalism' (see table 2.1), building up institutions and improving the 'rules of the game' (Scott, 1995; North, 1994). ID builds the capacity to create, change and enforce, and learn from the processes and rules that govern society (Cohen, 1994).

### **2.2.2 Systemic perspective**

The OD and ID do fit in the RP, because they largely split up organizational and institutional levels. These levels are targeted separately. The systemic perspective is already known since the 1990s but especially gained interest when the OD strategy was not able to deliver results as preferred. The SP is thus, on the one hand, a reaction on the RP and on the other hand an already existing perspective receiving extra attention in recent years. The heart of the difference between the perspectives lies in a different view on reality and its complexities. Actually, the idea of a complex reality does not really exist within the reductionist perspective, while it is in the heart of the systemic perspective. The following bullets explain more in detail the criticism by systemic theorists on the RP and explain the way they perceive the complexity of reality (Morgan, 2005; Baser & Morgan, 2008):

- Reality consists of human systems. These human systems are networks of people and processes that are not restricted to specific levels of analysis. There are many interconnections amongst and between different levels. The RP is not able to understand the dynamics in systems, which comprise of human activities, because it splits up the different parts too distinctive. In contrast, what matters most, is understanding the processes that make a system work in the way it does.
- Cause and effect are never in linear relation to each other. The RP is too simplistic and not helpful in dealing with multiple or delayed causality. Cause and effect are often separated in time and space and it is hardly impossible to measure how input and output are in relation with each other. The challenge in systemic thinking is to try to make possible desired outcomes more probable.
- Much CD interventions aim at fixing things and filling capacity gaps in order to improve the situation. The systemic perspective puts less faith in planned, engineered solutions. Systems already have their own dynamics that are not easy to manage. The clue is more how to strengthen this dynamics, rather than solving problems. There is emphasis on evolution and emergence of opportunities through the usual working of the system and adapting to these opportunities. Interventions according to the SP are different from the RP. The SP emphasizes close collaboration with the system to be intervened, and close following up on the intervention. Based on this analysis, the intervention should be readjusted, because it is already assumed that the cause (intervention) and effect are not linear related.

The systemic perspective towards CD is the basis on which the CBC works within the LVWATSAN Programme. It is therefore relevant to give some extra attention to underlying principles of the systemic perspective. The systemic perspective on capacity development is rooted in systemic thinking. This thinking looks at the whole system to unlock complex problems

(Senge, 1990). There are some key systemic concepts that form the basis for the systemic perspective. These concepts are (Burns, 2010; Worsley, 2009 (examples)):

- Interrelatedness - Within systems, everything is related to everything else. Small changes may achieve a huge amount. Large changes may achieve little. Small adjustments in water charging policy can significantly change the dynamics of UFW and coverage. Unclear projects that “miss the point” can rarely achieve the results intended.
- Emergence - One thing leads to another and these emerging elements are worth giving attention. A newly formed water company wants to develop its systems, but does not know how. A first step to define its ideas leads to an exercise of documentation, then a scan of who might be interested, to a courting of investors, and a partnership with an investor, who may then share investment ideas with a group of venture capital funds and secure a stream of investment capital.
- Non-linearity - More often than not Intervention A does not lead to outcome B. It is assumed that privatization of water systems will lead to better access in a rural water system. However, this does not happen because social dynamics prohibit people with HIV from accessing the water kiosk.
- Underlying systemic patterning - There are always underlying systemic assumptions and systemic patterns. These patterns and assumptions are influencing human systems though they are hard to reveal, because they are often underlying. Accumulated assumptions lead to belief sets: Water is a right, not a commodity!
- Unintended consequences - There are always unexpected outcomes, which are very hard to predict. This is due to underlying unexpected forces, though also across boundaries.

The impact of these different underpinning principles for CD can hardly be underestimated. The SP approach to CD is very much influenced by the systemic notions that reality is complex and hard to understand; consisting of a large field of relations with its own processes and patterns, not always visible for insiders, let alone outsiders of this system. A system could best be compared with an organism; living, changing, and continually adapting to its environment. A water system, for instance, changes every day and has to adapt to these changes. The inflow of water, pipes breaking down, contamination of water, misuse of water, changes in regulations, political changes, human resource strategies and underlying assumptions; all elements together shape the way a system works.

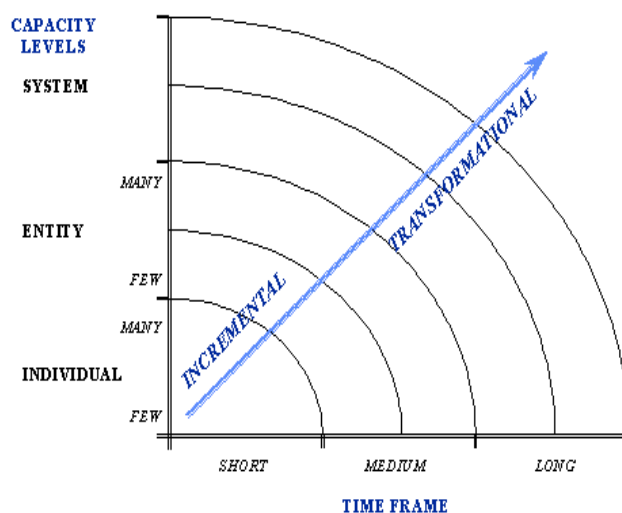
The SP keeps pretensions low about the ability of a CD process to successfully tap in to such a system with its own dynamics. Managing such CD processes should more focus on adapting to opportunities emerging after one taps in to a system. A pre-designed capacity development ‘plan’ that will be implemented is criticized by systemic thinking. The SP envisions a more middle-up-down CD process, focusing on the processes already at work that need specific attention; adaptation to these processes as well as innovation and change management are in turn approaches fitting better with the SP. However, as mentioned before, the development business is not always designed for those more long-term processes that need close follow-up and adjustment through the process.

### 2.2.3 Evaluation

The systemic perspective, which is important for this research, differs much from the reductionist perspective towards CD. Table 2.2 and figure 2.2 evaluate and show once more the main differences between the two perspectives. The table shows the main differences between the two perspectives, based on different aspects that are relevant for capacity development.

Figure 2.2 shows the ultimate purpose and desired outcome following the different perspectives. The

Figure 2.2 – Incremental vs. transformational change



Source: UNDP, 1997

systemic perspective to CD pretends to be focused more on transformational change. It does this by having a long-term perspective in which the working of the whole system receives attention. Theoretically, it is true that the systemic perspective is more long-term and that is a very positive element. At the other hand, much of the CD programs are still designed along fixed time spans as to achieve measurable results. This is in conflict with the long-term engagement the systemic perspective envisions. However, the development business should rather question whether they can change their approach to development work, than that they move out the systemic perspective through the back door because it is not applicable. The systemic perspective is a very valuable approach to CD. Although not put into practice that much, it builds on a massive body of information and experience from management and organizational disciplines, that sounds promising (Baser and Morgan, 2008).

Table 2.2 - Comparison of assumptions in different approaches to planning

Aspect	Reductionist perspective	Systemic perspective
Source of direction	Often top-down with inputs from partners	Depends on connections system agents
Objectives	Clear goals and structures	Emerging goals, plans and structures
Diversity	Values consensus	Expects tension and conflict
Role of variables	Few variables determine the outcome	Innumerable variables determine outcomes
Focus of attention	The whole is equal to the sum of the parts	Whole is different than the sum of the parts
Sense of structure	Hierarchical	Interconnected web
Relationships	Important and directive	Determinant and empowering
Measures success	Efficiency and reliability	Responsiveness to the environment
Paradox	Ignore or choose	Accept and work with it
Interventions (ext.)	Direct	Indirect , creates conditions for emergence
Intervention point	Design for large, integrated interventions	Where opportunities for change emerge
Uncertainty	Try to control	Work with chaos

Source: Baser and Morgan, 2008

**2.2.4 Back to ‘capacity’**

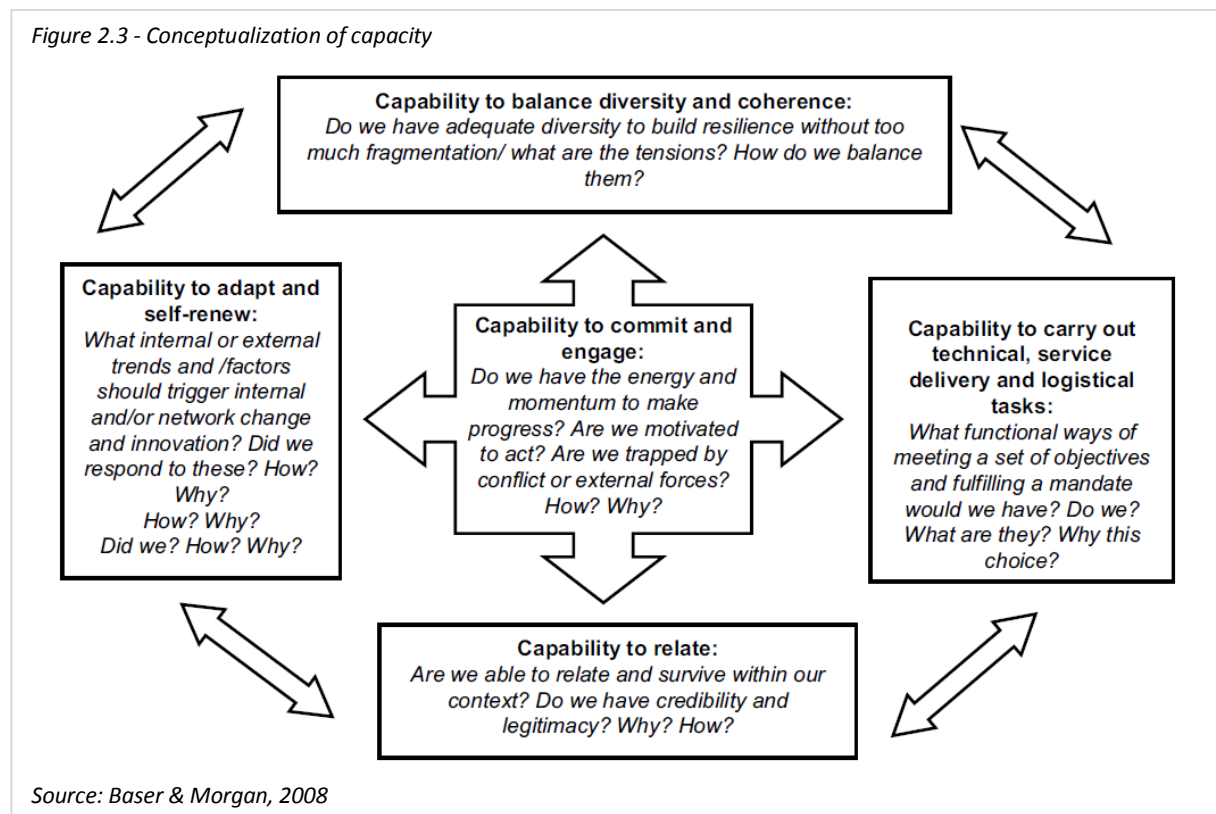
Section 2.1 already dealt with different definitions of capacity. It is now clear that some of these definitions are derived from a systemic perspective while others have a reductionist connotation. UNDP’s definition (1993) is very reductionist - capacity is the ability of individuals, groups, institutions, and organizations to identify and solve problems over time. Morgan (2005), the spiritual father of the systemic perspective within development theories, follows a systemic definition - emergent properties, such as capacity, come from the dynamism of the interrelationships in the system. The challenge is not so much to build or enhance them, as it is to unleash them or find ways to encourage their emergence.

The literature provided by Morgan is part of a large bulk of articles, produced by the European Center for Development Policy Management (ECDPM). On behalf of GOVNET and OECD-DAC, ECDPM is engaged in a research project on the issues of capacity, change and performance. They especially explore the possible value of systemic thinking for capacity development issues. Years of research led to satisfying new ideas for the theory and practice of capacity development. The development strategy of SNV, also one of the contributing organizations to ECDPM’s research project, is very much influenced, and changed due to the insights of this research.

One of the objectives of the research at stake here has been to give particular attention to “clarifying the nature of capacity and how it emerges, declines or sustains itself in a variety of settings” (Morgan, 2005). The scheme in figure 2.3 shows the final conceptualization of the concept of capacity. The interpretation of capacity follows a systemic reasoning and is not focused on individuals. “Working with individual people does not have an immediate linear relationship with overall capacity, as is assumed in some interventions” (Baser & Morgan, 2008). Capacity, according to Baser & Morgan, is a set of capabilities that enable a system or organization to carry out a particular function or process either inside or outside the system. Such a capability is a collective skill or attitude. Collectives like an organization or system are made up of individuals, so, to this extent it is also true that these capabilities can be applied to individuals. Though, it should be taken into account that

capacity comes about in the collective. *“The existence, effectiveness and interrelationships of collective capabilities are critical to capacity as a system condition. (Baser & Morgan, 2008).*

Figure 2.3 - Conceptualization of capacity



The five core capabilities request some extra explanation. The inquiry questions under the different capabilities (in figure 2.3) already give some direction though do not completely satisfy. The following bullets explain the different capabilities more in detail, most in the words of Baser & Morgan (2008):

- Commit and engage – organizations or systems must be able to have volition, to choose, to empower and create space for themselves. It is about the conventional term ‘ownership’, but also goes beyond. It is about attitude and self-perception. In case studies, it came out that this capability was often developed in an attempt to improve overall capacity. It is assumed this one to energize all others. Actors that developed it could overcome enormous constraints. When it was absent or weakened, they produced little of value.
- Carry out technical, service delivery and logistical tasks - this capability is the heart of many CB projects, and is a elementary component of capacity. It is also about the relation between the exact task and performance.
- Relate and attract resources to support – this is about being able to craft, manage and sustain key relationships. It is also about gaining legitimacy, earning trust and surviving within the specific context. It is about making and sustaining the organization or system a relevant player within the bigger system.
- Adapt and self-renew – is about being able to improve individual, organizational and system learning, fostering an internal dialogue, and changing the organization if necessary. New ideas have to be incorporated and new routes for the futures have to be explored.
- Balance diversity and coherence – This bullet describes the capability of balancing and managing different forces within or out of the system. Different, sometimes conflicting, capabilities within an organization have to be balanced. Though also balancing between stability and innovation, and encouraging both. It is also about being able to balance between soft and hard elements of an organization; or long and short term. After all, it is also about being able to communicate about this throughout the system or organization.

These five core capabilities can be found in all systems and organizations, though the extent differs. More developed systems are able to deal with greater complexity and have an increased capacity. This capacity is an emergent combination of the above written collective capabilities and individual competencies, enabling a system or organization to create value.

### 2.3 Difficulties with applying CD in development cooperation practices

Capacity development is a hot topic in development cooperation. It is generally acknowledged that hardware investments should always go hand in hand with software improvements. Often referred to as capacity building, many donors, and multilateral agencies are involved in capacity development practices. Some donors, like Netherlands, Sweden, Belgium, Canada, Denmark have reported two third or even higher percentages of their ODA devoted to enhancing capacity (Blokland et al., 2009). As development tool or objective, CD gained much interest and grew to the major activity. Despite these promising figures, there are also negative aspects related to the CD practice.

Especially Africa received and still receives very much capacity development, because institutions and organizations, as well as governments in the poorest continent are the most unable to perform their duties. Despite the fact that CD is also in Africa already practiced for years, it seems the development business is still not properly organized to support capacity development effectively. The embeddedness of CD within development cooperation is difficult. As mentioned before, this is mainly due to the conflicting nature of regular development work and CD processes. *“This is where the shoe pinches. In contrast to old-fashioned projects, which are time-bound, and have clear expected outputs, capacity development is a long-term process, whose outcomes and impact are difficult to predict at the outset and often hard to quantify”* (Yocarini, 2007). There are some attempts to overcome these conflicting pressures, though it is difficult to change the financial forces behind the development industry. This issue shows once more that development work is much more donor-driven than people would like to see. The donors are the main incentive behind the results-oriented drive within development cooperation. Whether or not this accountability force should be so strong, the fact remains that it complicates the CD practice.

However, to take capacity development practices up to a higher level, there are many recommendations to be found in development literature. Many organizations experience problems with utilizing CD in practice, either by their own inabilities, or by the structure of development cooperation. Most of the recommendations below related to the design and management of CD interventions. The issues mentioned here are a summary, by Nelson & Tejasvi (2009), out of the total recommendations to be found in the development debate:

- Lack of effective, participatory, diagnostic processes. Design of CD is not participatory; or the design is, but in practice, there are difficulties with integrating all the different actors into the CD process. An integration of LGA level, private sector, civil society and community is indeed hard to reach, but should be aimed for.
- Too much focus on one-off training programs and technical assistance through the use of external consultants. Outsiders’ bringing quick capacity development is too often the case, the sustainability of these processes can be questioned. Opportunities in the field of small-scale South-South learning and partnerships are explored on a very limited base.
- Overemphasis on technical approaches that pay little attention to the political economy, reform and issues of country ownership and leadership.
- Despite the ‘teach a man to fish-metaphor’, there is still over-reliance on supply-driven gap filling technical assistance, instead of helping partners to develop and learn sustainable ‘do-it-yourself’ methodologies.

These shortcomings are severe. It shows that there is still a world to win in the design and management of capacity development processes. A first recommendation is to promote demand-led CD. Local actors are often not owners of the CD process, keeping them less responsible for this process. Secondly, the short-term mindset that earmarked the past, should be changed for long-term engagement on the local level (Blokland et al, 2009). These two recommendations, long-term engagement and demand-drivenness, are key to new approaches towards development (Burns, 2007). The systemic perspective towards CD also promotes these elements to be driving forces behind CD processes within development cooperation.

A management approach that could help CD practice in the future is adaptive management (AM). It is designed along principles of the systemic perspective and handles the institutional dynamics in complex systems. AM is defined as “*the integration of design, management, and monitoring to systematically test assumptions in order to adapt and learn*” (Alaerts & Kaspersma, 2009). The objective of AM is to better manage the impact of an intervention, by investigating what happens within a system. An important component of AM is the involvement of stakeholders from beginning to end, to capture their knowledge and use it to derive a set of management options. An important advantage of AM is that the process consists of step-by-step learning, iteratively allowing to monitor what worked and what not, and to adjust the intervention process (Blokland et al, 2009).

## 2.4 Capacity development within LVWATSAN

The water sector is the target of the LVWATSAN Programme. Capacity development for the water sector is for some reasons very important. First, the complexity in the water sector derives from the fact that daily decisions, regarding water use, water pollution and sanitation, of every individual in society has impact on water management. The capacity to effectively manage such complex processes is limited and should be strengthened (Blokland et al., 2009). Secondly, water is a bulky and fugitive resource that has to be managed continuously in order for it to be available in the right quantities at the right time. Thirdly, it is a difficult task to get all the people on the same track regarding environmental issues as well as delivering them all the necessary basic services. (Alaerts et al., 1991; Blokland et al., 2009). LVWATSAN emphasizes the building of local water systems in the respective towns. The programme is much broader than water provision. It also covers other basic services such as solid waste management, sewerage, and sanitation - topics influencing the water circle. In addition, these local water systems (see Box 1.1) are highly influenced by the role of people, either the community or responsible stakeholders. Especially the CD component within LVWATSAN focuses on the stakeholders with a responsible function within the local water system.

The CD part within the LVWATSAN Programme is outsourced to five international development organizations (united as the CBC). These organizations all have specific experiences in the field of capacity development. UN-HABITAT assigned SNV, UNESCO-IHE, the Gender and Water Alliance and the Federation of Canadian Municipalities to design a tailor made CD Programme for all the towns. In a later stage, NETWAS joined these four organizations, to be the major capacity builder on the ground. NETWAS is an East African organization and has many offices, knowledge and labor force available for the implementation phase of the CD Programme. SNV, in addition to NETWAS, is also continually present in all the three countries, but on a smaller scale, and will therefore assist in the implementing of the capacity building plans for each town. These organizations together form the capacity building consortium (CBC).

To support the hardware interventions by UN-HABITAT through capacity development, the CBC designed a CD Programme partnership proposal, mapping out the path to reach the desired outcomes through CD. Five core issues are guiding the CD interventions, which partly flow out of the different focal points of the organizations involved. The following issues are important for the CD part within LVWATSAN (UNESCO-IHE/SNV/GWA/FCM, 2008):

- Pro-poor Governance; is focusing on active participation of the urban poor in planning, implementation, monitoring and management of proposed interventions. PPG is regarded as a way of supporting LGA's to create an enabling environment in which development activities can take place (FCM).
- Local Economic Development; is related to the economic opportunities for the population to develop market goods and services derived from access to improved water and sanitation services and solid waste management (SNV).
- Utility Management; is aimed at the efficiency and effectiveness of water and sanitation service provision and solid waste management to ensure financial sustainability and improved service level (UNESCO-IHE).
- Urban Catchment Management; is focusing on conservation of water resources in the urban catchment areas, together with management systems that ensure reliable water quality and quantity for upstream and downstream users (UNESCO-IHE).

- Gender Mainstreaming and inclusion of Vulnerable Groups; is focusing on equal participation of women and men to enhance efficiency, success and sustainability of proposed interventions. Vulnerable groups, often with limited access to services and a lack of opportunities to empower themselves, receive also attention.

The different focus areas described above are leading in the project proposal. In practice, these divides are less stringent. The CBC is, as one team, approaching the water system in the respective towns. Key to the approach of the CBC is the use of regional and local capacity builders (RLCBs). These organizations will initiate and sustain means to respond to specific on-the-ground issues within each town. NETWAS is the main regional capacity builder to undertake the actual capacity building on behalf of the CBC. The use of local capacity builders depends on the circumstances per town; and whether capable local capacity builders are present (UNESCO-IHE/SNV/GWA/FCM, 2008). The Capacity Building Programme has the following structure (see table 2.3). The Inception Phase took place between December 2009 and March 2010 (depending per town). Based on this Inception, RLCBs are assigned and trained, in order to deliver the CD services in the respective towns. Stage 5 indicates that the CBC, together with the RLCBs, gathers more specific information about the towns, and the outcomes and impact of interventions, undertaken by the RLCBs. Based on this evidence, the RLCBs are coached by the CBC, and the CD process is readjusted if necessary. In a later stadium, structures are created to ensure that HRM and knowledge development will also continue after finishing the CD Programme. Stage 8 also aims at sustaining the impact of the CD Programme. By connecting stakeholders from different towns, it is assumed that learning processes continue. In addition, when the top level of the system and respective organizations are well equipped to lead the CD process a step further, it is likely that benefits of the CD Programme will have a longer lasting effect on the water systems in the towns. When top-level managers become change agents, continuing change is likely to take place (Burns, 2007).

Table 2.3 – Planning of CD Programme by CBC

1. Inception phase
2. Training needs assessment for RLCBs
3. Training Design
4. Training of Trainers
5. Joint Inquiry and evidence gathering
6. Coaching
7. Capacity Enhancement for HRM
8. Supra Town - Top Level consultations

Source: UNESCO-IHE/SNV/GWA/FCM, 2008

The feedback loop, designed within this CD Programme (stage 5), will make sure that results of action are sent back to the capacity development input of the system. *“As with any process set in motion, it is important to develop and install means to continually ascertain progress towards results”* (UNESCO-IHE/SNV/GWA/FCM, 2008). Positive feedback information facilitates and accelerates transformation in the same direction as the preceding results, giving rise to a cumulative and expansive effect. If however information describes a result that is opposite in direction to previous results, such negative feedback stabilizes the system.

The CBC emphasizes the systemic perspective towards CD, although it is not in the heart of the project proposal. Especially during the design of the Inception Phase, the SP received attention as the guiding principle towards CD (Worsley, 2009; Burns, 2010). This will be explained more in detail in chapter 3. However, also in the project proposal, the SP is present, because the water system is approached as a whole, and feedback loops will be installed during the implementation process. *“This holistic approach to capacity development is designed to engage with the systems of relationships that exist, and to respond to rapid emergence of new dynamics. It deliberately seeks to continually generate and examine evidence, and use this to inform subsequent steps. It emplaces ways and means to build on learning, wherever and whenever this happens, and is predicated”* (UNESCO-IHE/SNV/GWA/FCM, 2008).

## 2.5 Concluding remarks - systemic capacity

People have many capacities, just as organizations have capacities. Even institutions have capacity. Also systems of people institutions and organizations have a certain capacity, namely, the way they perform the task to be done, the process going on. The same applies for Bunda’s water system. This is the system making sure that the town is served with water provision. This system is made up of a wide range of investments, efforts of people, institutions, collaborating organizations, reporting structures and financial incentives. All these components together lead to the actual state of water service delivery as known. The capacity of BWS is thus dependent on many different factors. For the purpose of this thesis, the definition ‘systemic capacity’ is introduced, to refer to the capacity of the system as a whole. This systemic capacity differs from human capacity, OD and ID because it defines the capacity that comes about in the interrelatedness of the system.



Capacity development refers to a process that aims to understand such a system and the processes making it work the way it does, in order to contribute to an improvement of this system, which will in turn lead to the preferred outcome. Capacity development for BWS will thus focus on understanding the local situation, and intervening if possible to improve the capacity of this system. Through improving the water system, the water service delivery will also improve.

This approach to capacity development is labeled as the systemic perspective towards CD. The systemic perspective recognizes the complexity and interconnectedness of reality and its processes. It is difficult to effectively in such a complex reality and one should be careful with it. Inputs more often than not lead to unexpected outcomes. To overcome those difficulties, a CD process should be a long-term process. This enables for a follow-up of interventions, investigating all outcomes, adjusting the process, evaluating again, and readapting the approach. This is the ultimate way to make sure that CD is a sustainable process.

The design of CD processes and programs by international development organizations is of utmost importance. There are many factors determining the quality of such a CD process (as also explained in 2.1.2). At first, the local situation has to be understood very well, in order to undertake interventions that are necessary and are supported by the recipients, the stakeholders at the local level. Preferably, these stakeholders should have demanded for the CD process themselves, in order to make sure that they are really owners of the change process. In recent years, even more emphasis is put on long-term engagement for long-term impact. CD is not consultancy work and should be approached as long-term processes, enabling for adjusting, based on findings during the process.

## 3. Methodology

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“We have to involve all stakeholders to build the ownership of community.”

*Mr. Isaac Alex, Township Officer*

Doing research is trying to create the clearest picture of reality. Such a picture should preferably contain all the relevant elements to give an outsider of the research knowledge about a local situation, or processes that are taking place. This research attempts to give a picture of the local situation in Bunda’s water system. This chapter serves as a research manual. It explains why and how this research is undertaken, and elaborates on the value of the results. It will provide an explanation of the methods followed and the decisions made to come to this specific research design. It argues that qualitative research was the most preferable opportunity given the specific assignment by SNV. Research in the field of capacity development should be approached from a systemic perspective that starts with the notion that the reality is complex and hard to understand. This thinking helps in creating a better picture of reality and also gives direction in the methods to be chosen to research this complex reality. This chapter, in line with the previous ones, zooms in even more to the local level.

### 3.1 Research objective and questions

This research is undertaken in close collaboration with SNV. This is an international development organization based in the Netherlands. On December 1, 2009, the research objective below was sent. The description elaborates on the proposed assignment and the direction the research would take:

*The capacity building component of LV-WATSAN is initiated through an intensive one week Inception Phase, using the appreciative inquiry methodology. The Inception Phase has been completed for Bukoba, Muleba and Mutukula. Bunda is scheduled for March, 2010, so the internship would be useful in preparing for the Inception, participating in the exercise, assisting in documentation and providing follow-up.*

At that time, this description was very general and it was unclear for me what direction the actual research had to take. The internship finished, it is completely clear that the research carried out fits within this objective. Beforehand, it was more difficult to understand what this objective meant in concrete. These difficulties in mind, the prepared research proposal did not match with SNV’s objectives. It was therefore that the prepared research proposal found its way to the bin in the first week after arrival in Tanzania. The shift to the topic of capacity development was heavy and it was not easy to design a research with little background knowledge. However, the experience with the feet in the mud was very enriching and afterwards, it is much easier to understand that this objective has enough information to build up a research. In addition, there was actually very much space and support from SNV to design the specific research in a preferred way. The limited knowledge of the subject made it difficult to design a proper research. Especially the systemic perspective was unknown for me though should be included in the research because it is the heart of the CD approach of the CBC. Mainly during thesis writing, it became clear that the research undertaken was too little based on background knowledge and that it is difficult to link the results to existing theories, also enforced by the fact that the systemic perspective is rather complex.

The fieldwork period in Bunda can be split up in different parts. The first weeks were mainly to settle in and get an idea of BWS. These weeks were used for identifying the major stakeholders and going through the few available and relevant documents. Some of these documents were already available online, before going to Tanzania, though these also got more dimension because of living in the area of subject. This introduction especially gave insight in the hardware capacity of BWS. One specific assignment is worth mentioning. Together with the Managing Director (MD) and Technical Manager (TM) of BUWSA, we designed a general map of the piped water network of Bunda (see Annex B). I learned very much about the water provision in Bunda Town, while the MD and TM were trained in handling GoogleMaps, Word and thereby, making knowledge available to a wide range of people.

The first weeks of March marked an important step in the design and practice of this research because the Inception Phase of the CD Programme took place in Kenya and Bunda. The CD Programme within LVWATSAN was officially launched and the

CBC did an assessment in four towns to evaluate the capacity of the water systems in the different towns, and marked capacity development opportunities (UN-HABITAT, 2008). This Inception Phase served as the base to come up with a CD Plan, elaborating how CD could be able to contribute to an improvement of the water and sanitation services. Before undertaking this inquiry, there were training days, which introduced me to systemic thinking and the implications of this thinking for research and practice (3.2). Although criticism should always remain, the systemic perspective to CD is, in theory, preferable.

After the Inception, it was decided to make the systemic perspective towards CD also the guiding theory of this research, although I did have very limited knowledge about the systemic perspective. However, it seemed the best choice, though back in the Netherlands, it turned out to be more difficult to translate the micro situation in Bunda to macro thinking in development literature.

The second research phase partly gives follow-up to the Inception Phase, by investigating deeper on the capacity development ‘issues’ found during the systemic action inquiry (SAI). This SAI is the first part of the research, jointly undertaken by employees of the five international development organizations, organized in the CBC. Section 3.2 will elaborate on this SAI research phase. This research being a follow-up on the SAI provides more background information concerning BWS. Though the background information provided in this report is also subject to change and does have limited value over a longer period. Continuous research is necessary to retain the understanding of BWS.

The objective of the research is two-folded. The first part examines the systemic capacity of BWS. Capacity thus in terms of hardware and delivery of basic services, but even more regarding the software of BWS. The processes, institutions, actors, organizations, skills and attitude of the system determine the delivery of basic services. This soft side of BWS is also the focus of the CD Programme. The second part aims at assessing the CD Programme on its ability to contribute to an improvement of BWS. The research question guiding this research is:

*What is the capacity of Bunda’s water system and to what extent will the CD Programme within the LVWATSAN Programme, be able to contribute to an improvement of the capacity of Bunda’s water system?*

Describing the capacity of the BWS is a difficult task and this chapter will explain how this systemic capacity is interpreted and how it will be analyzed. It is important to acknowledge that a systemic interpretation of capacity is used, emphasizing the emerging of ultimate capacity in a system’s setting (as explained in section 2.2; 2.3). The competencies or capabilities of specific stakeholders are not the most important foci, but the working of the system as a whole. The term ‘stakeholder’ is used throughout the whole document and describes the actors, organizations, and representatives of organizations in BWS. The exact stakeholders are introduced in section 5.2. A majority of these stakeholders have been participants in the research.

This methodological chapter will elaborate on the methods opted for during this research and how these different methods together aim to give a complete picture of the local situation in Bunda. Section 3.2 will elaborate on the systemic action inquiry (the first research phase) and argue how this inquiry gave a direction to the further research. The second research phase will be explained in section 3.4. The conceptual model is brought up in between these sections (3.3) because it is specifically designed for the second part of the research. The second research phase consists of semi-structured interviews combined with other methods, aiming to complement each other. Section 5.3 serves to explain how *systemic capacity* is operationalized. The limitations of the research are mentioned in section 3.6.

Table 3.1 - Overview of activities during fieldwork

Wk	Major activities
1	Introduction SNV Lake Zone, adjustment of research
2	Introduction Bunda, BUWSA
3	Analysis documents, introduction to relevant stakeholders
4	Training SAI, Inception Phase in Kisii & Homa Bay, Kenya
5	Inception Phase Bunda, further defining own research
6	Finishing research proposal, planning interviews
7	Interviews, mid-term meeting SNV
8	Interviews
9	Interviews
10	Interviews and analysis
11	Interviews and analysis
12	Analysis and reporting
13	Feedback and reporting

### 3.2 Systemic Action Inquiry - Research phase 1

The LVWATSAN Programme combines investments in ‘hardware’, with efforts in smoothing the ‘software’ of the water systems in the respective towns. The long term hardware interventions will be “*complemented by an integrated programme of training and capacity building to address the capacity gaps and priorities in the project towns*” (UN-HABITAT, 2008). The CBC, comprising of five international development organizations is involved in this training and capacity building programme on behalf of UN-HABITAT. In order to undertake this training and capacity building, the CBC needed to investigate on the ‘gaps and priorities’ in the different towns. Therefore, detailed needs assessments are carried out in each town, enabling the CBC to design tailor-made training modules per town (UN-HABITAT, 2008). The ten towns are assessed in three phases:

- Phase 1    November 2009    Muleba (Tz), Bukoba (Tz) and Mutukula (Tz side of border)
- Phase 2    January 2010    Kyotera (Ug), Bugembe (Ug), Nyendo (Ug) and Mutukula (Ug side of border)
- Phase 3    March 2010    Homa Bay (Ke), Kisii (Ke), Bondo (Ke) and Bunda (Tz)

It was in the first week of March that 18 employees of the different international development organizations came together in Homa Bay, to launch the Kenyan part of the CD Programme within LVWATSAN and carry out the inquiries in the different towns. The first days in Homa Bay were used for extra training on the methodology of systemic action research. The assessments per town are called inquiries, creating the terminology ‘systemic action inquiry’ (SAI). These inquiries took place in smaller groups after the methodology training days. The experience being involved in the SAI was very enriching, showing the working of development business and increasing knowledge on interesting issues such as capacity development and systemic thinking. Largely, this experience helped me through this research.

The SAI is an inquiry method based on systemic action research, as described by Burns (2009). The specific SAI methodology of the CBC is carefully designed, and improved in between the different assessment phases. The CBC team received guidance from professor Danny Burns from the University of the West of England, a professor with much field experience in development cooperation and one of the leading authors in the field of systemic action research. He also wrote a guideline serving as the base for the inquiries in the different towns. Systemic action research is a methodology that fits within the systemic perspective, and is rooted in systemic thinking. Systemic thinking means taking into account the whole, and seeking meaning in the complex patterning of interrelationships between people and groups of people (Burns, 2007). Put another way, systemic thinking requires people to look at sets of interacting activities and looks for patterns that can be strengthened (Packham and Sriskandarajah, 2005). The SAI is called systemic because it is believed that one is not able to understand all processes taking place in the system. SAI enables to follow up what are outcomes of interventions. This improves the knowledge about processes. In addition, SAI continually evaluates changes and adapts to new situations and opportunities. Or in the words of Flood (2001): “*It is through systemic thinking that we know of the unknowable. It is with action research that we learn and may act meaningfully within the unknowable*”.

The action part of the SAI is more problematic, as also Burns (2010, Annex D) does not provide clear guidance why the SAI is called action research. In fact, there is not a concrete action or interventions taking place during the inquiry. In a later stage, as described in the previous paragraph, SAI follows up on interventions, though the inquiry itself does not. However, it is assumed that through the inquiry, the participants can become aware of opportunities for improvement.

#### *Inquiries*

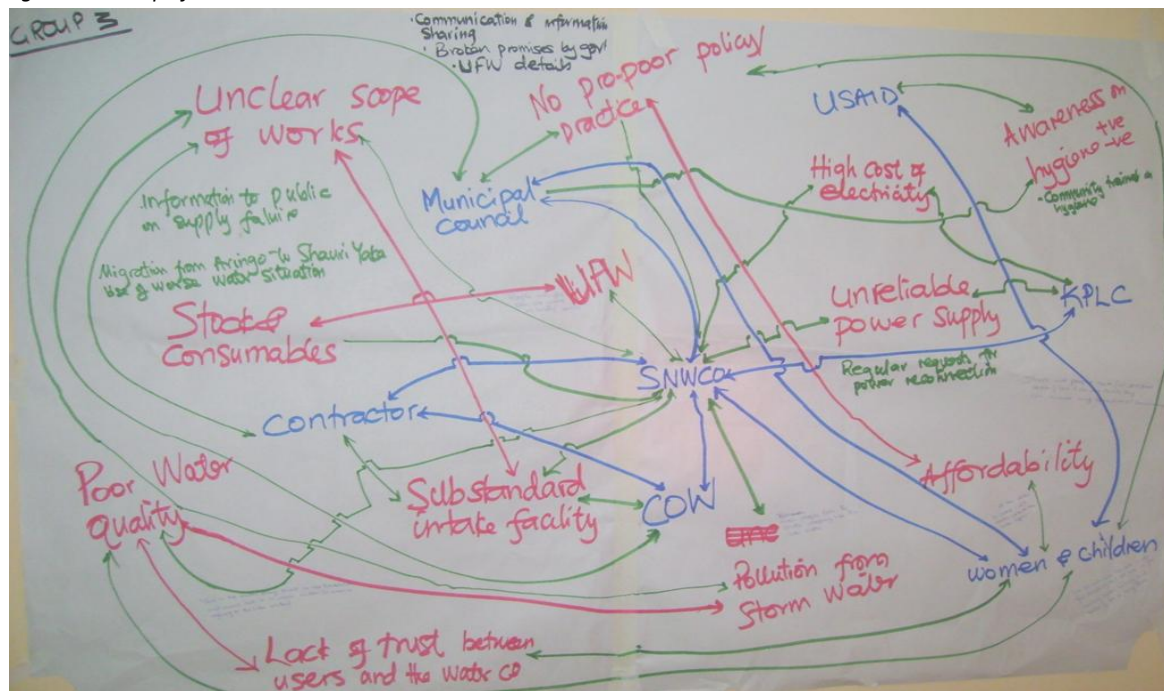
The systemic action inquiries in the towns follow a prepared guideline which explains the methods to be used. This complete guideline can be found in appendix D, though will also be explained here, in short. The inquiries are undertaken enabling the CBC to design a capacity development plan, which will be used in the further CD process. The aim of the inquiry is to gather enough information about BWS, and the processes already at work. This is done by building pictures of *issues* and *actors* and the interrelationships between them (Burns, 2010):

- ‘Issues’ are elements of BWS that cause a specific pattern in the way processes take place. ‘Unreliable power supply’ is an example issue. This very much affects the working of the water system and is thus very important.
- ‘Actors’ refers to institutions, organizations, groups or individuals that seem to be of relevance in the way processes are taking place, and which could also be a leverage point for a possible capacity development process.

- These different elements together lead to the design of a 'mindmap' (as shown in figure 3.1). All actors (in blue) and issues (red) are written down and linked to each other. A system's view emerges and relevant linkages (or the absence thereof) become visible.

This mind mapping is undertaken to “develop insight into problems; why they emerge, how they are maintained, and how they become entrenched. While one can never see the whole system, it is usually possible to reveal the most important relationships. Once you can see the ways in which different parts of the system influence each other it is easier to think about sustainable responses to those issues” (Burns, 2010). It is assumed that the mindmap, produced after a few days of inquiry, contains sufficient information about the issues and actors determining the water system.

Figure 3.1 - Map of issues and actors



Source: Methodology Training, Homa Bay (Ke)

### Participants

The information stored in the mindmap is extracted from participants of the inquiry. The participants in this SAI were found using a snowball method. At first, the stakeholders already known as relevant participants (from documents and earlier visits) were asked to elaborate on their experiences within BWS. Through approaching these stakeholders, new issues emerged, leading to new possible participants. The inquiry process is some sort of interplay between stakeholders and issues. This selection method is far from random, because the selection of participants is based on the information gathered during the process, and not predesigned, or randomly chosen. However, creating an overall picture of BWS needs approaching people that have information about the processes at work. Those people are often relevant stakeholders within BWS. It is assumed that the snowball method will lead to those relevant stakeholders, because they will also be mentioned during interviews.

Many stakeholders of BWS are reached during the SAI. However, despite the preferable snowball method, it turned out that some rather relevant people were left out during the selection process. In the second research phase, this became clear. Some of the stakeholders, who later seemed to be of relevance and a source of valuable information, did not participate in the SAI research phase (Annex A shows the interviewees of the second research phase – the bold names also participated in the SAI). The SAI mainly focused the top level of the government officials and some community members. Later, it turned out that especially lower-level government staff as well as NGOs and CBOs had a lot of, and sometimes contradicting, information.

The interviews undertaken during the systemic action inquiry follow a very open structure. Participants are asked to tell their story about BWS or something related that is of relevance for the participant. It is assumed that the stories the participants tell will reveal more relevant information, than answers on predetermined questions can do. This 'story telling' can be compared with focus group discussions. Inquiry questioning differs from focus groups in the sense that it does not really have a predetermined topic or issue. Where focus group discussion are centered around shared experiences translated in topics for discussion, the inquiry is aiming at exploring someone's story and finding new issues that might be of relevance. The insider perspective evolving out of this SAI gives much clarity about the processes that take place within BWS and the perception of different actors.

Capacity development processes should focus on strengthening elements that are already present, rather than filling capacity gaps. The systemic action inquiry is also a method that *"does not rely on assumptions about "what isn't" but rather tries to establish "what is" as a platform for generating solutions"* (Burns, 2010). The mind mapping also served as an attempt to get insight into what is present in BWS. The two-day assessment in Bunda, enabled us (nine researchers from the CBC) to get an insider perspective and this SAI was very good in getting an overview of the main issues and actors in Bunda. However, it turned out that in practice, we were unable to focus on 'what is' within BWS and especially noticed weaknesses, rather than strengths. Many of the issues mentioned during the SAI are negative points; probably leading to 'gap-filling' CD interventions (see also Annex C - the CD Plan, mentioning all issues and actors, as well as the proposed interventions). In addition, the SAI was not able to go in-depth about the capacities of specific organizations within BWS. This flows from the systemic perspective to CD, which emphasizes that the systemic capacity comes about in the interrelatedness between the actors. The second research phase also noticed capacities of specific organizations within BWS, such as BUWSA or a specific government department, though BWS as a whole receives attention in this research.

The SAI served as the base for the second research phase. It does this in different ways:

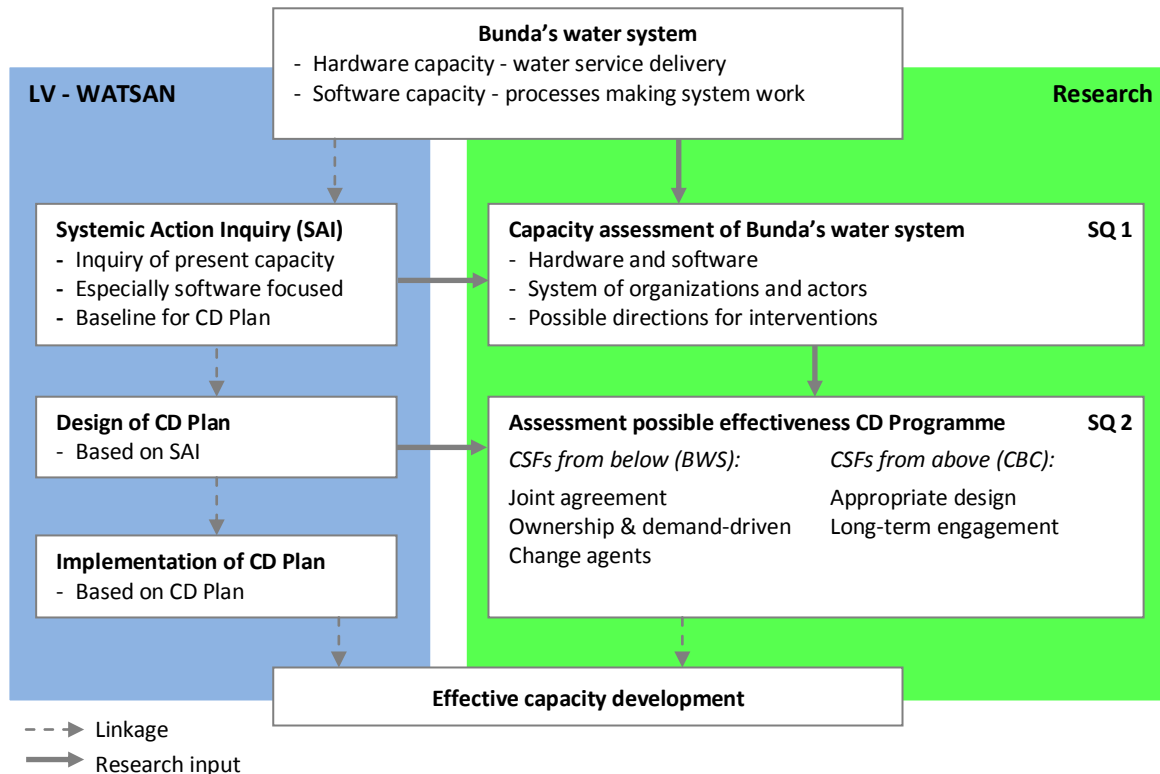
- The SAI indicated major issues, relevant for BWS. These issues are positive and negative and sometimes opened up space for follow-up research, especially in determining the (software) capacity of the BWS.
- It also defined some important stakeholders, working within BWS. In addition, also critical stories about some stakeholders already came out.
- Other actors that appeared to be interesting, but which were not approached during the SAI, became (possible) participants for the second research phase.
- The information gathered already gave me a general picture and from the SAI onwards, I was even less value-laden than I was before. This is more or less a general threat for researchers as also explained in Desai & Potter (2006), though I experienced it worked that way.
- The information gathered also led to the design of a CD Plan by the CBC. This document (annex C) explains which interventions will be undertaken in order to follow-up issues found during the SAI. The interventions designed by the CBC were input for the second research phase in two ways. The CD Plan was discussed with the stakeholders in order to, firstly, discuss whether the SAI process led to a correct understanding of the local situation in Bunda, and secondly, to investigate the local support for the interventions (this will be explained more in detail in section 4.3).

There is thus a strong linkage between the contents and the selection of participants between the two research phases. This interrelation between the two research phases enables a deeper analysis on the contents, which will lead to a more complete understanding, in order to answer the research question. The conceptual model designed to explain the concepts of this research is shown in the following section. The conceptual model also visualizes the linkage between the two research phases.

### 3.3 Conceptual model

The core concept in this research is capacity development. The conceptual model explains how effective capacity development can be reached and how this research adds up to this objective. However, reality is far more complex than this model suggests. “Complex systems are far more difficult to engineer successfully since potential outcomes can be difficult to identify, let alone measure” (Parker and Stacey, 1995). Capacity development is a very difficult process and satisfying outcomes are hard to reach. In addition, researching a complex system, such as BWS, is a tough process, as the quote also suggests. Though, this research aims at researching BWS as correct as possible. The conceptual model below shows how this research is designed.

Figure 3.2 - Conceptual model



The conceptual model shows two streams; LVWATSAN (left, in blue) and the research (right, in green). The different streams both deal with capacity development for BWS, and are related through this research. The LVWATSAN column shows, very general, the overall CD Process within LVWATSAN. The green column shows the embeddedness of the research within LVWATSAN. The arrows in the conceptual model start from BWS, which is the context in which this research takes place. The arrows lead to effective capacity development, which is the desire of LVWATSAN and this research. The thick arrows are important linkages for this specific research.

The research has two sub-questions (SQ). These questions are reflected in the two big boxes in the green column. SQ1 is an assessment of the capacity of BWS. As shown, this capacity assessment is done through the SAI and in the second research phase. The bullets in the box SQ1 give some extra explanation. Capacity refers on the one hand to the hardware of the water supply system, which is shown in section 5.1. Secondly, and more important, it focuses on the systemic capacity of BWS. Systemic capacity refers to the system of organizations and actors that are responsible within BWS - defined as the ‘stakeholders’. Very much can be said about the systemic capacity in Bunda, and this research is unable to cover everything, though the elements (*issues*) that are relevant, i.e. that make the system work in the way it does, will be covered.

This capacity assessment gives much information about BWS. Strengths as well as weaknesses emerge during the research. These can both be a source of intervention. CD processes often aim at eliminating weaknesses in order to improve the existing situation. However, it is emphasized (see section 2.2) that supporting and securing existing strengths has more

impact to reach the preferred situation. It is therefore that strengths and weaknesses of BWS are both relevant for this research. The possible interventions that emerge during the capacity assessment will also be explained under the first sub-question. This sub-question will be covered in chapter 5.

The second box in the green column corresponds to the second sub-question of the research. This box requests some extra attention and explanation. The second sub-question is: *to what extent will the CD Programme within the LVWATSAN Programme, be able to contribute to an improvement of the capacity of Bunda's water system?* The reason for this sub-question is two-folded. Firstly, the information of the SAI served as the base for the CBC. The design of the CD Plan happened based on limited knowledge. This research increased the understanding of BWS. This deeper analysis also enables to 'judge' or 'evaluate' whether the CD Plan will touch upon important *issues* and whether the stakeholders in Bunda *own* the CD Process. Secondly, the academic development literature also explains how effective capacity development does look like. This is thoroughly explained in chapter 2. This knowledge also enables an analysis of the CD Process undertaken in Bunda.

Whether a CD process will really contribute in the preferred way, depends on many different factors, of which some are intangible. However, development cooperation experienced many failures and successes, and learned much about effective CD. There are many critical success factors (CSF) for effective CD, of which a few are chosen to be leading in this research. If these factors are properly taken in mind during a CD process, it is likely that the gains of the process will be larger and last longer. The conceptual model shows three CSFs from below and three CSFs from above. CSFs from below depend on factors to be found on the local level, i.e. the 'recipients' of the CD process, BWS. The CSFs from above refer to the activities from the deliverer of the CD process, which is the capacity building consortium.

The five CSFs used in this research are necessary factors for effective CD. The CD process as designed so far will be assessed, judged and evaluated to the extent that these factors are guiding principles, in theory and practice. The CSFs bullets in the conceptual model are general terms, though are interpreted as follows:

- Joint agreement: the recipients of the CD service should agree upon the actual interventions within a CD process. The deliverer of CD should make sure that the proposed interventions are necessary, by checking whether the stakeholders agree on these interventions. In addition, all stakeholders in the system should agree on specific interventions, rather than some of them. When all stakeholders within a system jointly agree on the designed CD Plan, the outcomes are likely to be higher. Like Nelson & Tejasvi (2009) argue: Design of CD should be participatory; the design often is, but in practice, there are difficulties with integrating all the different actors into the CD process (see also section 2.3)
- Ownership and demand-drivenness: Even broader than the first bullet, the recipients of CD services should be the owner of the CD process. They should not only agree on specific interventions, though accept that the process as a whole is necessary. They should take responsibility to make sure that the recipients own the process; the CD process should preferably be demand-driven. Whereas the local stakeholders request for CD themselves, they will likely own the process. CD fails whereas recipients have awaiting attitude of 'let's see if it can help, every assistance is welcome'. Or in the words of Burns (2010): "unless they (recipients) understand and own the process, any gains from capacity building are likely to be very short lived".
- Change agents: this factor especially receives attention within the systemic perspective towards CD, which distillates more of its knowledge from change management theory. The system of actors, approached through a CD process, should contain some change agents, stakeholders that are able to bring about change and to get others on the same track. These are often influential stakeholders or organizations, in the higher 'levels' of the system. In preparation to the internship, Van Klinken (2010) also sent us out to the research context with the question 'where is the energy?' or 'who are the change agents?'

The CSFs from below are factors that have to be present at the local level. However, it is also partly the responsibility of the CD organization to make sure that these CSFs are present at the local level. Otherwise, CD is likely to have limited impact. The following two CSFs from above are only in the hands of the CD organization. This organization should make sure that their CD Process is designed according to these CSFs:

- Appropriate design: the CD deliverer, here the CBC, has to ensure the quality of the CD process. There are many factors influencing the quality of a CD process, though two should be mentioned: firstly, participatory diagnostics and thus un-



dertaking interventions that are relevant (this is covered among 'joint agreement'). Secondly, it is important that the deliverer ensures that all stakeholders are involved in the CD process.

- Long-term engagement: an effective CD process should be a long-term process. There should be an engagement over a longer period, to ensure that changes are taking place, and if necessary, adjust another time. A long-term involvement also enables to check whether lessons learned are put to practice, also when incentives are moving away (see for more information section 2.2 and 2.3). The local stakeholders as well as the CD organization has to engage for a long-term process, though especially the 'deliverer' of CD has to make sure that the process is designed for long-term engagement.

The factors described above will be used as indicators to measure whether the CD Process in Bunda is on a right track. This is done based on the findings of the research, though also by comparing the Project Proposal and the CD Plan of the CBC with the findings from the research. When the six factors are leading principles in the CD Process, the desired outcomes of the process become more probable. The conceptual model above, therefore also shows a linkage between the SQ2-box and 'effective capacity development'.

### 3.4 Research phase 2

The SAI and this second research phase together will provide an answer to the research question: *what is the capacity of the water system and to what extent will the CD Programme within LVWATSAN be able to contribute to an improvement of the water system in Bunda, Tanzania?* By interviewing a wide range of stakeholders in Bunda, more information is gathered about the (systemic) capacity of BWS and the possible contribution of the CD Programme towards BWS.

The second research phase consists of interviews with stakeholders within BWS, which is a rather complex system of actors, organizations, institutions, hardware, and community involvement. Mayoux (2006) indicates that the analysis of systems and complex processes fits in the approaches development practitioners follow. More than researchers, they need to understand the functioning of the system, which stakeholders are in power, what the impact could be of an intervention, and how policies are put to practice by the stakeholders. Researchers tends to focus more on getting an idea of the present situation as such. Processes are based on many decisions and assumptions of even more actors. To be able to intervene in such a complex reality, the local situation has to be understood very well. BWS is thus approached as a whole, because the system is more than the sum of its parts (Alaerts & Kaspersma, 2009). The BWS is one system and one organization, which comprises of different smaller organizations.

#### *Qualitative analysis*

Understanding the reality in its complexity and all actors as interrelated in one system is the guiding principle for this research. Consequently, the methods opted for during the research flow from this principle. A qualitative analysis is the most preferable opportunity to collect the data, because it fits the best in the objective of the research, which is, investigating the capacity of BWS. Mayoux (2006, p. 122) also underlines, for several reasons, the advantage of qualitative analysis:

- Holistic understanding of complex processes.
- Good at uncovering processes and causality. The research aims at uncovering processes and the underlying patterns and assumptions which make this processes go the way they do.
- Flexibility and cumulative understanding. This research wants to understand the local situation. Flexibility in questioning is of utmost importance to be able to adapt to issues which pop-up and seem to be important. The understanding is increasing during every interview.
- Captures the underlying meanings, the unexpected and sensitive issues. Although most research is able to show what are dependent and independent variables, qualitative approaches are able to dig deeper. The underlying assumptions, unexpected issues become visible through qualitative research.
- Captures different local perceptions. All actors are able to present their view and ideas of the local situation.

- May give people a chance to discuss things they have never been able to tell anyone before. The research will give space for people to tell their story. Although interpreting a story into a severe analysis is hard, it is people's right to tell their story.

All these elements are to some extent important for this research in Bunda. It is important to get an insider perspective of the functioning BWS, which is reached by letting people tell their stories. During every interview new issues emerge, iteratively allowing digging deeper in a further interview or linking it to issues raised earlier. It is necessary to get the overall perspective of BWS. This second research phase consists of in-depth semi-structured interviews with relevant stakeholders and other actors within BWS. During this phase, a semi-quantitative tool is used, giving the research some hard data. In addition, the internship actually was a participatory observation within BUWSA and therefore also in BWS. These different methods will be explained below.

The use of different methods builds on the idea of method triangulation, i.e. using more than two methods to crosscheck the results with each other. Although this research does not really consist of hard triangulation, the use of different methods next to each other underlines the idea of crosschecking. In addition, the fact that also different investigators have been involved in the SAI influences the reliability of the results positively.

### 3.4.1 Semi-structured interviewing

The second research phase comprises of semi-structured interviews. The aim of these interviews is two-folded. Firstly, the interviews provide information about the capacity of BWS. All participants were, in line with the SAI, asked to tell their stories about topics such as water access, sanitation, community behavior, working of the system, LGA involvement, human and organizational capacity of stakeholders, organizational collaboration; issues that seemed to be of relevance. Some of these issues resonated from the SAI while others emerged during the interviews. This information is also valuable for the CBC.

Secondly, the interviews facilitated as meetings to share the ideas of the CBC with the stakeholders in Bunda. The CD Plan, designed by the capacity building consortium, was input for the interviews, and the stakeholders were asked to elaborate on the findings of the CBC and their proposed interventions. As such, the research became close to action research, because the already designed interventions were discussed with the stakeholders. This is done for several reasons (see also section 3.3 - conceptual model):

- Cross-checking whether the findings and interpretations of the CBC are correct and correspond with the complex reality of BWS. The CBC underlines the difficulty of understanding a local situation as an outsider, so cross-checking is a valuable element. When the CD Plan is very much in contrast with the perceptions of the stakeholders in Bunda, the design of the CD Plan is not appropriate.
- Investigating the opinion of the stakeholders within BWS regarding the proposed interventions. Misinterpretation (as in the first bullet) could easily lead to 'misintervening'. This should preferably be prevented, because 'outsiders' intervening on an issue that is not relevant for the local situation has very limited impact. Moreover, the interviews lead to information about the joint agreement on issues (as in the CM, figure 3.2). The BWS and the CBC should both agree that a specific intervention is necessary before actually intervening.
- In addition, the interviews enable an inquiry of the other CSFs (see CM - figure 3.2), especially regarding to change agents and ownership. Although ownership is very difficult to conceptualize, it can easily be examined whether someone really owns a certain process. Owners are sometimes also change agents, especially when they have an influential position. Example: the chairman of an NGO regarding environmental conservation is likely to own a CD process regarding community sensitization, though is maybe not a change agent to change government involvement regarding environmental issues, though all these stakeholders are part of one system.

Most of the participants of the interviews are key stakeholders in BWS (see Annex A for the complete list, including organization and function). The list of participants consists of responsible government officials, the MD of BUWSA, NGOs and CBOs dealing with basic service delivery and environment, water kiosk operators, councilors and solid waste collectors. In

addition, an adviser from SNV as well as high-level government officials such as the DED and the Town Executive Officer are interviewed. They are not directly involved in BWS, but do have an overview or specific knowledge.

The selection of these participants is on the one hand based on the experiences during the SAI. The remaining participants are involved through a snowball method. During the interviews, new names emerged, or were specifically asked for. This method was taken up assuming that the participants know the local situation the best and are better able to define which people might be interesting participants. At the same time, it should be considered that an outside researcher with a fresh mind to the local reality will see things which are common for local actors. This way of selection makes much use of local knowledge, while at the same time keeping some distance as a researcher. It seems that most of the relevant stakeholders are covered and participated in the research. This is assumed because, after the majority of interviews, no new stakeholders emerged. When the participants saw the list of other research participants, they declared that the main actors were approached. Although it was possible to speak to almost all of the stakeholders, two were not reachable because they were on 'safari', and another one was not willing because he did not see the relevance, although several other stakeholders mentioned him as an interesting participant. The participants were not mere respondents, as all stakeholders guided the research to new emerging issues and other possible participants. The definition *participants* is used to refer to the participatory nature of the research (Beazley & Ennew, 2006). It is the right of the stakeholders to be involved in the research (Burns, 2010)

Accessing the participants was relatively easy because of the formal organizations they work with. Making appointments was much harder though. In some cases, it took three or more times before the opportunity to interview was realized. By the end of the internship, there were still three stakeholders on the list of possible participants, though it was not able to make appointments with them. This could be marked as non-response. For those people not accessible through their organization, the assistance of Mr. Opata was very helpful. Being employee of the host organization BUWSA, he got freedom to assist me if necessary. This was mainly in finding participants in town and in six cases also acting as translator. Translation took place in both directions, from English to Kiswahili and after replying, from Kiswahili to English. It was not always easy, especially not because the translator preferred to share its own knowledge and answers, rather than translating the interviewee. However, it seemed he translated quite literally what the interviewee said. Finally, his assistance seemed to be very helpful and it worked out very nice, especially after I explained that he should receive some income for this duty. Detailed note taking was used to gather the information from the interviews. None of the interviews were recorded on tape. The note taking was quite heavy, and sometimes I had to request for some writing time. The focus was especially on writing down quotes as literally as possible, to ensure that the qualitative did not become too vague. The quotes are used to embellish the presentation of the results in the following chapters.

Questioning the participants took place using a topic list, but with some freedom. This freedom is incorporated, because the story of the participant is as interesting as the answer to predefined questions. The topic list covered issues, derived from the SAI or earlier interviews. This topic list has been subject to change, based on the participant. A predefined question list should limit the possibility of gaining knowledge. If so, it would not be possible to follow up issues that popped up in earlier interviews. The ultimate aim was to finally receive an overall picture of BWS. Every participant made his or her own contribution to the picture, which sometimes overlapped.

The interviews took mainly place in the office of the specific participant and sometimes in their home. Interviews took at least one hour and sometimes even up to three and a half hours. The interviews were mainly face-to-face and personal, although in a few situations a joint interview took place. In one situation, this was a loss of information because one kept the other silent. Later on, the other person is approached on his own. In total, 26 stakeholders were approached (see Annex A). Out of the 25 interviews, six were in Kiswahili, translated by Mr. Opata, and the remaining nineteen happened without assistance. It should be admitted that every interview enriched the understanding of BWS, and probably more interviews would have added even more knowledge. However, the fact that there were no new stakeholders coming up led to the assumption that most relevant issues were covered.

### 3.4.2 Semi-quantitative tool

Almost all interviews also consisted of a semi-quantitative tool. Only four participants, not enough involved in BWS, did not make this exercise. This tool is more or less a numeral evaluation of the interventions designed by the CBC (see Annex C for the CD Plan). To collect more hard data, the participants had to grade the interventions, to the extent that they address a problem in BWS. The grading was as follows:

*0 = Not a problem      1 = Small problem      2 = Medium problem      3 = Large problem      4 = Main / core problem*

This semi-quantitative tool is used to reveal whether the critical success factors (see CM - figure 3.2), are taken into account in a sound manner. Firstly, this grading reveals information about the joint agreement on interventions, among the stakeholders in Bunda, though also between the BWS and the CBC. It turned out that some interventions received very much appraisal, while others were not agreed upon, or not by all stakeholders. Secondly, this data measures the quality of the CD Plan. If local stakeholders do not agree on some interventions, the design of these interventions is probably not appropriate.

Of equal importance to the gathering of hard data, this semi-quantitative tool proved its worth as a starting point to talk with the stakeholders about the designed interventions and hear their opinion about the CD Process as a whole. Remarkable grading often revealed an interesting opinion or led to a newly emerging issue. The analysis from this tool is used to answer the second sub-question.

### 3.4.3 Participatory observation

The experiences being hosted by one of the major organizations within BWS, was probably the most revealing part of the whole research. The everyday practice gave insight in the capacity of BWS and the attitude of some of the stakeholders, especially those working within BUWSA. One of the opportunities being hosted by BUWSA was the direct link with the LGA level and the access to all relevant officers at this level. In addition, the location of the BUWSA office, next to the DC offices gave an opportunity to see the everyday practice within the LGA, although sometimes it seemed that the major work took place in the conference room receiving allowances and under the acacia trees, rather than behind a desk.

There is an unlimited source of experiences within a researcher's mind, especially when it comes to issues as organizational capacity, which can easily be assessed by eyes and ears. However, at the same time, these experiences are intangible and influenced by emotions, feelings and perceptions. Even a properly working organization in Tanzania probably is so different from the Western experience that it is probably more critically assessed than reasonable.

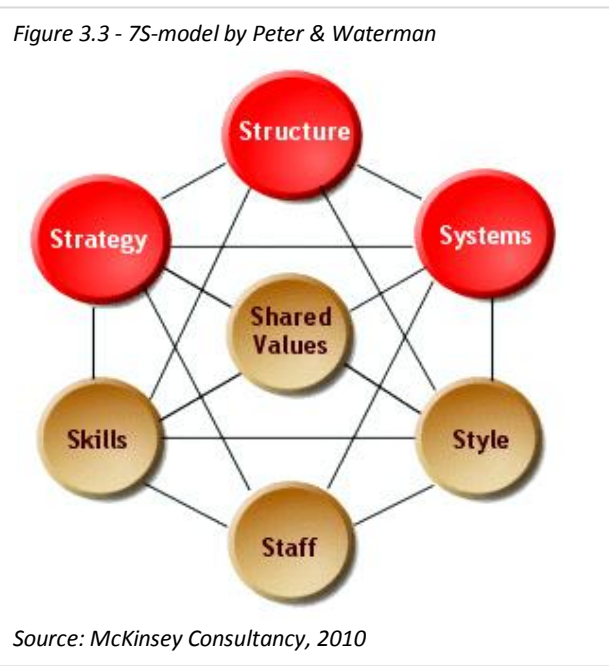
This research tends to not build on this knowledge and is awaiting to bring this in as reliable data. It is more used as a tool that is able to underline other issues emerging during the interviews. In addition, it will be used as added value next to the more hard data, extracted during the two research phases. However, this is not to argue that participatory observation is not a reliable research method. However, because it is not really assessed as such during the research, it will also not be brought up as an important tool afterwards. However, quite some of the 'issues' mentioned, could also be discovered by just using my eyes and when the opportunity emerges to share an additional story, this is because it is referred to as participatory observation.

## 3.5 Systemic capacity - from research to thesis

During the research, very much knowledge was gathered about the capacity of BWS, processes at work, strengths and weaknesses. There is a mass of information stored in the data collected during the SAI and the interviews. All this information together draws a picture of BWS. It is hard to imagine how many pages of text one should get if I should write down everything I know about BWS. However, translating this knowledge into proper concepts and relating this to capacity have been very difficult. Even more because the systemic interpretation of 'capacity' differs rather much from more conventional interpretations (as explained in section 2.2 and 2.3). It is therefore that the term systemic capacity is invented and used, to at least distinguish from other interpretations of capacity.

After returning home in the Netherlands, it was quite a struggle to turn all data into a coherent analysis of the capacity of BWS. In order to make a satisfying translation, the 7S-model (shown in figure 3.3) is used. Peter & Waterman designed this model in the 1990s. As consultants, they desired to invent a model that could describe every organization in a sound manner. The seven circles all represent a specific characteristic of an organization and the circles together show an overall picture of an organization. In other words, the 7S-model enables an analysis of the specific capacities of an organization. For this reason, this model is also used to describe the systemic capacity of BWS. The term capacity is operationalized in the seven bullets shown in figure 3.3.

Bunda's water system (interpreted as in Box 1.1), is approached as one organization. This creates the opportunity to use the 7S-model to describe this organization. It will become clear in chapter 5 that this systemic analysis has many advantages, because systemic capacity comes about in the interrelationships of the system, rather than in the respective parts. The CBC also approaches BWS as a whole, involving all separate organizations.



The 7S-model shows seven circles, each representing a specific characteristic of an organization. These characteristics are found in every organization, although always in a different way. Some organizations excel on style, while others have an advantage in their strategy. This model can describe every organization. The seven S's reflect seven keywords all starting with an S. These S's refer to the following characteristics of the organization, including examples:

- Shared values; refers to the values and norms within an organization. These often dig deeper than the conventional definition of organizational targets. These values are hardly written down, but are commonly acknowledged. Example: work ethics.
- Strategy; refers to the vision, mission and targets an organization has. It describes the way in which the efficient use of knowledge and resources will lead to outcomes and, finally, income. Example: Performance Improvement Plan.
- Structure; is about the organizational structure of the organization. It describes the different responsibilities within the organization, and how this structure will contribute to the ultimate goal of the organization. It is also about communication lines and reporting structures. Example: Chart with explanation of the different functions and responsibilities.
- Systems; refers to all the formal and informal structures and systems that enables the organization to undertake the day-to-day activities. These systems make the organization function well. Also hardware systems are covered under this bullet. Example: piped water network, work plans.
- Skills; refers to the capabilities of the organization and its employees. It refers to knowledge, skills as well as attitude. Those are all necessary for effective use of skills. Unique elements, which are often opportunities for an organization, are also put under skills. More or less the conventional interpretation of 'capacity' within CD.
- Staff; is not so much about the actual skills of the personnel, but refers to the type of people working within an organization, their attitude and collaboration style. It also refers to underlying elements such as motivation and meaning. Examples: Expressive, committed, lazy, narrow-minded, cooperative.
- Style; refers to the organizational culture and leadership style. Examples: hierarchic, equal, stimulating, authoritarian.

All circles are related to each other. Change in one circle will also influence the other ones. The shared values are in the center of the model, assuming that the shared underlying values and norms influence all the other elements within an organization. The model consists of four brown (gold) and three red circles. The brown ones represent the so-called soft elements and the keyword in these circles is people. The red circles represent hard elements of an organization, often referred to as processes. This 7S-model analyzes an organization, by describing them according to seven elements. Some of

these elements can be changed easily, while others request much effort and faith. Skills, for instance, is relatively easy to change, through finding new employees or, firing others, while style requests much more effort, because it is often deeply rooted in the organizational culture.

The 7S-model is used as the tool to translate the collected data into a coherent explanation of BWS. Still, it remains difficult to outline the local situation in a proper way, and vagueness is closer than clarity. Moreover, a systemic analysis is more intangible than conventional interpretations of capacity. Systemic interpretations are in recent years more used by practitioners, though there are limited examples of other scientific reports that managed to make a sound translation from a mass of knowledge about a local situation, to a coherent presentation of the systemic capacity in a local context.

The next, fifth chapter will elaborate on the systemic capacity of BWS following the 7S-model (after introducing BUWSA in specific and BWS as a whole). Systemic capacity consists of many components. It is impossible to cover everything that can be said about the capacity of BWS in this research. The systemic capacity of BWS consists of much more components than could be investigated in this research. In fact, this research is mostly interested in those 'issues' (interpreted as in section 3.2) in BWS that seem to be relevant for the CD Process. These are specific strengths, weaknesses, opportunities and threats of BWS, also perceived as such by the stakeholders. The participants of the research told very much about the capacity of BWS and it is assumed that these components of the capacity are the most relevant, and, in addition, it is only possible to intervene on issues that are also came up during the research as possible intervention points. To enrich the analysis of the capacity of BWS, quotations are part of the analysis. These quotes are used to illustrate statements made about the capacity of BWS. These quotes are derived from participants in the research, and are during the interviews also used to show a small piece of the ultimate capacity, and often to show where things hamper. BWS is, by using the 7S-model, approached as one organization, although the respective parts remain and will receive attention as such, though systemic capacity comes about in the interrelation between all stakeholders of BWS.

It should be admitted here that the analysis of BWS provided in chapter 5 is a struggle with the issue of reliability. Some components of the systemic capacity of BWS that will be mentioned are, for example, only mentioned during two or three interviews. However, there are reasons to accept this information as valuable, not in the first sense because it is reliable, but because of its relevance. Systemic thinking argues that small things may have huge effect and vice versa (Baser & Morgan, 2008; Burns, 2010). In other words, systemic capacity is determined by all parts, how tiny they might be (as also explained in SAI methodology – Annex D). The aim of the fifth chapter is to draw a general picture of BWS and the processes that make the system work. All processes and elements of systemic capacity are relevant, and it is difficult to argue that something very visible (and often mentioned), is also most important. Two examples: community behavior towards sanitation emerged during almost all interviews as a negative point in the water circle, which is true and very visible. The salary structure within BUWSA, influencing work ethics in a negative way, did only came up once during one interview, though is also of relevance for the systemic capacity of BWS. Every interview went through different topics in order to get the participant's perspective on BWS. It is therefore difficult to come up with figures such as: 'from the 26 participants, 18 agreed upon this issue'. In fact, as Burns (2006) also notes, this research focuses much more on who says what to get an insider perspective. The systemic capacity of BWS depends on many elements, ranging from small to large; hidden to visible; and from captured often to only mentioned passing-by. The ultimate objective of the analysis is not so much to draw conclusions as it is to draw a picture of the systemic capacity of BWS. 'Issues' (as in the SAI - section 3.2) that deserve attention and could be followed up by the CBC are mentioned, showing once more the practical nature of the research (and the researcher).

### 3.6 Limitations to the research

The strength of research becomes visible when one is able to draw conclusions that are valuable because of proper research design. However, every research has its limitations. No ever research design goes without limitations, because every method has strengths as well as weaknesses. The research question is often guiding in the method to opt for. Although quantitative analysis is preferred for its reliability, because any research can only be typified as reliable when it is based on a random sample (Laws, 2003), quantitative analysis has advantages because it is better able to reveal processes and underlying patterns. Just like any other research, restrictions apply also to this research, even before the results can be analyzed.

There are at least three general limitations to be taken into account. First, the research was conducted within a limited timeframe of three months. This prevented the research from being very thorough and in-depth. A second limitation is the fact that the research topic is in general new for me, and even more because I was not well prepared. A third and final limitation has been the inability to speak the local language, Kiswahili, reducing a thorough understanding of the answers given by respondents.

At least two major limitations to this research receive attention. The first limitation derives from the fact that all actors are free to talk about issues they see and that this gives them much space. This space could lead to too many opinions without sufficient motivation, influencing the reliability of the results. In addition, many of the concepts used, such as development, BWS and stakeholders are not clearly defined and will be interpreted differently by every participant. Secondly, this research design also opts for interpreting and analysis afterwards by the researcher. Because hard data are lacking, there are little guiding figures for the analysis. The interpretation of qualitative data is a subjective process, opening up space for misinterpretations.

These limitations are severe and due to the specific research design. However, the specific design is more valuable than its limitations. Given the specific research objective, such a design does no harm to the stakeholders, because they have the floor to tell their story, which is of utmost importance for getting an insider perspective. In addition, the fact that interviews were also designed, based on input of earlier interviews, made it possible to crosscheck interpretations in other interviews.

A last overall factor influencing the reliability of results, and applies for all master researches is the issue of power relations. This is mainly between the researcher and participants, but also between participants. Power relations are also able to constrain people to tell their story. Every foreign researcher is in a position of power, even when one is not aware of this. As Apentiik & Parpart (2006) argue; gender, ethnicity, race, and access to certain resources can all influence the way a researcher is perceived by his population. Being a western, white, male, student, doing research among government officials and other important people in Bunda, puts you in a position of power. It is experienced that people didn't dare to tell their story while his boss was sitting next to him, and also participants cooperating because they perceived me as a valuable resource or entry point to receive 'resources'. Although it is not investigated what has been the impact of those power relations, one can be sure that to some extent, they influenced the results of the research.

In addition, as also explained in section 3.5, this research is undertaken with limited background knowledge and afterwards, it appeared to be difficult to translate it in a coherent thesis. This is partly due to limited preparations beforehand, though also to the inability to understand the research objective in all its facets. It could be argued that this difficulty lead to another limitation, because it has been hard to turn this thesis into a nice-to-read scientific contribution, it is sometimes tough and requests for re-chewing.

## 4. Regional contextual framework

“Do you know what D-by-D means? Decentralization by dumping; the only thing you decentralize is problems.”  
*Mr. Masaka Maganga, SNV WASH Advisor*

The previous chapters outlined some temporary thinking on capacity development and the implications for this research as well. This chapter will focus on the contextual issues relevant for this research. These are some national issues regarding Tanzania and its political history and the development of the water sector in Tanzania as a whole and Bunda in specific. Finally, some details about the LVWATSAN Programme will be provided.

### 4.1 National context

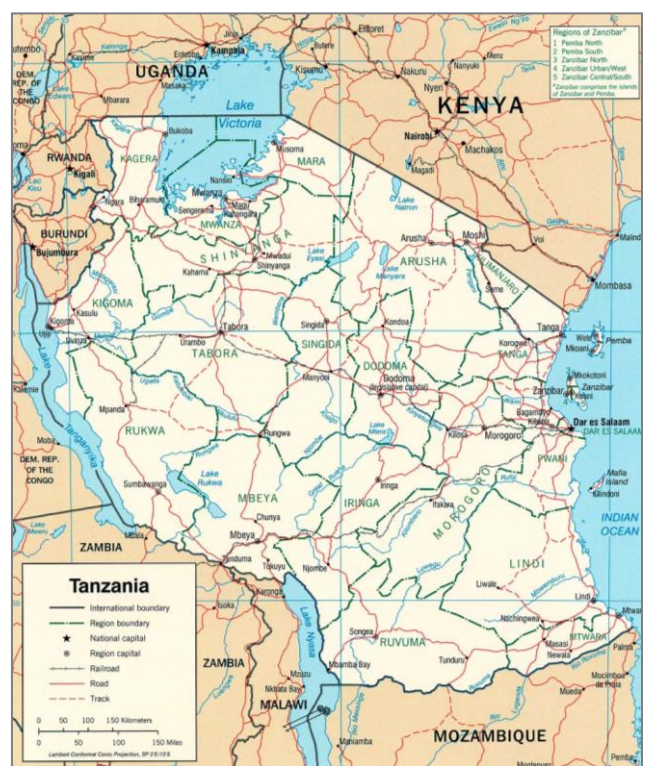
Tanzania is an East-African country sharing its borders with many different countries: Kenya, Uganda, Rwanda, Burundi, Congo, Zambia, Malawi and Mozambique. Tanzania has a few more than 43 million inhabitants on an area 25 times larger than the Netherlands (31<sup>st</sup> largest country in the world). The country houses 130 different tribal groups with different religious backgrounds (CIA, 2010). Christians (30%, more in the inlands), Muslims (35%, more at the coast) and indigenous beliefs (35%, spread) live relatively peacefully together, in contrast with neighboring countries such as Uganda and Kenya, as we heard many stories about genocide in churches in Kenya and the rebellions of the ‘army of the Lord’ in Uganda.

#### 4.1.1 Development picture

Tanzania’s economy is built on agricultural activities. This sector accounts for 80% of the work force. Yet, paradoxically, the primary sector only accounts for 40% of the total GDP, causing Tanzania to be in the bottom 10% of the world’s economies in terms of per capita income. (CIA, 2009). Industry accounts for 17% of GDP and services for 40%. Tanzania is one of the donor darlings in Africa, particularly because of its political stability. The government budget consists for 35-40% of foreign aid (DPG Tanzania, 2010).

However, national income and economic figures do not give a complete picture, deciding UNDP to invent the Human Development Index, also taking into account other dimensions related to “human well-being”. A life expectancy at birth of 55 years (170/191), combined gross enrolment rate of 57.3% (143/170), estimated GDP per capita of \$1,208 (PPP – 142/162) and an adult literacy rate of 72,3% (138/180). These indicators bring Tanzania to a position within the lower ranks of the ‘medium Human Development’ category. They are ranked 151st out of 182 in 2007 (UNDP, 2009). This score does not look very impressive on the first hand. However, compared to other Sub-Saharan countries, Tanzania performs quite well with only a few others also in the medium Human Development category. Tanzania’s score is also positive, looking at the developments over time. Considerable improvement is shown by a solid GDP growth rate of about 7%, and life expectancy going up from 47.6 years in 1970 to 55 years in 2009 (UNFPA, 2009; UNICEF, 2009; CIA, 2009; UNDP, 2009).

Figure 4.1 - Map of Tanzania



Source: University of California, 2010



Nevertheless, although these numbers and growth rates might sound promising, and while the IMF and World Bank praise Tanzania for its strong economic growth, it remains a fact that up to today Tanzania continues to struggle with its poverty. 88% of the people lives under the poverty line of \$1,25 per day. The distribution of wealth is unequal with a Gini-coefficient of 34,6; though Tanzania is among the better performing African countries (World Bank, 2010, UNDP, 2009). Although some poverty reduction has been achieved during the past decade, the actual number of people living below the poverty line has only increased by 1.3 million between 2001 and 2007 (Policy Forum, 2009). Consequently, the Tanzanian government influenced by donors, made poverty reduction their main priority. This is reflected in the national policies aiming to increase development by combating poverty and stimulating growth. Two guiding documents are made in the last 15 years. At first, the Vision 2025 and secondly, the Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania (MKUKUTA), or, the National Strategy for Growth and Reduction of Poverty. The first dates back to 1995 and sets a long-term developmental target for the year 2025, focused around the quality of life of its citizens, good governance and rule of law by its leaders and a strong economy, able to compete on a global scale. With these targets achieved, Tanzania should become a “middle income country with a high level of human development” by the year 2025 (The United Republic of Tanzania, 1995; Mastwijk, 2009).

Just like vision documents of other countries in the region, such as that of Rwanda, this Vision 2025 is criticized for being too ambitious and far from realistic. In addition, it is far too much donor driven (Policy Forum, 2009). MKUKUTA is in this sense much more practical and is a follow up of the PRSP, designed in 2000. It begins with admitting that the MDGs are already unable to reach anymore by 2015. Taking this as starting point, MKUKUTA is formed around three clusters of indicators; (economic) growth and reduction of poverty; improvement of the quality of life and social well-being; and governance and accountability (United Republic of Tanzania, 2005). The report acknowledges developments in the field of economic growth, but realizes that especially health and education did hardly gain of this positive development. Governance and accountability are seen as the clues towards a better development, because effective government and respect for the rule of law will positively influence the economic growth, whereas reduced levels of corruption are beneficial for the provision of services such as health and education. Good governance and government accountability are thus perceived as a precondition for the development of Tanzania.

#### 4.1.2 Decentralizing back and forth

Tanzania especially receives much positive attention, because of the country’s relative stability, compared to other African countries. Tanzania is already for the last 50 years a quite stable country (Pallotti, 2008). Tanzania is formed on 26 April 1964, out of Tanganyika and Zanzibar, which became independent from Britain a few years before. A few years later, the country came under the ruling power of Julius Kambarage Nyerere (1922-1999), born in Mara region, very close to Bunda Town. No one who will ever visit Tanzania will be able to avoid pictures and adorations of this worshipped leader. Nyerere was a visionary leader who tried to ensure a stable and well-performing Tanzania. He took up a policy now labeled as pan-African socialism. He pointed out that Tanzania should strive for transition by going back to collective land ownership and also collective revenues. He stated in as essay: *“In socialist Tanzania, our agricultural organization would be predominantly that of co-operative living and working for the good of all. This means that most of our farming would be done by groups of people who live as a community and work as a community. A nation of such village communities would be a socialist nation”* (Nyerere, 1968, p. 124). Nyerere translated the hope to build up an own society to practice and it actually increased the literacy rate and major developments in health care. However, the centralistic ideas became a burden for Tanzanian government later on, when they found out the inheritance of these policies.

Nyerere’s specific vision for Tanzania ended up in mixed results. Some basic services were organized very well, such as basic education. The high adult literacy rate is

Figure 4.2 – Nyerere visting communist China



Source: Personal visit Nyerere Museum, Butimba

partly due to this period. Around the end of the 1970s, Tanzania went under the same transition as most developing countries. The Western community felt they had to take up some responsibility to develop Africa up to another stage. The former failed approaches made way for a strong neo-liberal policy. This pushed Nyerere to transform. At that time, Tanzania was also bankrupt, because the pan-African socialist system was too expensive. All citizens received an income from the government, but the government was unable to pay this. Tanzania therefore had to turn to the World Bank and the IMF to get funding. From inside as well as outside forces, Tanzania became more influenced by donors and multilateral agencies, even becoming one of the donor-darlings (Therkildsen, 2000; Mastwijk, 2009). However, one will not hear this other side story while visiting Tanzania. The inhabitants of Bunda also only know about his charismatic leadership and humbleness, making him the national cult hero, and forever he will be 'Baba wa Taifa', father of the nation.

The pan-African socialism especially influenced the political structure of the country. Communistic thinking is based on the idea of centralization. Everything had to be organized by the government and they provided income for all citizens, making sure no one had shortages. This centralization policy had different components. At first, the local traditional chiefdoms were abolished, and a new structure of LGA's installed. These newly formed LGA's are not the same as they are referred to today. They did not have any space to organize themselves and just had to do what the central government asked them for. The central government became the driver of development. The Arusha Declaration, which formed the base for the pan-African socialist policies, emphasized the nationalization of the private sector. In the end, everything was under rule of the central government (Gaventa, 2002). Nyerere, the freedom fighter was hard to criticize, because he brought peace and was able to give its citizens stability and some form of income. The impact of this centralization is hard to overestimate, because the traditional culture that gave security and has ruling power broke down. The LGA's on the other hand were not really utilized, leading to the lack of a local government level.

Tanzania's bankruptcy in the 1980s made Tanzania fled into the arms of the World Bank and IMF. They re-introduced the idea of the private sector as the driver for development. More important was the reintroduction of the LGAs. In 1984, rural and urban LGAs were re-established with their former responsibilities. However, this was perceived more as an administrative and organizational change, rather than a way of bringing democracy and development to the community (Liviga & Mfunda, 1999). This decentralization policy was far from successful and several problems were encountered. The LGAs were unable to manage the necessary processes, did not have leadership skills, and had a general shortage of staff. The existing staff had only very little commitment, and transparency and accountability were mainly lacking (PMO-RALG, 2004).

The involvement of donor agencies also lead to a multi-party system, established in 1992 (Mastwijk, 2009). Since then, decentralization practices received even more attention as a development tool. The landmark in this process was the introduction of the Local Government Reform Programme (LGRP) in 1996. Under pressure of the donor community, Tanzania took up a more decentralizing approach including devolution of power to lower levels. The LGRP is still in place and is of particular importance in the whole transition of Tanzania, because it *"represents the last stage of the complex post-colonial evolution of Tanzanian local government institutions"* (Pallotti, 2008, p. 224).

The World Bank and a number of other donors fund the LGRP. They try to stop the deteriorating economic and social conditions in Tanzania (Harrison, 2008; PMO-RALG, 2007). With the introduction of the LGRP in 1996, the Tanzanian government envisioned the creation of autonomous, strong, effective, democratically governed, participatory and development-led local institutions; LGAs that could function as drivers of development, instead of the central government being the main development agent (van Dijk, 2008). Decentralization by devolution, aims at improving basic service delivery at the local level and improving accountability to the needs of the community (PMO-RALG, 2004).

Decentralization and strengthening of LGAs was very much needed, bearing in mind the specific centralization practices in history. Important policy changes such as this decentralization always encounter problems and the decentralization policy is therefore critically evaluated. Different reports and literature, in line with the introductory quote of this chapter, mention difficulties regarding the implementation and outcome of the decentralization by devolution policy. Four main reasons can be distinguished:

- The decentralization policy is less than preferable embedded in a legal framework. The different responsibilities between different government levels are not always clear and they are not institutionalized very well. In turn, opportuni-

ties emerge for extra layers of corruption, making it even more difficult to act as a local government authority (Harrison, 2008).

- There is a conflict between elected councilors and appointed government employees. There is a high staff turnover and decisions regarding transfers are taken by the national office of the PMO-RALG. This often leads to small brain drains at the district level. When corruption practices become known, officers are just transferred to another village or ward, being able to do the same job again, but most often, corruption never sees daylight (REPOA, 2006; Mastwijk, 2009).
- Funding and financial allocation is still done on national government level. The fiscal autonomy of LGAs remains limited.
- The central government is still unwilling to transfer authorities to LGAs, leading to power struggles between the different levels (van Dijk, 2008, p. 165). However, among LGAs, this lack of political will can also be found.
- Despite the participatory approach taught, LGAs experience difficulties with participation of ward and villages levels, as well as the involvement of NGOs and CSOs (SNV, 2008).

After all, the biggest constraint is the limited capacity (in terms of knowledge and skilled labor) of LGAs to perform their duties, although the extent to which they are able to deal with the new responsibilities differs per LGA (REPOA, 2006). However, not only the LGA should be criticized. Corkery (1997) questions the extent to which Tanzania is able to run such large-scale projects such as the LGRP themselves. Donors should also be critical to their role and question whether they should adopt for those kinds of changes and policies. In other words, *“It is hard to escape the conclusion that we seem to know more about what does not work in the public sector in a donor-rich country such as Tanzania than we know about how to improve and sustain performance under present and foreseeable economic, administrative and political conditions”* (Therkildsen, 2000).

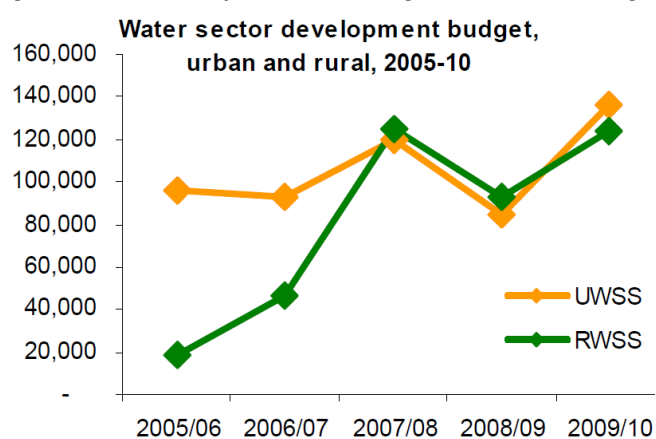
## 4.2 Water sector in Tanzania

As for most countries and regions, water is available in proper circumstances. Tanzania is endowed with sufficient freshwater resources to meet its current water needs. The challenge for the government is to effectively and efficiently allocate water in a way that all Tanzanian citizens have clean and secure water access (Ministry of Water and Irrigation, 2009). Despite the availability of freshwater, around 45% of the Tanzanians do not rely on a safe and clean water access. Urban areas are better served, with a coverage rate of 80% in 2009, where only 4 out of 10 rural inhabitants rely on safe water access (TAWASANET, 2009).

Urban Tanzania did gain more from financial government and donor assistance in former years. New government policies aim for equalization of this difference in financial flows. Figure 4.3 shows this process of equalization of the water sector development budget, where the allocation is almost equal. However, looking at the per capita development budget allocations - using census data to calculate the number of unserved urban and rural residents - it is clear that allocations to urban areas remain substantially higher (around 4 times) than allocations to rural areas (TAWASANET, 2008).

Tanzania went through many changes in the strategy and policy towards water provision. Especially the new 2002 National Water Policy (NAWAPO) marked a change in the organization of the water sector. The former National Water Policy (1991) made gave the government the mandate and responsibility to manage and implement water schemes and new water projects. Urban and rural areas were both under jurisdiction of the central government. A radical policy shift in 2002 made way for beneficiary participation of other parties, to undertake water projects and install new water schemes, in terms of either planning and management or where it concerns

Figure 4.3 - Allocation of water sector budget in Tanzanian Shillings



Source: TAWASANET, 2009

operation and maintenance (United Republic of Tanzania, 2002). The NAWAPO is also different from the former policy, because it has different strategies for rural regions and urban centers. Especially in urban contexts, beneficiary participation is stressed. This can be undertaken by private sector, NGOs or LGAs.

General problems faced in urban water provision are a lack of an enabling environment for private sector participation; inadequate supply in quantity and quality; poor billing and revenue collection and an 'institutional gap', although it is partly unclear to what extent this last element is still problematic (United Republic of Tanzania, 2002; Doering, 2005). The institutions involved in water management are to some extent loosely connected and lack basic coordination and are often at the periphery of the water management agenda, divorced from the water management programs (Sokile et al., 2003). There are several institutions involved in water management in one way or another. Water supply is under the regional water engineers (Districts), irrigation under Ministry of Agriculture and Food Security and hydropower under TANESCO in the Ministry of Energy and Minerals (Doering, 2005). The current institutional framework for water in Tanzania is based on the National Water Sector Development Strategy (NWSDS) of 2006 which sets out the strategy for implementing the National Water Policy. Urban Water Supply and Sewerage Authorities are designated by the Minister of Water Irrigation in the areas of municipal councils and district headquarters throughout the country (Arseniuk, 2010). The water sector is thus undergoing decentralization processes. Especially on the lower government levels, difficulties are faced with this new strategy, because *"there is a limited awareness by the local level stakeholders of the roles and functions allocated to the regional level administration by NAWAPO, NWSDS, and the new legislation which is being drafted"* (United Republic of Tanzania, 2008)

The new found Urban Water Authorities differ to the degree that they are able to meet their operation and maintenance costs. If not, LGA bodies often jump in to make sure that the budget gap between collections and expenditures is closed, making the water authority some sort of semi-private water supplier. To partly close the institutional gap and assist the newly established water authorities, the Energy and Water Utilities Regulatory Authority (EWURA) is established. This authority is assigned with supervising and regulating the Energy and Water Supply Authorities. After all, also donors and NGOs still play a significant role in the development of the water sector in Tanzania (Seppala, 2002; TAWASANET, 2008).

The NWSDS also indicates CD as one of the tools to improve the performance of the water sector. The urgency of increasing capacity is shown by striking figures from the human resources department of the Ministry of Water and Irrigation (2009). It is indicated that carrying out the existing government plans requires 460 engineers and 1125 technicians on national scale. However, by June 2009, only 156 engineers and 182 technicians were under contract, causing problems with putting in place the proposed projects. As far as Urban Water Authorities are concerned, the main capacity development interventions are to be found in the fields of (United Republic of Tanzania, 2008):

- Organizational development skills
- Change management skills
- Business management skills
- Project planning and implementation skills
- Customer care skills
- Contract management skills
- Coordination, consultation and participatory skills

Looking at the capacities lacking the conclusion comes up that, even though private participation is promoted in NAWAPO and NWSDS, there is still a world to win and a gap to bridge. The era of governmental responsibility for water provision (for free) is already finished, though profitability of water supply is still far for many urban areas in Tanzania. The private sector has no or little experience in water service delivery, while many of the schemes are likely to be too small to attract international private sector. *"The rise of the local private sector would have to entail a great deal of capacity and entrepreneurship rarely available in Tanzania"* (Arseniuk, 2010).

### 4.3 Bunda Town

Bunda is one out of ten towns targeted by the LVWATSAN Programme, aiming to contribute to achieving the MDGs for water and sanitation. Bunda is a town at the southeast shore of the Lake Victoria (see also figure 4.4). It is a so-called secondary city, compared to the two nearest cities Mwanza and Musoma. There are some 50.000 people living in Bunda, although exact figures are lacking (UN-HABITAT, 2008b). The estimates differ from 25.000 up to 60.000. Bunda turned to become the major town of Bunda District, one of the districts of Mara Region. Bunda District has the size of a Dutch province. Bunda District is further subdivided into 4 divisions, 20 wards, 86 villages, and 14 sub villages. Bunda District has 300.000 inhabitants. The main occupation of the inhabitants is agriculture, livestock and fishing. However, Bunda Town has a slightly different picture; agriculture is underrepresented, while more people are working in services and the two cotton-oil and cotton splitting factories.

Figure 4.4 - Bunda within Mara Region

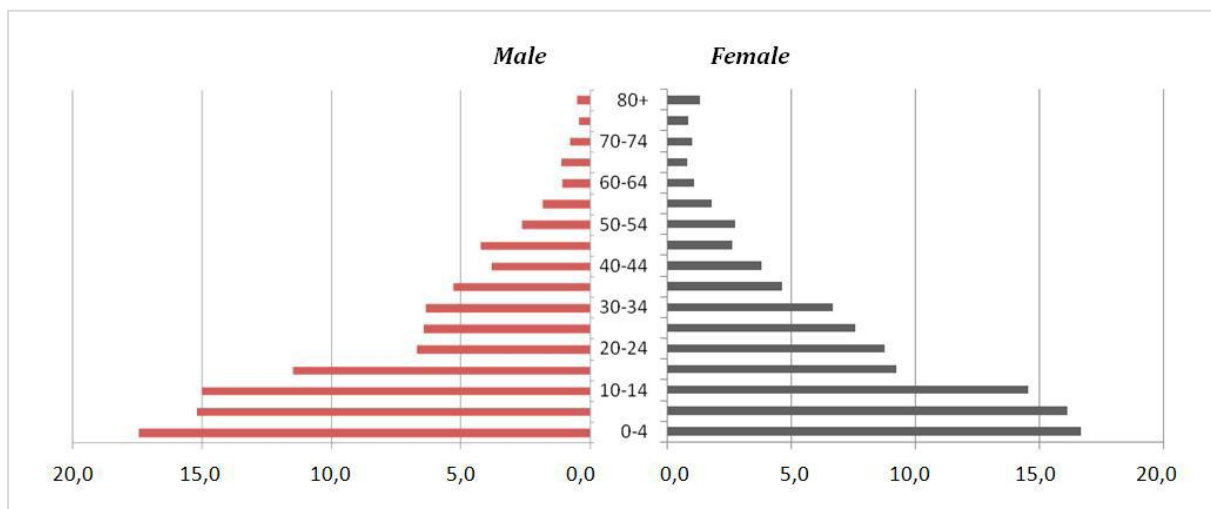


Source: Anglican Church in Tanzania, Mara Diocese

Bunda's population size is not that impressive, but the population growth rate is. The population of Bunda grows fast and a growth percentage of more than 4% is expected every year, causing an urban population of 100.000 inhabitants in 2025. This high population growth is one of the major reasons of concern from UN-HABITAT. All secondary towns around Lake Victoria experience this growth rate, which is higher than growth rates of larger towns such as Mwanza or Musoma. These smaller towns are less developed and schemes for water provision are often not renewed since the 1970s. Population growth rates such as in Bunda put much pressure on basic services as well as on the environment. This situation therefore requests for vigorous action.

Bunda is a very young town. The age composition of the population in Bunda District is very pyramid shaped, leading to very large households. Half of the population is under 15 years old and the average household size in Bunda is 6,1 (UN-HABITAT, 2008b). The population pyramid (figure 4.5) shows the percentage of Bunda's population per age category.

Figure 4.5 - Age composition of Bunda's inhabitants, split in male and female in percentages, 2006



Source: UN-HABITAT, 2008b

Compared to all the other 112 districts in Tanzania, Bunda is ranked as the poorest district of whole Tanzania. Although people in Bunda do not know that much about national issues, they all know that they are the poorest district. It is true that

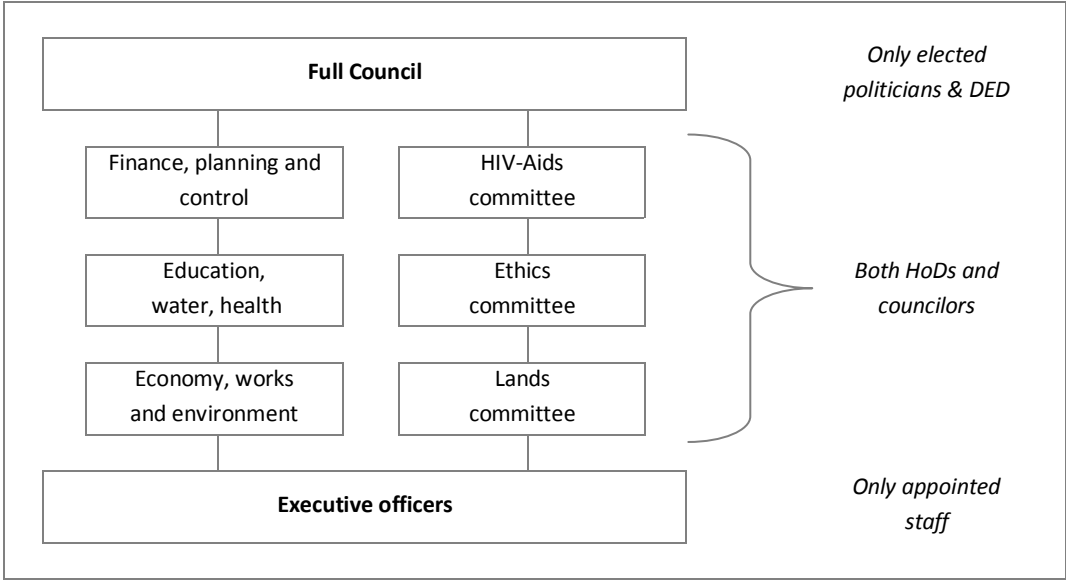
many of the people in Bunda are poor. Poverty is to be found on every corner and street. Many people in Bunda are to some extent vulnerable, depending on the definition of this term. However, the vulnerable people that should receive specific attention according to the Bunda Appraisal Report of the LV-WATSAN Programme are the *“aged, sick, orphans; land-less, unemployed, widows, abandoned wives whose husbands go to look for jobs outside the town, single men and single women. These vulnerable groups are often helpless, physically constrained, and lack basic necessities”* (UN-HABITAT, 2008b).

**4.3.1 Local Government Authorities**

The context of this research is very much shaped and influenced by the working of the LGA levels, for two reasons. Firstly The local government is the ‘deliverer’ of basic services, the first responsible that all its citizens receive water, have sanitation and are aware of proper behavior regarding the environment. Secondly, as section 4.1 already suggested, it is doubtful whether the LGA is capacitated to perform this duty in a proper way. In that case, CD is likely to involve the LGA as a stakeholder. The Water and Sanitation Act declares that the local government, on behalf of the Ministry of Water and Irrigation, is responsible for *“effective and sustainable water supply in the area falling under its jurisdiction”* (United Republic of Tanzania, 2009, p. 435). It is not made explicit what this ‘effective and sustainable water supply’ means in practice, just as it remains unclear what should happen in situations of undersupply. The central government, however, acknowledges the water situation in Bunda as water-stressed, and invests together with the WB and UN-HABITAT in a new water scheme.

It follows out of the Act that the LGA can delegate the responsible of water supply to community-managed water schemes or water authority, either public or (semi-)private. The latter is the case for Bunda. BUWSA acts as an authority, separate from the LGA, although they are in a change process to become a complete privately owned water company. The responsibility of BUWSA is to *“do all things necessary to provide water supply and sanitation to the area falling under its jurisdiction”* (United Republic of Tanzania, 2009, p. 436). There are rather close ties between BUWSA and the District Council. Financially, the DC jumps in every month to close BUWSA budget gap between revenues and expenditures. Furthermore, the lines are short because the MD of BUWSA is also the HoD of Water within the Bunda District Council (DC). The MD, Mr. Swai, is still much involved in the government working and has meetings every week in his function as HoD.

Figure 4.6 – Committee structure of the District Council



Source: Mastwijk, 2009

The general structure in which the DC departments work together is shown in figure 4.6. The Full Council is the body controlling the DC. It consists of 38 representatives of the 38 wards in Bunda District. These councilors are elected by the people. The executive officers below are the people working for the DC. In between are six committees, made up of HoD’s of the different departments within the DC and some councilors. The HoD’s are also appointed and are sometimes brought in to improve the working of the DC. These committees tend to not collaborate that much with each other. The four most

important departments regarding the LVWATSAN Programme are in different committees. The departments of water and health are split from environment and community development.

Bunda Town has a separate governing structure from Bunda District. The Bunda Township Authority (BTA) is formally responsible for governing Bunda Town. The BTA is like a daughter of the DC and serves on behalf of the DC. However, the DC is still very much in place regarding Bunda Town. The UN-HABITAT Programme also collaborates with the DC, while strictly speaking this is not correct. The BTA is becoming a Town Council later this year. By then, they have the same status as the DC and will receive direct, increased, support from the central government.

#### 4.4 Lake Victoria Water and Sanitation Programme

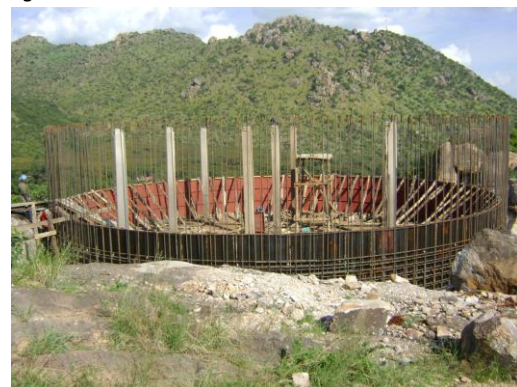
The LVWATSAN Programme is one of the landmarks of UN-HABITAT in Africa. It is a large-scale programme, serving many towns around the Lake Victoria. The Programme consists of different phases, partly depending on the budgets to be received in the following years. UN-HABITAT started the LVWATSAN Programme already in 2002, aiming to serve the towns by contributing to their attempts of developing the provision of water and sanitation services to its citizens. Therefore, the Programme consists of different elements and also has its own applications depending per town. Formally speaking, the LVWATSAN Programme aims at *“supporting secondary urban centers in the Lake Victoria Region in contributing to the achievement the Millennium Development Goals”* (SNV, 2008). The seventh MDG receives attention within LVWATSAN and especially target 7C: Reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation (UN, 2010)

UN-HABITAT undertakes the LVWATSAN Programme in the Lake Victoria region because the area experiences high urbanization rates, putting much pressure on environment and basic service delivery in urban areas. The Lake Victoria basin deserves an integrated approach regarding environmental management and water supply, because of the cross-boundary problems. UN-HABITAT therefore approaches the different countries shoring the lake (Uganda, Kenya, Tanzania) all in one project. The secondary towns with an inappropriate water infrastructure or other severe problems are targeted. The programme aims at meeting the poor in their demand for water, sanitation and sewerage. The means to reach this objective are multiple. Governance is one of the focus points as well as private sector involvement and other opportunities for local Economic development. Gender is a cross-cutting issue through all the activities. The ultimate goal for UN-HABITAT is to provide adequate water supply coverage to all households (UN-HABITAT, 2008a).

The LVWATSAN Programme is experiencing delays and struggles in funding. Bunda is one of the captives in this process, not receiving any assistance in infrastructure investments so far. UN-HABITAT, together with the World Bank and the Tanzanian government are undertaking investments in a large new water scheme, enabling water provision to whole Bunda. The storage tanks and pump houses are already built though UN-HABITAT is responsible for the piping. It is still questionable whether these will be built within a few years.

The only assistance Bunda received in the LVWATSAN Programme so far is the Fast-Track Capacity Building Programme. This is a capacity building programme targeting the Bunda Urban Water Supply Authority in specific, designed by the National Water and Sewerage Company from Kampala, Uganda. This programme offers training for the personnel of BUWSA and focuses on participatory learning. A block-mapping of all customers is undertaken, together with the installation of an electronic billing system. During the internship, a ‘microcredit for sanitation’-programme was launched by KADETFU.

Figure 4.7 - New Kaswaka Tank under construction



Source: BUWSA, 2010

## 5. Results: capacity of Bunda's water system

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*"If you give the community proper knowledge, attitude changes."  
Mr. Flavian Nyamegeko Chacha, Councilor Bunda District*

The first part of this thesis gave all input necessary to understand the results and put them in the right context. The second part of this thesis presents the results of the fieldwork in the following two chapters, in order to discuss these findings and draw some conclusions. This fifth chapter will cover the subject of the first sub-question, which is the capacity of BWS. The next chapter will focus on the possible effectiveness of the CD Programme for BWS.

BWS comprises of various stakeholders of which most also acted as respondents in the research. These stakeholders have their role and responsibilities in BWS. Together they make sure that Bunda's community receives and makes effective use of this water, minimizing environmental damage. The capacity of BWS is determined by many factors, as explained in chapter 3. This chapter will discuss the capacity of BWS in different steps. Firstly, the focus will be on the actual water supply and the main deliverer, BUWSA. Secondly, the focus will be broadened to the capacity of BWS as a whole, which will be assessed by using the 7S-model.

### 5.1 Water supply

The Bunda Urban Water Supply Authority (BUWSA) is the water provider through the piped water network in Bunda. BUWSA is legally charged with the delivery of water supply in Bunda Town and some minor towns along the transmission line from Lake Victoria towards Bunda. The water provision in the remaining of Bunda District is under jurisdiction of the District Water Department. BUWSA is established on June 21, 2002, under the new National Water Policy, promoting beneficiary participation in urban water supply (UN-HABITAT, 2008b). BUWSA is currently shifting from a public utility to a commercial, self-relying entity. This transition process is far from finished, as expenditures are four times higher than collected revenues (EWURA, 2010). The water, extracted from the Lake Victoria, is provided by means of private connections, towards either the customers plot or dwelling. Water kiosks are not used for distribution, except from the only kiosk at the market area, which is run by an independent operator. He is responsible for operation and maintenance, but does not have freedom in setting tariffs.

#### 5.1.1 Operating aspects of BUWSA

The distance between Lake Victoria and Bunda is approximately 15 kilometers, burdening BUWSA with impressive electricity costs. Two booster stations are required to bring the water up to Bunda, where two minor boosters transfer the water through the town's waterworks. Problems with lacking pressure in the pipes are daily and every customer experiences disruptions. The capacity of Bunda's piped water network is limited and currently stands at 1600 m<sup>3</sup>/day (EWURA, 2010). However, due to power failure, the actual consumption is only around 1000 m<sup>3</sup>/day. This is far from appropriate to serve Bunda's population, which demands for 6500 m<sup>3</sup>/day (UN-HABITAT, 2008b). It is estimated that 18% of Bunda's population is served by BUWSA, all of them experiencing limited supply, with 9 hours of service per day on average. Exact figures are lacking, though the informal policy is more or less to serve every part of Bunda 2 à 3 times a week for some hours.

The majority of BUWSA's customers are private households. Out of the total 1192 connections in February 2010, 1152 were domestic (96,6%), leaving the remaining connections for institutions and commercial organizations (BUWSA, 2010). The domestic connections account for less than half of BUWSA's water consumption. This Pareto-principle is to be found, where a few institutions (hospitals, DC, hotels) account for a large part of BUWSA's revenues. The Designated District Hospital is responsible for one-third of the collections every month (BUWSA, 2010b). However, even this hospital experiences water shortages, taking up to two or three days, causing dangerous health situations and a very pungent odor in the premises. The amount of connections is increasing very slowly. The limited pumping capacity restricts BUWSA from increasing its connections. 65% of the connections are metered, and the remaining 35 are charged a flat rate per month. All institutional



and commercial connections are metered. Water treatment is not in place, except from dosing Calcium Hypochlorite. This happens on an irregular basis, regardless of the water flow, which differs very much (UN-HABITAT, 2008b).

Financially, BUWSA is performing very badly. Many of the UWSA's in Tanzania are not able to run break-even, though BUWSA is among the worst performers, compared to national figures (EWURA, 2010). This is due to a variety of reasons, such as (UN-HABITAT, 2008b; BUWSA, 2009a):

- High electricity costs due to pumping distance and power disruptions.
- Very old and dilapidated network – most of it dates back to 1970s – leading to a high incidence of leaks, bursts and illegal use of water.
- High non-revenue water (NRW) figures, between 50% and 60%. This is consumption not paid for (commercial NRW) and water lost by leaks and bursts (technical NRW).
- Low prices for water, compared to national figures.

The only activities made recently to alter its bad performance are attempts to improve the financial stability and independency of BUWSA. One of the most effective quick-wins is implemented in April 2010. Under supervision of EWURA, the prices charged for water are increased. The table above shows the old and new prices for the different customer categories, per connection type. It is estimated that this difference will lead to a doubling of BUWSA's revenues. In 2009, BUWSA only managed to collect 56 million Tanzanian Shillings, far too little to meet the expenses of 216 million TSH's. Hopefully, the price intervention will enable BUWSA to collect half of the revenues themselves.

Despite the financial deficits experienced nowadays, BUWSA already managed to improve financial performance very much in the past eight years. From 2002 onwards, when BUWSA was established, the yearly revenues increased from 6 million towards 56 million (BUWSA, 2010b), which is almost ten times more. It came out that especially the appointment of a new Managing Director, transferred from the Ministry of Water and Irrigation, led to a new impulse in financial collections. Until BUWSA is running a proper budget, own investments in improving the water network are not possible (BUWSA, 2009a).

### 5.1.2 Human capacity of BUWSA

As far as the human capacity of BUWSA is concerned, there are huge differences within the organization. Especially the competence gap between management and labor force is large. *“The managers of BUWSA have a high level of competence, experience and skills but there is still need for building capacity in core areas coupled with targeted performance improvement initiatives in order to advance BUWSA's operations”* (NWSC, 2008). There is thus room for improving management levels, though the problems at the lower cadre of the organization are more severe. The two BUWSA employees (Mr., Opata & Mr. Alloo), which participated in the second research phase also point to this picture, by acknowledging that they lack up-to-date knowledge to effectively maintain the water network. Also UN-HABITAT (2008b) underlines this problem and advises *to train some of the lower level technical staff in utility mapping and monitoring of the water and sanitation facilities, as well as operation and maintenance scheduling.*

BUWSA is already 'capacitated' through the fast-track capacity building programme of LVWATSAN. This one is only focused on the water utilities in the respective towns, where the CD Programme of the CBC focuses on all stakeholders of the water systems in the towns. During this process, BUWSA did a self-evaluation, including a SWOT-analysis (BUWSA, 2009). The BUWSA staff managed to mention 24 strengths against 98 weaknesses and 22 opportunities against 24 threats. Most of those elements refer to hardware and funding difficulties, though the software elements are interesting.

Table 5.1 - Water prices charged by BUWSA (new: >May 2010)

	Customer category	Old tariff structure	New tariff structure
Metered customers (TSh/m3)	Domestic	350	800
	Commercial	500	1000
	Institutional	500	1000
Unmetered flat rate (TSh/month)	Domestic	4800	12000
	Commercial	8000	40000
	Institutional	12000	40000

Source: EWURA, 2010

The picture BUWSA draws themselves is the same as NWSC (2008) and UN-HABITAT (2008b). At first, the lack of knowledge and skills for operation and maintenance is lacking among the lower staff. The customer care department experiences problems, enforced by the fact that the staff is not so much used to the commercial nature of private water supply. Thirdly, the attitude of the staff is not proper. Both during the second research phase as in NWSC (2009), the BUWSA employees declare that there is a problem regarding laziness and dishonest staff. This is a threat and a weakness of BUWSA. In this line, it is not obvious that the former commercial manager has been fired in 2009 due to a misuse of funds (BUWSA, 2009).

At present, there is no real human resource management strategy within BUWSA. None of the employees receives training or capacity building, besides the fast track capacity building programme. As far as the problems regarding attitude are concerned, it is acknowledged that there are no financial incentives in place, creating the scene for such behavior (Mr. Tubert, BUWSA Technical Manager; Mr. Oyata, BUWSA Technician). Also NWSC (2008) mentions the inadequate motivational strategies as a point of major concern. Employees of BUWSA (who receive a proper salary) are also paid overtime and lunch allowance when they work beyond normal working hours and while handling major emergencies respectively. ‘Workers’ are only paid 75000 TSh (€35) at the end of each month irrespective of whether they have performed or not “and since most of them are government workers there is little commitment from most of the staff” (NWSC, 2008). During the research, some of the staff turned out to be at the office everyday while others only appeared every now and then. It took a while to find out that the ‘committed’ staff acted upon the financial incentive of a proper salary, while the other workers has all sorts of jobs next to their BUWSA job.

**5.1.3 Additional water figures for Bunda**

The LVWATSAN Programme aims at improving water and sanitation in Bunda. Strengthening BUWSA’s capacities to supply water is one of the major components of LVWATSAN. However, the majority (exact figures differ because estimates range from 7% (see table 5.2) to 18% (BUWSA, 2010)) of Bunda’s inhabitants does not receive water by BUWSA; and this is not expected to change in a few years. Those not connected to ‘piped water’, extract their water from a multitude of sources, mainly protected wells (see table 5.2 for exact figures). Next to these wells, a large part of the population uses public taps or standpipes. Customers with a piped connection are limited. The major part of the piped water flows to institutions (hospitals, LGA) and commercial customers. Some additional recommendations should be made to put the table in its right perspective (UN-HABITAT, 2008b):

- The piped water network is mainly serving the middle- and high-income group (80%).
- The term protected well is rather misleading. The form of cover; the inflow of contaminated water, and also the proximity of latrines affects the protection quality in increasing proportions.
- From the piped water users, 93% pays for its water. For the other sources, exact figures are not available. The community development officer said that it would be around 75%, though data are not present. However, paying for water is rather uncommon in Tanzania, especially in rural areas (United Republic of Tanzania, 2002). It could easily be less than 75%.
- The water vendors are, as always, the most expensive source (Allen et al., 2006). However, some inhabitants of Bunda are relying on them. They ask up to 150 TSh per bucket, which is 7,5 times more than the usual price (20 TSh).
- At least 80% of the wastewater is disposed on the streets, but presumably more, as only the center of Bunda has proper sewerage facilities.

Table 5.2 - Source of drinking water, Bunda

Source of drinking water	%
Protected well	45
Public tap / standpipe	17
Unprotected spring	7,5
Unprotected well	7
Piped into plot	6
Borehole	5
Water vendors	4,5
Rain water	4
Protected spring	2,5
Piped into dwelling	1
Surface water, bottled, other	< 1

Source: UN-HABITAT, 2008b

The water situation in Bunda is far from appropriate, burdening people with unsafe water access, and high prices for those not able to get water by themselves, such as vulnerable groups, aged and handicapped. However, the average time it takes to collect

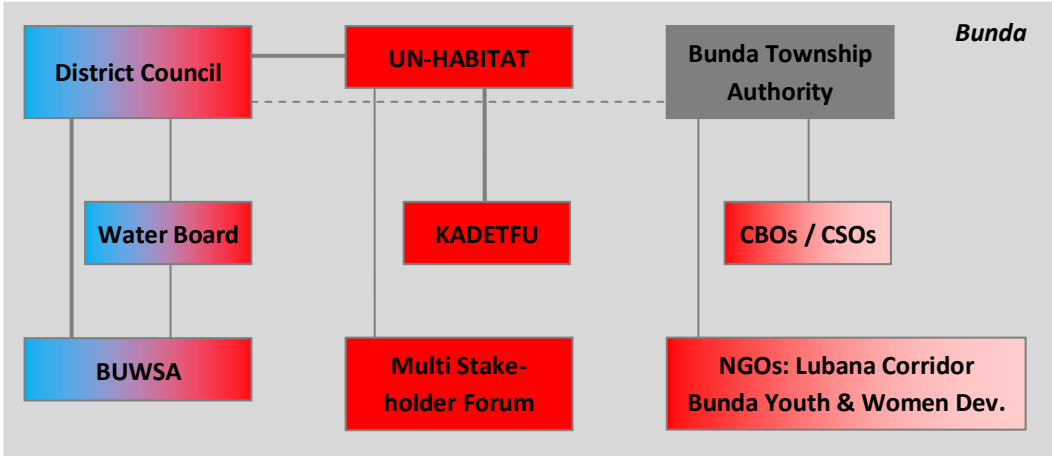
water in Bunda is, in contrast with rural areas, rather short. Half of the population needs less than 15 minutes to collect the water, but there is also a group of more than 15% of Bunda’s population, that needs more than 60 minutes to fetch water. In most cases (61%), the adult woman takes up the majority of the fetching activities. Sometimes the adult man will do the job (7%), but in even more situations (24%), there is no specific member of the household fetching the water (UN-HABITAT, 2008b). Water access is thus rather near for most of Bunda’s inhabitants and just as the general picture, water fetching is mainly the women’s job. Proper sanitation coverage is very low in Bunda. The incidence of toilets is less than 5%, and pit-latrines are widespread, just as the resulting contamination of the ground water (UN-HABITAT, 2008b).

**5.2 Bunda’s water system - stakeholders and their interrelations**

The first section went briefly through the major aspects of the capacity of BUWSA (recent performance indicators as well as human and organizational capacity); the following sections will elaborate on the systemic capacity of BWS. The CD Programme of UN-HABITAT approaches BWS as one system responsible for the improvements in water and sanitation. BWS consists of different stakeholders, which will be introduced hereafter. This analysis will enable a better understanding of the systemic capacity of BWS, which will be given in the following section using the 7S-model.

Water supply in Bunda is the responsibility of BUWSA and they provide this basic service to 18% of Bunda’s community. The remaining 82% of the population receives water from a multitude of sources. These different ways of water provision are both important for improving the water situation in Bunda. There are different organizations and actors involved in the provision of water. The same applies to related topics as sanitation, solid waste management, environmental conservation and sewerage, which will also be touched upon if necessary. The stakeholders being part of BWS are visualized in figure 5.1. These organizations are all part of BWS and most are thus also involved in the LVWATSAN Programme of UN-HABITAT. All these organizations are in some way present within the geographical boundaries of Bunda Town.

Figure 5.1 - Bunda’s water system - stakeholders and their interrelations



Legend with explanation of colors and lines:

Part of (and established under) LVWATSAN	— = working relationship in BWS
Part of LVWATSAN (and MSF); involved in water supply	— = strong working relation in BWS
Represented in LVWATSAN through MSF	- - - - = minor relationship in BWS
Not involved	

The figure (5.1) shows nine distinct stakeholders in BWS. There are two local government authorities; the District Council (DC) of Bunda District and the Bunda Township Authority (BTA). The BTA functions under the DC and is dealing with some of the issues regarding Bunda Town. BTA became a Town Council at the end of 2010, giving them the full responsibility over Bunda Town. During the research, the DC was still very much involved in governing processes regarding Bunda Town. BUWSA functions under the supervising of a Water Board, which is functioning on behalf of the District Council.

UN-HABITAT is the funder of the LVWATSAN Programme and therefore present in Bunda Town. The CD organizations, organized in the CBC, are also in this box. UN-HABITAT assigned KADETFU to undertake a Microcredit for Sanitation Programme in Bunda. The Multi Stakeholder Forum (MSF) is also established under LVWATSAN, as an attempt to bring all stakeholders of BWS together in one evaluation body. Bunda's community is also represented in the MSF, primarily through the presence of CBOs and CSOs in the MSF. They have to make sure that the voice of Bunda's inhabitants is also heard. There are two major NGOs present in Bunda, next to KADETFU. These are Lubana Corridor, mainly dealing with environmental issues and Bunda Youth and Women Development, which is dealing with health, education and gender issues.

The different colors explain a little about the exact position of the stakeholders within BWS and within LVWATSAN. The middle column of stakeholders is primarily involved in the LVWATSAN Programme. These stakeholders are key to the processes of UN-HABITAT. The stakeholders in the left column are responsible for water supply in Bunda Town. BUWSA is the organization supplying piped water and the DC is, according to Tanzanian law, formally responsible for the provision of water to the citizens in the area falling under its jurisdiction. These stakeholders are also part of the LVWATSAN Programme. In fact, there are strong linkages between UN-HABITAT and the relevant DC departments and with BUWSA.

The right column shows the BTA, which is not involved in LVWATSAN and the CBOs/CSOs/NGOs that are represented in the MSF. These community organizations can be relevant for BWS, though are not really involved in the system. The BTA is the main stakeholder who acknowledges those organizations as tools to reach the community for purposes of sensitization and the improvement of health, education and regarding gender issues. The Multi Stakeholder Forum is established and almost all stakeholders participated during the Inception Phase, though the MSF structure is not utilized outside the LVWATSAN Programme. BWS consists of different stakeholders, though it is not to say that they are operating as one system. This will be explained more in detail in the following sections.

### **5.3 Systemic capacity analysis following the 7S-model**

The systemic capacity of BWS will be explained using the 7S-model. This is an organizational model, aimed at describing an organization of system, following seven key components of organizational capacity; shared values, strategy, systems, structure, staff, skills and style (see for more information section 3.5). This organizational model is in this research used in a system's context, enabling for an evaluation of the systemic capacity of BWS.

#### **5.3.1 Shared values**

'Shared values' refer to norms and values that are determining the working of an organization. These are underlying principles, also influencing the other S's. These can be explicit, but often also implicit. There are different shared values worth mentioning in the context of BWS, some of them influenced by Tanzania's history of a central organized government. At that time, the government was the deliverer of all basic services. Recent decades marked a decentralization shift, though BWS is very much struggling to perform their new duties. The responsibilities transferred to DC level require knowledge and skills, which are very limited available in BWS. As also Mr. Mirumbe (BTA, Development Planning Officer) acknowledges: *"the public sector reform went far too quick and the local level is not able to do the job"*. The issue of lacking knowledge and skills came up in many interviews, though one of the underlying principles for this shortage are the problems regarding the fast decentralization. Mr. Maganga (SNV) underlines this by pointing out that D-by-D refers to 'decentralization by dumping'. The DC and BTA have to be able to govern Bunda in a proper way, though are not provided with capacity (primarily in terms of skilled labor and finances) to do so.

Bunda population is very much used to the fact that the government delivers basic services, such as water. And, more important, there is still a wide-spread idea that those basic services are for free, although this is belief is subject to change. However, the idea that water is a God given resource that should not be paid for, is a value that is deeply rooted in Bunda's community, just as the NAWAPO already indicates this as a major challenge to deal with (United Republic of Tanzania, 2002). The financial opportunities to improve BWS are very limited, but approaching water more as an economic good is one of the solutions to this problem. The government as the deliverer of basic services also facilitates a community not so much used to participation or involvement. These are unexplored structures, due to the unfamiliarity with those structures and the inability (from LGA and community) to utilize these structures in an effective manner (Bergh, 2007). On the other

hand, the community is also not aware of their rights as Tanzanian citizens; and how to assert these rights towards the government.

When it comes down to the community, 17 of the 26 participants mentioned one specific issue in concern of values, which is the ignorance of the community towards proper environmental behavior. This is a very high score, as also knowledge about environmental behavior is very limited. Environmental behavior is everything that is necessary to ensure that someone's lifestyle does no harm to the environment. In Bunda, there are many environmental problems showing the lack of this attitude, such as the wide coverage of badly protected pit latrines, and, which is more, the proximity of these latrines to wells and water pumps. Though also the absence of any form of solid waste management is a revealing example (UN-HABITAT, 2008b). Mr. Mabanga (BTA, Town Executive Officer) suggests this to be one of the major challenges for Bunda: *"If we Africans should have a better attitude towards sanitation and environment, than very much is possible"*. Moreover, different stakeholders also suggested that this lacking capacity at the community level should be built first, before intervening at the level of BWS. In the words of Mr. Machage (DC, Trade Officer): *"If the project of UN-Habitat wants to be sustainable they have to focus on the community. They need to be sensitized, in order to really change"*. In fact, there is a shared value lacking at the community level, as Mr. Mabanga (BTA, TEO) also continues to argue: *"They (UN-HABITAT, KADETFU) are bringing money to us to buy proper latrines, but there is not the real problem. The problem is that the Bunda population does not value water and sanitation in the right way. They need to be inspired and most of them will be able to pay the money themselves. We also sleep in a house under a roof, because we value it. For myself, I want the toilet to be better than the bedroom. That is not common African thinking, but I have knowledge in this field. In our culture, we are proud on bulls or cars or houses, but the toilet is nothing"*.

Another shared value hampering development is the rather widespread belief that improvements can only be reached by the (financial) assistance of donors. The donor-dependency is deeply rooted in the minds of stakeholders in BWS. The lack of funds is often (15 out of 26 participants) mentioned as one of the most constraining elements for improvements. It is true that Bunda's budgets are limited, though the opposite is not true. Money can not solve all problems, and moreover, the idea that donors will solve all problems should be very contestable. This belief is to be found among all levels of stakeholders, as even Mrs. Rweyemamu (DC, HoD Lands, Natural Resources and Environment) declares that *"always, the funding is not enough. Without donors we are not going to develop further"*. Leaving aside the exact systemic capacity of BWS, it is poignant to experience a limited belief in own opportunities, especially when it seems to be facilitated by donor practices.

### 5.3.2 Structure

The second S that forms a part of the systemic capacity of BWS is the topic of structure. The structure of an organization or system can contribute to the capacity of a system. Well-established structures create short lines between different stakeholders and effective collaboration and consultation. Organizational development (OD) approaches also incorporate interventions to establish well-functioning structures within organizations. Systemic CD builds on the knowledge of organizational management and related change processes. This section precedes where section 5.2 ended, elaborating further on figure 5.1 and the interrelations between different stakeholders. Proper structures within BWS are able to contribute to the systemic capacity of BWS.

#### *District Council*

The largest stakeholder within BWS is the District Council (here used to describe the government staff as well as elected governors). The DC has the largest capacity in terms of labor, finances, and power. The figure (5.1) also shows the DC in the upper left corner, which reflects the status as an important stakeholder. DC is formal responsible to assure water provision in Bunda District. The linkage with BUWSA is strong and lines are short between those stakeholders, reinforced by the fact that the DC closes BUWSA's budget gap and that the MD of BUWSA is the HoD of Water at the DC.

The DC consists of different departments and committees. There are structural problems regarding the collaboration between these departments. Like figure 4.6 shows, water and health are in a different committee than environment and community development. These four departments are primarily responsible in BWS, but are divided in policymaking. Both committees consist of different DC officials and councilors, making it difficult to collaborate effectively. All participants at DC level (HoD's, councilor) mentioned this as a constraining element. In addition, there is also friction between councilors

and LGA officials. As also Mastwijk (2009) concludes, the relationship between those is difficult. LGA employees are appointed, while the councilors are elected. The employed government officials have a sense of superiority.

The strength of relationships in BWS differs rather much. The relationship between the DC and the BTA is problematic. The capacity of the BTA is limited (in terms of labor and finances), because the DC does not provide them with resources to work properly. Up to this day the BTA is a small stakeholder, performing duties related to Bunda Town, on behalf of the DC. Preferably, the BTA should be a separate entity with responsibilities and resources to perform these duties. However, the BTA has to beg for finances at the DC and have to report their activities to them. There is friction between these two government levels, as also these quotes show - *Since we have the BTA; we are still building up the town. They are dependent for funds on the district. This is a constraint for them to work* (Mr. Chacha, Bunda District Councilor), *DC is the mother of BTA but is far from us, we face many challenges, such as requesting for funds, but the DC is putting priority in rural rather than urban* (Mr. Mirumbe, BTA, Development Planning Officer). These difficulties are experienced by BTA personnel and councilors, though DC officers deny this problem, as they also did not reply on it during interviews. This is in line with a quote heard during the SAI: *"you can't complain to the Council, as you are regarded as a bad person, and you can be denied a stall table"* (Mr. Mirumbe). The BTA becomes a Town Council later this year. By then, they will get direct support by the government, are able to expand their activities, and are better able to focus on the issues of Bunda Town. Bunda is the only major town in the district and this makes it different from the rural areas.

The Bunda Township Authority is not involved in BWS. Water and sanitation within Bunda Town are still under the District Council. Those working within the DC and BUWSA do not criticize this structure and are not aware of the difficulties by the BTA, though also an outsider criticizes it: *The structures are not well established; like BUWSA, which is still under the DC. It should be either private or public* (Mr. Maganga, SNV, WASH Advisor).

The uncertainty regarding the responsibilities for water provision also disables the community to enforce governing bodies to provide water. The majority of Bunda's inhabitants (82%) is not connected to the piped water network and is forced to extract water from other sources. However, the DC only look to BUWSA to improve the water situation in Bunda Town, though they are only able to reach a minority of the population. It is not clear whether the DC or the BTA can be held accountable to improve the water stresses situation in Bunda Town. These problems are urgent, as diarrhea, a water borne disease, is the second major reason of death in Bunda Town (UN-HABITAT, 2008b). It is true that the DC has limited financial capacity to undertake improvements in water provision, though they can also not held accountable because the structures are not well-established. In addition, BUWSA being a private organization makes it harder to reach the whole community, as their network excludes the poorest, because the costs are rather high. However, on the other hand, it should be noted that promoting water is an economic good has advantages, also in increasing revenues, which can be used to improve the provision of water in Bunda (UNDP, 2006; Loftus, 2008).

#### *Linkages to the community*

BWS is performing different duties regarding water. The major duty is to provide water to Bunda's community, though sanitation, sewerage and to a minor extent solid waste management are also related to the water circle in Bunda. Proper sewerage is not established in Bunda Town, and solid waste management is very limited (UN-HABITAT, 2008b).

The local government authorities are primarily responsible to ensure solid waste management, sewerage and also to promote proper sanitation. The DC is involved in activities related to those environmental topics. Their main approach is to sensitize the community regarding these topics - *Our role is to sensitize. The town is not very clean, as required. The problem is ignorance of the community* (Mrs. Mshora, DC, Community Development Officer). They undertake programs to ensure that the community is sensitized to make proper use of the environment and will invest in sanitation. However, these programs are widely criticized. All research participants working for NGOs declared the DC sensitization to be ineffective and very limited. After all, *"the LGA level has to be sensitized on the value of environment in order for them to deliver proper sensitization to the community"* (Mr. Mwita, Lubana Corridor).

There are NGOs (KADEFU, Lubana Corridor, Bunda Youth and Women Development) undertaking activities related to community sensitization, as well as some CBOs (Mazingira Bora, Umojaa Group, Maccare, Kabassa Com. Group, CODERT, VISA, Tujiihue), trying to improve community knowledge and behavior regarding health, sanitation and environment. These multitude of organizations are mainly doing their own job. As figure 5.1 already shows, there is no linkage with the DC and

NGOs and CBOs are not involved in government activities. Mr. Alex (BTA, Municipal International Cooperation) even made the story worse by stating: *"I found out, that on DC level, they try to avoid CBO's"*. The BTA, in turn, acknowledges the opportunities of those NGOs and CBOs in reaching the community. The BTA maintains close connections with those organizations, influenced by their city-to-city programme with Tingvoll, Norway (Norwegian Association of Local and Regional Authorities, 2009). However, there is limited alignment between the different NGOs and CBOs. Most of them are concerned with similar issues, though collaboration is limited (according to all participants working with NGOs or at BTA level).

Closer collaboration among stakeholders is regarded as one of the opportunities to improve BWS. Out of the 12 participants working at DC, BTA and NGOs, 9 mentioned the opportunity lying in effective cooperation. This will for sure contribute to the systemic capacity in BWS. When it comes down to knowledge in the specific focus areas of the different stakeholders, it is mentioned that they could complement each other. New knowledge regarding environment is increasing quickly and not all the stakeholders do have updated knowledge. Mrs. Rweyemamu (DC, HoD of Lands, Natural Resources and Environment) acknowledges the limited capacity of the DC in terms of knowledge, but also *"how to effectively disseminate the knowledge to the people"*. Capacity development regarding the structures in BWS is an option, but the stakeholders also see opportunities to improve the system from within.

#### *Linkages to the private sector*

The topic of 'structure' also refers to linkages out of BWS. The private sector is not really involved in BWS, apart from BUW-SA, formally being a private supplier. In addition, water vendors are present in Bunda, though are not covered by this research. However, private sector involvement is acknowledged as a clue for an improvement in water provision and solid waste management (Loftus, 2008). Mr. Machage (DC, Trade Officer) agrees private sector involvement to be among the opportunities for improvement: *You have been here for 2 months. If you look around, what do you see? Government is not able to do the job. We have to privatize. Within the Water and Sanitation Act as well as in the UN-HABITAT Programme the idea of PPP is underlined as a useful tool to improve the basic service delivery.*

In solid waste management, private sector involvement is utilized on minor scale. Last year, a dumpsite is created and to Maende Garage Company, is employed to transport waste from three collection points in Bunda to the dumpsite twice a week. The dumpsite is rather small and the percentage of the total waste dumped at the site is maybe 1% (Mr. Maende, Maende garage company). Moreover, it is not real private sector involvement, because the DC pays Maende for this service, instead of the destroyers paying their contribution. Private sector involvement is made difficult because the community not used to pay for those services. The underlying issue of community payments should be addressed in order to improve private sector participation in solid waste management. If so, Mr. Maende assumes that *"If the community would pay, then it can be a nice business. But they are not paying. If we have some 5 or 6 million TSh we can run it. The township maybe invented a solid waste management system. They did not involve us. I have quite some ideas how to improve it. But the funds are crucial"*. It seems that private sector participation is from both sides perceived as a business opportunity, though the institutional embeddedness of community payments should be made sure. The BTA, through the municipal international cooperation, also acknowledges this opportunity and investigates what is needed to establish a proper solid waste management structure in Bunda Town.

Private sector involvement is often part of approaches labeled with LED – local economic development, which is also the focus area of SNV within the LVWATSAN Programme. Bunda does not have much economic development, although there are some opportunities. The rapid growth of the town is not going hand in hand with economic evolution. Many of Bunda's citizens still work seasonal in the rural areas and do some small handcraft work in the other season. Because of Bunda's expansion, new internal markets are growing, leading to all sorts of shops and services popping up in the town. However, *most of the people do not have satisfying income and it is hard to live from these services* (Mr. N'gorongo, Water Board, business representative).

There are opportunities for Bunda to stimulate LED, though unleashing this potential is regarded a problem (as explained by Mr. Mtaki, Technoserve, Business advisor; Mr. Machage, DC, Trade Officer; Mr. Werema, DC, 2<sup>nd</sup> Trade Officer) Five problems regarding LED are identified during the interviews. The first issue is limited knowledge about setting up and running business, as well as knowledge about technology. The critical educated mass for Bunda is very limited, making it difficult to generate economic development. Secondly, limited entrepreneurship skills are mentioned as a constraint. Little people see new businesses. Those able to jump in those opportunities are limited. *Unfortunately, in Bunda and the whole of Tanzania*

*all the skilled people move to government or outside or NGOs. They don't want to invest in businesses. But this also keeps creativity very low. There are no new ideas. People only copy old ideas. People also don't want to take the risk. It is not in our culture to do business* (Mr. Mtaki, Technoserve, Business Advisor). The third reason is the very difficult and limited access to capital. Even if it is accessible, it is very expensive, with interest rates up to 20%. The fourth and fifth reason for little local economic development are too be found at the institutional level. The business environment is far from conducive. The governmental structures regarding businesses are hampering - *If you want to start a business, you have to go to Dar for one week, it costs so much money, and the regulations are many* (Mr. Machage, DC, Trade Officer). It is not easy to overcome this issue at the local level and that is acknowledged. *The CD will have much more effect if the environment should be enabling. The government has to change the environment at the national level* (Mr. Werema, DC, 2<sup>nd</sup> Trade Officer). What could be done at the local level, the fifth issue, is utilizing the PPP structure. The public sector also wants to collaborate with the private sector but this is not utilized in a proper manner. They lack the skills to plan together, and there are no meetings between private and public sector.

#### UN-HABITAT

BWS also comprises of stakeholders established by UN-HABITAT; KADETFU and the Multi Stakeholder Forum (MSF). KADETFU undertakes a microcredit for sanitation programme on behalf of UN-HABITAT. KADETFU keeps up strong linkages with UN-HABITAT. The MSF is a consultative and evaluative body, established by UN-HABITAT, comprising of different stakeholders of BWS. The MSF structure is designed because holistic multistakeholder processes make sense when it comes to provision of water and sanitation services, which involves numerous stakeholder groups with different interests. When all stakeholders have a meaningful participation, projects are much more likely to meet their objectives (UN-HABITAT, 2008c). *The MSF in Bunda Town is in place as from 29 October 2008, although members are unaware of their roles and responsibilities. In addition, no formal meeting has been convened so far. The chairperson is a councilor with fears that political agendas could interfere with its operations* (SNV, 2009). This picture corresponds with the experiences during the Inception Phase, as also written down in the CD Plan (Annex C). Participation of community groups remains critical, although UN-HABITAT attempts to ensure this by the establishment of the MSF.

#### 5.3.3 Sub-systems

This section elaborates on systems (as interpreted following the 7S-model) at work in BWS. For the sake of preserving vagueness, the term sub-systems is used, to distinguish from the terms BWS and systemic capacity). There are different sub-systems determining the systemic capacity of BWS. The most important sub-system is the water delivery system, the piped water network. It should be noted that the piped water network is not pro-poor. The wealthy inhabitants of Bunda are connected to the network, remaining the poor leaning on less- or unimproved water sources. Annex B shows the piped water network, which is mainly serving the higher income neighborhoods around the centre and some major institutions (schools, hospitals) and commercial customers. There are attempts to improve this system of water provision. A new built water scheme by the GoT, WB and UN-HABITAT, aims at upscaling the amounts of water pumped, enough to meet Bunda's demands. However, current investments have to be made by UN-HABITAT, connecting the already built tank and pump houses (provided by GoT and WB) through pipes, though UN-HABITAT has problems to fund this (Mr. Tubert, BUWSA, Technical Manager).

Here it is argued that community behavior towards environmental issues is an important 'sub-system', because it really influences the capacity of BWS. It is important the community has a proper behavior towards solid waste management and sanitation, because these are on-going daily activities, influencing the water situation in Bunda. When the community is concerned towards the environment, this will enable a better preservation of the environment by BWS. Proper sanitation also decreases water contamination and related water-borne diseases. The capacity in terms of knowledge and attitude of the community is limited. Improved sanitation is to be found among 5% of Bunda's inhabitants and this is not values. The ignorance of the community regarding environmental issues came up during most interviews. The lack of funds is in the majority of the interviews brought up as the reason for this ignorance. Mr. Maganga (BTA, Town Executive Officer) assumed it to be different: *"If you see a farmer with a large flock and a nice house, you won't find a toilet. Why does everyone still say that the lack of sanitation is caused by a lack of funds?"*. Proper sanitation is not valued within Bunda's community. The same applies in relation to solid waste management. Digging waste is common practice (Mr. Oyata (BUWSA, Technician), Mr. Mulla (MSF secretary)), causing contamination of the ground water, and burdening the environment with bigger prob-



lems. Seventeen research participants also marked the behavior of the community as one of the most urgent capacity development interventions to be undertaken under LVWATSAN, as also mentioned by the MSF (UN-HABITAT, 2008b)

Reporting and administration practices are also under the 'S' of sub-systems, because these are on-going daily activities. Administration in Bunda is generally done by handwriting and computer coverage is limited, except from the DC that uses it for formal procedures. Especially when it comes to reporting structures at DC level, the capacity is limited. Despite the decentralization process in Tanzania, Bunda's budgets still have to be approved by the national government. Some important responsibilities are still in Dar es Salaam and Dodoma, burdening Bunda with long reporting lines and large distances to responsible persons at national level.

At the level of BWS, especially the consultation meeting structure is criticized. The amount of meetings scheduled at DC level is large. Finding participants for the research was difficult because they had to attend meetings. Mr. Swai (the MD of BUWSA) always apologized himself, whenever he had to leave me alone, for the sake of another meeting. The allowance policy at DC level is blamed for causing this meeting structure. Most actors at DC level keep attending the meetings because they receive allowances, which are often a nice contribution to their regular salary. The allowance policy is, for obvious reasons, not criticized by government officials. Only Mr. Werema (DC, 2<sup>nd</sup> Trade Officer) marked the hampering allowance policy of which he himself also benefited. Also Mr. Maganga (SNV, WASH Advisor), with years of working experience at the Tanzanian government is quite critical: *"The culture of allowances, I hate it. You come to support them and then they want money"*. A usual meeting in Bunda accounts for around 10 dollar, but a one-week travel to Dar es Salaam could easily be more than a monthly salary.

Furthermore, the financial policies at LGA level hamper the human capacity of the employees. This is also true when it comes down to salaries at LGA level. The height of the salary depends primarily on educational degree and afterwards on the specific function. Performance indicators are not present. *The salary structure is also hampering development. The top level gets very much compared to the lower levels* (Mr. Werema, 2<sup>nd</sup> DTO). Employees of Local Government Authorities will also not be fired, because the ministry in Dar es Salaam is responsible for recruitment.

#### 5.3.4 Strategy

All organizations work according to strategies. These can be explicit strategies written down in strategic documents, but also implicitly present in large systems. BWS is to a limited extent working according to explicit strategies. In the case of water provision, the BWS, and especially BUWSA, is aligning its processes towards their Performance Improvement Plan (BUWSA, 2009). In addition, solid waste management is regarded as an opportunity and the BTA is aiming at improving this, in collaboration with representatives from Tingvoll municipality in Norway. However, only one stakeholder is involved in those efforts to improve water and solid waste management. It is not a system-wide strategy. The same applies to community sensitization, which is undertaken by the DC as well as NGOs as well as CBOs. There is no umbrella strategy for BWS. *There is a narrow thinking in all the departments, no working together, (...) You never develop, until you unite your effort together* (Mr. Mirumbe, BTA, Development Planning Officer).

At DC level, it is acknowledged by HoD's (Mrs. Rweyamamu, DC, Lands, Natural Resources and Environment; Mrs. Mshora, DC, Community Development Officer; Mr. Swai, BUWSA, MD), that they are working in line with strategies from the national government. However, they argue that a lack of resources constraints them to make the strategies work. The latter also applies to CBOs and NGOs, who are depending on funding. They have target areas, but are sometimes more busy with applying for new funds than undertaking the programs for which they received funding. Mr. Alex (BTA, MIC Officer in charge of CBOs): *"CBOs have very large objectives, which they can never reach. They sometimes also don't have enough knowledge and understanding of the real issues, for instance concerning environmental conservation. And there is a behavior problem regarding funds which are put in their own pocket"*. A Swedish intern at Lubana Corridor underlined this story by stressing that, in the time he did his internship, three out of four employees only wrote project proposals.

Next to the concrete strategies written down and attuning of strategies of various stakeholders in the system to each other, there are, often not made explicit, underlying strategies. Two of these implicit strategies apply for BWS in Bunda. Firstly, there is much faith in hardware. Technical solutions can solve all problems. This becomes most clear regarding the new water scheme. It is commonly acknowledged by the research participants that finishing the water scheme will solve all

problems and will lead to a 100% coverage of water supply in Bunda. Although this new water scheme will improve the water coverage, the price of water via BUWSA is too high for the poorest and always people will be excluded. Secondly, in addition to the first, is the faith in funding. There is a common belief that Bunda is structural underfunded, and that therefore, the town does not develop. The issue 'lack of funds' came to the front in almost every interview undertaken. *There is money needed for investments and donors or government has to give this. Then, things can be implemented and then everything will be solved* (Mr. Opata, BUWSA). There are two critical elements in this thinking. First, the stakeholders tend to think that if funding arrives, all problems also will be solved. It is for sure true that financial resources open up many opportunities, but it is not a direct relation. Secondly, most of the actors in Bunda tend to think that more funding is the only and ultimate way to improve BWS. The former is not true, but the latter is even more critical. Lack of funding seems to lock up many other opportunities, lack of funds is brought up many times, justifying all kinds of situations. Only a few of the respondents also contested this faith in financial resources as the only source of improvement: The real thing is not funds. *The thing is a lack of integrating capacity of different stakeholders. As government, we are responsible, but we do not have the capacities to organize this* (Mr. Machage, DTO).

### 5.3.5 Skills

The systemic capacity in terms of 'skills' refers to two major things in BWS. On the one hand, this 'S' defines specific characteristics that give BWS a particular opportunity or strength, in management terms often mentioned as 'unique selling points' of an organization. On the other hand, it refers to state of knowledge and skills among the stakeholders of BWS (the issue of attitude is under 'staff' (5.3.6)). One of the unique selling points of BWS is the strong relations with donors and funding agencies. The Tanzanian government as well as the World Bank and UN-HABITAT are involved in the improvement of BWS, though mostly through investments in hardware, which is only a small part of BWS, as interpreted in this research. The financial contribution made by these donors increases the capacity in terms of water supply, because after implementation of their projects, the piped water network will spread over a large part of Bunda. A negative aspect regarding the donor involvement is the limited influence against the big donors. The financial delays of UN-HABITAT are burdening Bunda, though they do not have space to enforce UN-HABITAT in this situation (Mr. Maganga, SNV, WASH Advisor).

The relationship with Dar es Salaam and Dodoma, where the Tanzanian government has its base, is another strong skill of BWS. Especially the MD of BUWSA, who formerly worked for the Central Government has many connections with influential people at national level, causing priority for investments in Bunda's water infrastructure

Next to the above positive skills, there are also 'skills' causing a subordinated position for BWS. Among the stakeholders, there is limited knowledge about improving the existing situation. Among the participants, only Mr. Mirumbe obtained a Master's degree, and six others managed to finish their Bachelor's. These are mainly the Head of Departments and directors of NGOs. The water sector is rather knowledge-intensive and therefore depending on people graduated in related fields (Blokland et al., 2009). The amount of graduated stakeholders is even not that bad, but in the lower cadres of the organizations, especially within BUWSA, there is little capacity in terms of knowledge. The Technical Manager and the Commercial Manager of BUWSA also finished a Bachelor's degree, but the majority of BUWSA employees did not finish secondary school, and some only primary school. Although some technical skills necessary for operation and maintenance of the water network are present through learning-by-doing practices, up-to-date knowledge is lacking. Mr. Tubert (BUWSA, Technical Manager) agrees on this by stating: *"there is knowledge available to do the necessary things, but if you will grow, you need competent people"*. This perspective is very much in line with UN-HABITAT's analysis: *"the managers and policy makers in the municipality associated with water and sanitation have limited capacity in the area of strategic planning, operation and maintenance, and management as far as water and sanitation issues are concerned* (UN-HABITAT, 2008b)

Another issue within 'skills' refers to a typical Western focus on organizational and knowledge management. During the SAI, it already came out that organizational management is an unexplored field in BWS (see also Annex C). A revealing example often used is the fact that Tanzania's water authorities (like BUWSA) have to be run by a graduate engineer, preferably second degree in civil engineering. This technical knowledge is necessary at BUWSA, but it is ignored that it is a private company that deserves a commercial mindset. According to Western wisdom, the MD of a water company could easily be someone with a business background. For Bunda, it is positive that the MD of BUWSA has quite some commercial skills

(since his occupation, BUWSA's revenues grew from 200.000 TSh to 6 million in 5 years), but he has limited knowhow in organizational management (NWSC, 2008).

The above paragraph touches upon the topic of human resource development. HRM has many different components, such as education policies and refresher courses, but also salary policies and recruitment strategies. The HRM department within the DC has a very narrow interpretation of their responsibility, namely to make sure that all functions within the organization have at least a first degree in the right field. There is little emphasis on additional education, except from HoD's going for further study, while they already have most knowledge. Structures to trickle down knowledge among stakeholders in BWS are not present, neither at LGA level nor within BUWSA (according to Mr. Swai (MD BUWSA) and Mr. Mabanga (TEO)).

Most (14 out of 26) research participants addressed the issue of limited knowledge as constraining BWS to work, but there are little strategies to address this. It seems that also, the DC has financial space to change this knowledge scarcity but this problem is not prioritized. The impact of improved knowledge is to be seen at the Bunda Township Authority. Two out of the three research participants are currently putting effort on finishing a Master's degree (in community development and poverty alleviation) by their own funding. Presumably, it is not coincidentally that these two stakeholders are perceived as possible change agents (more details in chapter 6).

### 5.3.6 Staff

The topic of staff is different from skills. It is not about the personal skills of the stakeholders, but about the linkages between the stakeholders, their collaboration style and the attitude in the system. In practice, the linkages between the different stakeholders are weak and selective. The weak linkages between stakeholders (also explained in section 5.3.2) disables BWS to function properly. There are many opportunities in collaboration, knowledge sharing, and jointly undertaking of sensitization activities (acknowledged by 13 of the participants). Stakeholders are not always able to use all their knowledge and skills because they are not connected to each other.

The DC is the stakeholder with the largest capacity within BWS. The DC has, especially in relative terms, many employees and the major functions are filled with skilled personnel. The organizational culture and the attitude of the DC employees is not very well. This is already explained by the allowance policies, though there is more criticism related to the attitude of LGA officials (especially explained by Mr. Werema, DC, 2<sup>nd</sup> Trade Officer). Also in terms of financial space, the DC has more resources than the other stakeholders do, because the DC receives direct funding from the national government.

The issue of attitude is still unmentioned in this analysis, although it came up in at least 12 interviews. Attitude is an important component of human capacity. Someone's attitude directs the way in which other capabilities are utilized. The attitude of most actors working in BWS is not very good. *We are not doing well at the moment, we could do much more. But the attitude is not good. Like me, I have a Bachelor in Management, but I do not utilize my knowledge as I could do. And many of us could do much more in the same time* (Mr. Werema, DC, 2<sup>nd</sup> DTO). On the question which capability mainly lacks in BWS, some (4 out of the 9 LGA officials) answered that attitude is a hampering factor. A better attitude towards their work is able to contribute much to the improvement of BWS - *The attitude is a main problem in the system* (Mr. Mirumbe, BTA, Development Planning Officer). There are two organizations performing better than others, on the issue of attitude. The first is the BTA, which seems to be a hard-working organization, accountable towards striving for a better town. Secondly, BUWSA could be mentioned. During my internship, it was not uncommon for the management and lower staff to work up to five or six o'clock if necessary, while they are allowed to leave at 15.30. The fact that BUWSA increased performance so very much in recent years is due to a proper attitude towards work. This is particularly true comparing BUWSA with the neighboring rural water supply authority, where the employees sat together for days, undertaking no activities.

### 5.3.7 Style

The issue of style is maybe the most intangible one of the seven S's, also because this issue did not really emerge during the research or is already mentioned in other sections. Style refers to the organizational culture and the leadership style within the organization, and especially the first is already mentioned under skills. However, one question related to style should be raised here, because there is for sure a working and organizational culture within BWS. At the community level, collectivity is a shared value and it seems that, already for ages, this system worked out quite well, and it is still present within Bunda.

Next to this culture, there is a governing structure working along different principles. The question comes up whether this more traditional culture, and modern structure, are in contrast, or even conflict, with each other.

There are some reasons to agree on this question. First, as government official you are working for the sake of the community. The latter fits very well into the communal shared value of the collective, but the way to do it less. Being employed, and paid by the national government and at the same time responsible for the basic service delivery, sometimes seems to be in contrast. The attitude of the people working within BWS is not very good. It is acknowledged by 5 participants that it is difficult to work hard, if there is no direct contribution to your own livelihood. Working for the sake of the whole community feels different than taking care of your own cattle or harvest. The fact that the higher governmental salaries are high and continually flowing every month, without performance indicators, makes it difficult to be accountable to the work.

Arguing that people should be more accountable is logically and very donor-influenced. It is also possible to reason in the other direction, like the question above. The LGA officials are maybe not able to work within this structure, because they grew up in another culture. Or like Mr. Portes argued during the return day: *How do we have to choose between social capital and structures? People tend to choose for social capital while donors push through the structures.* Next to the fact that the local level is not able to carry out the duties brought down by the decentralization process, the actors are also not used to collaborate towards public service delivery.

Capacity development aiming at changing the mindset or attitude of stakeholders is very difficult. Returning to the traditional structure seems to be impossible, because the LGA level is constructed over the whole of Tanzania. Therefore, it should be accepted that people have to work in this structure. For better performance, their attitude has to change. However, a change of attitude is hard to reach through CD, although it is often the final goal of a CD process. By giving knowledge, skills and capacitating, it is envisioned that the performance and attitude of the actors will change. Through this research, it became obvious that an attitude change is preferable within BWS. Moreover, according to the stakeholders, another behavior towards work would increase the effectiveness of BWS very much.

#### **5.4 Concluding remarks - possible directions for interventions**

This chapter aimed at providing insight in the capacity of BWS, by using the 7S-model (5.3 - systemic capacity) and elaborating on the hard- and software capacity of water supply in Bunda (5.1). BWS consists of different stakeholders with their own roles and responsibilities. However, the sum of efforts of these stakeholders determines the systemic of BWS. This multi-stakeholder focus, also emphasized by UN-HABITAT, is necessary to effectively collaborate and create broad support for improvements in BWS. The analysis provided in this chapter follows the systemic perspective towards CD, although the analysis sometimes a little blurred and fragmented.

In order to create cohesion about the major elements of the systemic capacity of BWS, this section will evaluate the previous sections by using a SWOT-analysis. The chapter will be summarized to some key strengths and weaknesses, as well as opportunities and strengths. In addition, the capacity analysis opens up the question which CD interventions should be taken to improve BWS, as also the conceptual model (figure 3.2) indicates under the bullet 'possible sources for interventions'. To answer this question, there is a confrontationmatrix derived from the SWOT-analysis. This confrontationmatrix evaluates the major SWOT's and confronts them with each other (see figure 5.2). The output of the matrix shows possible interventions to take up (strengths confronts to opportunities), as also systemic capacity elements that should be strengthened (weaknesses confronts to opportunities). On the other hand, the confrontationmatrix also proposes interventions to defend the capacity (strengths confronts to threats) and areas where BWS should move away from (weaknesses confronts to threats).

The confrontationmatrix offers the most important results of the research, in terms of systemic capacity as well as directions for possible interventions. These findings also enable to evaluate whether the findings of the research correspond to the findings of the SAI. The next chapter will question to what extent the CD Programme of LVWATSAN is able to contribute to BWS. A proper analysis of the local situation is necessary for proper intervening, and the confrontationmatrix serves as a base to confront the findings of this research with the ideas of the CBC, articulated in the CD Plan (Annex C). The decision to mention 'directions' for interventions is influenced by the systemic perspective towards CD, putting little faith in pre-

designed interventions, and in turn opting for some major directions in which interventions could probably be taken. In collaboration with the stakeholders, the actual interventions should be designed, and the impact of these interventions impact should be evaluated during the process, enabling for adapting to new interventions.

Figure 5.2 - Confrontationmatrix for CD interventions in Bunda’s water system

		Strengths			Weaknesses		
		Change agents to be found: BTA, BUWSA MD	Donors involved - financial impetus	Plenty of water around Bunda	Safe water access as major problem	Lack of finances; misuse of funds	Limited capacity in terms of attitude, knowledge and skills
Opportunities	Town Council – increasing funds, separated from DC	<b>Take up!</b> - BTA as leverage point for CD processes, acting as change agent within BWS - Strengthen linkages among stakeholders - Closer collaboration with CBOs and NGOs to sensitize community - BWS to address the situation of those not connected to piped water network - PPP regarded as opportunity for solid waste management (by both public and private parties)			<b>Strengthen</b> - Focusing on safe water access (private sector for pumps, wells); reducing contamination - Increasing capacity by closer collaboration and knowledge/skills sharing within BWS - Donors not to only focus on hardware and piped water network - Improving HRM structures; especially in terms of knowledge (training, education) - Addressing salary structures and allowance policies creating problems regarding attitude		
	Collaboration between stakeholders in BWS						
	Private sector involvement (LED through PPP)						
Threats	Power structures within BWS - financial position of DC	<b>Defend</b> - Creating strategies to improve safe water access at community level without donor money - Address power structures within BWS (and lack of resources BTA). - Contest the idea that only with donors (finances) BWS can improve - Address financial accountability within BWS, especially by increasing funds BTA			<b>Move away</b> - DC is not regarded as a driver of change, despite highest level of knowledge in BWS - Donors should focus on making sure that they are not the clue for all problems - Make sure that donor money is used for its purposes - Employment without performance at LGA level (national policies – hard to change)		
	Limited faith in improvements without money						
	Improvements very donor-depending						

The first sub-question of the research is to investigate the capacity of Bunda’s water system. This fifth chapter served to provide the information to answer this question. The confrontationmatrix summarizes the most important SWOT’s experienced during the research and in fact, answers more than the sub-question actually requests for. For every SWOT, three major elements are mentioned, in turn leading to four or five interventions per box. Most of these interventions are focused on the level of BWS or at least a few of the stakeholders are involved in those interventions. There are different directions of interventions. This shows once more that CD is a multidisciplinary tool, extracting its tools form organizational management, institutional development, HRM and other disciplines. It is very likely that the interventions proposed in the confrontationmatrix are able to contribute to the systemic capacity of Bunda’s water system.

# 6. Results: capacity development process

“If we can join together the little funds we have, and sit and discuss, we can improve.”  
Mr. Charles Machage, District Trade Officer

The previous chapter aimed at providing insight in the (systemic) capacity of Bunda’s water system. Different methods analyzed the systemic capacity of BWS, enabling to come up with some possible directions for CD interventions. This sixth chapter answers the second sub-question of this research; to what extent will the CD Programme of LVWATSAN be able to contribute to an improvement of BWS. This chapter builds on the previous one, though also draws upon section 2.3, which indicated the difficulty of applying CD in development cooperation. Effective capacity development is a complex process and there is a wide range of factors influencing the quality of CD. The second chapter already marked some critical factors determining the quality of CD processes. In order to answer the second sub-question, six critical success factors (CSFs) are used throughout this chapter. These CSFs are introduced in the conceptual model (section 4.3; figure 4.2). These CSFs are important aspects that should be taken into account during CD processes. The objective of this chapter is to assess to what extent those CSFs are present in the CD Process of LVWATSAN, taking place in Bunda.

## 6.1 Critical success factors at the supply side - Capacity Building Consortium

The Capacity Building Consortium consisting of five international development organizations designed a CD Plan for improving the water provision in Bunda. The CBC has to put all its efforts in ensuring a proper CD process, in order to maximize results of their contributions. Their contribution will be judged in line with two critical success factors: appropriate design (CIDA, 2000; Blokland et al, 2009): and long-term engagement (Alley & Negretto, 1999; Nelson & Tejasvi, 2009).

### 6.1.1 Appropriate design

The first CSF is *appropriate design*. This implies that the supplier of CD has to make sure that the CD process has a proper quality and touches upon issues that are relevant in the context where CD will be given. Primarily, it is stressed that appropriate design starts with participatory diagnostics of the situation that have to be improved. In the research at stake here, that means the CBC has to make sure that the design of the CD Process is appropriate and corresponds with the situation in BWS. The interventions designed by the CBC have to touch upon issues that are agreed upon by the stakeholders of BWS. Otherwise, any gains from CD efforts are likely to be very short-lived (Burns, 2010).

To investigate to what extent the designed CD interventions touch upon ‘issues’ in BWS, the proposed interventions have been discussed with the stakeholders, during the second research phase. By doing so, it is possible to judge whether the interventions are agreed upon by the stakeholders, and whether these are designed appropriately. Ten major interventions that are discussed with the stakeholders are shown in table and figure 6.1. The CD Plan (Annex C) covers more interventions, though this selection focuses the research by reducing overlap and joining interventions. In the table, the interventions are ranked, to the extent the stakeholders of BWS agreed on these CD interventions. The first intervention has a ranking of 3,4. This ranking is an average of the values given by the stakeholders of the BWS (see section 3.4.2 for more information on this semi-quantitative tool). The 3<sup>rd</sup> intervention, for example, has a value of 3, meaning that this intervention is regarded as a large issue in BWS. The stakeholders thus agree that strengthening the demand for the poor and vulnerable is a relevant CD intervention. Figure 6.1 is a visual representation of the data provided in

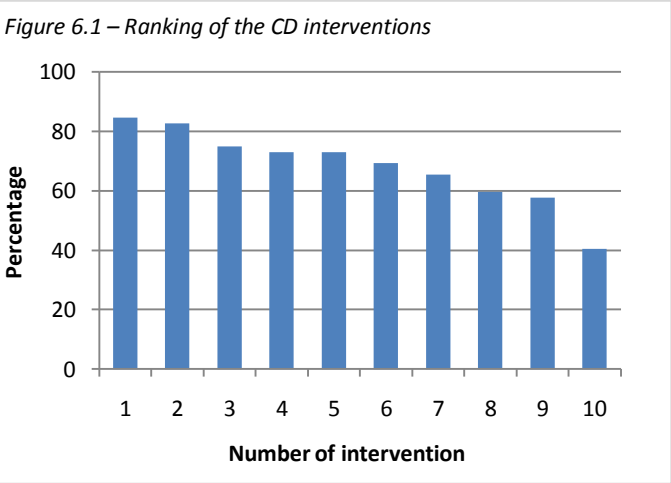


table 6.1. Appropriate design here focuses on the quality of the designed interventions, and less on the overall process, mentioned in section 6.1.2 (long-term engagement), and chapter 7 which will discuss the design of the Systemic Action Inquiry.

Table 6.1 - Agreement (cumulated) by the stakeholders of BWS on the different designed interventions

	Description of intervention	#	%
1.	<b>Sensitize</b> on the interrelatedness of water, sanitation, solid waste management and health	3,4	85
2.	Enhance management and O&M of <b>water supply system</b> by training staff at different level	3,3	83
3.	Strengthen <b>demand</b> for services especially for the <b>poor</b> and vulnerable	3,0	75
4.	Strengthen <b>institutional linkages</b> and governance to ensure water system is serving all	2,9	73
5.	<b>Involve</b> and engage <b>community</b> to ensure sustainability and ownership	2,9	73
6.	Create awareness on <b>local economic development</b> opportunities for income generation	2,7	69
7.	Facilitate a multi-stakeholder process for the development of a <b>Master plan</b>	2,6	66
8.	Develop <b>accountability mechanisms</b> for Council, Township and other key institutions	2,4	60
9.	Develop a <b>coordination mechanism</b> through a multi-stakeholder process	2,3	57
10.	Strengthen <b>communication</b> among institutions, departments and communities	1,6	40

There are some general comments to be made following from the data. First, the difference in agreement is rather high between the different CD interventions. The wide range between the first and tenth intervention shows that the stakeholders do not agree on all interventions with the same urgency. In fact, these data already open up space to discuss whether all interventions are relevant and will be supported by the stakeholders of BWS. Secondly, looking closer to the specific interventions, it is interesting that those receiving the lowest grades, are more dealing with the organizational dynamics within BWS, than actually focusing on performance in water and sanitation supply and management in specific. This is especially true for the interventions 7 - 10, which are aimed to improve the working processes within BWS in general and not specifically to upgrade the situation regarding water coverage and sanitation in Bunda. Thirdly, it should be noted that, although the range of agreement is wide, there is no full agreement or complete non-agreement. All interventions are to some extent relevant in the context of BWS. During the interviews, this grading process (the semi-quantitative tool) became an excellent opportunity to start a broader discussion about the proposed interventions. More nuances came out than shown in table and figure 6.1. Below, some nuances are mentioned to give the exact figures some extra dimension.

1. *Sensitize on the interrelatedness of (problems in the fields of) water, sanitation, solid waste management and health* - this intervention touches upon the lack of knowledge about environmental issues. This is primarily true for the community, though also among stakeholders it should receive (renewed) attention. A revealing example is the District Health Officer showing the ‘model dumpsite’ during the SAI. The set-up of this dumpsite is far from satisfactory; seen the risks of diseases for kids playing and for cattle grazing at the site. Fences are lacking and the waste is not centered at one place but scattered over a large area. Knowledge about how to store waste safely must be learned and related behavior have to be addressed as well, as explained in section 5.3.1. The current (lack of a responsible) attitude and behavior towards environmental issues can contribute to health problems within the population and leads to a burden for future generations. Many stakeholders acknowledge this a major issue in Bunda, an underlying constraint that should be addressed primarily. CD thus has to focus on sensitizing the community and on responsible public and private officers on proper environmental

Figure 6.2 – The ‘model dumpsite’ of Bunda

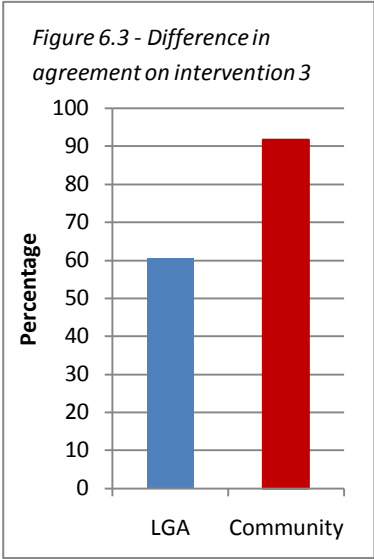


Source: personal visit during SAI

behavior. However, the sensitization projects taking place are also limited. CD thus also has to target CBOs/NGOs in this field as well as the responsible LGA officials, who could even collaborate.

2. *Enhance management and O&M of water supply system by training staff at different level* - This issue addresses upon the old piped water network, its bad condition as well upon the long time it takes before deficiencies in the system are solved. Training staff could assume that a lack of knowledge and skills is primarily causing these problems. It is true that the staff lacks up-to-date knowledge. However, during the internship, it also turned out that a lack of planning and transport facilities as well as no storage of spare parts are constraining factors for effective maintenance. The limited financial headroom constraints BUWSA to improve its performance. Although it is acknowledged as an important issue, the actual CD still has to be redefined. It is complicated to assess what actions will actually improve the performance of BUWSA. As BUWSA is only serving a minority of Bunda’s population, and CD will thus focus on those clients receiving piped water (already served best), one can state that more has to be done for strengthening the system’s capacity.

3. *Strengthen demand for services especially for the poor and vulnerable* - According to the approach opted for by UN-HABITAT within the LVWATSAN Programme, the situation of the poor and vulnerable should receive specific attention (UN-HABITAT, 2008; UNESCO-IHE/SNV/GWA/FCM 2008). This part of the community often lacks basic services the most. The poor have very limited access to the piped water network and have to rely on free sources, which are less safe. In history, the piped water network grew and best coverage is still in the richer areas of Bunda. The semi-privatized status of BUWSA also pushes the organization to focus on profit, what probably weakens the situation of the poor to demand for water. This intervention is thus designed to try to not make the poor captive of their position.



It is interesting to see the split results on this intervention. Figure 6.3 shows that the different grades given by LGA officials and community representatives. The latter mentioned strengthening the demand to be very important (3,6), while the LGA officials do not see this urgency (2,4). This corresponds with limited attention paid to the poor and vulnerable at LGA level. One of the responsible persons, Mrs.

Mshora (DC, Community Development Officer) stated: *“the community is poor and does not have money, we need money and then, the problem can be solved”*. Whether this is true or not, it at least shows that there are no policies present to address the problems of the poorest, due to a lack of funds. An intervention as written above should be designed to explore opportunities to address the situation of the poor and vulnerable. During the interviews, a few community participants (Mrs. Gulinja, Water Board, women representative; Mr. Malima, water kiosk operator) acknowledged opportunities of establishing water kiosks, run by groups (of women - Gulinja), with fixed prices per bucket to serve the poorer part of the community.

4. *Strengthen institutional linkages and governance to ensure water system is serving all* - The previous chapter already showed that many CD issues emerged around the ‘S’ of structure. The relations between stakeholders in BWS, their collaboration, and the embeddedness of CBOs/NGOs within the LGA are sources of problems, though also opportunities (as shown in the confrontationmatrix (figure 5.2)). It is therefore that many interventions are capturing ‘structure’ issues and address the strengthening of linkages is an important CD intervention for BWS. The different stakeholders within BWS are limited connected; especially connections between different levels are few, like Mr. Mirumbe (BTA, Development Planning Officer) stated: *“you never speak to DC officers or BUWSA, only when there are problems”*. The situation regarding the CBOs, largely neglected by the DC and not being institutional embedded, is also an opportunity for improving the system and linking the community to the higher level stakeholders.

One of the reasons that the CBC designed this intervention is because they found out that DDH Hospital does not receive continuous water from BUWSA. DDH Hospital for instance, generally receives water only once in three days and sometimes even less frequent, causing hygienic problems and pungent smells in and around the hospital. It is assumed by the CBC that stronger linkages (more concrete regulation of water pressure and faster action upon complaints) between BUWSA and the hospitals will ensure that BWS is serving those institutions properly. However, it should be questioned whether this is ap-



appropriate design by the CBC, as BUWSA is not able to serve all institutions with water at all. BUWSA is willing to serve DDH Hospital constantly, but is constrained by the limited amount of water pumped through the piped water network. This latter element has to be changed, in order to serve DDH with constant water pressure.

*5. Involve and engage community to ensure sustainability and ownership* - Community involvement is stressed within many projects and programs in development cooperation. It is another 'sine qua non', though it can mean anything. This intervention especially addresses the weak position of the Multi Stakeholder Forum within BWS. This body, established to discuss and evaluate the process of LVWATSAN in Bunda, is not 'institutionalized' in a proper manner. The MSF does not meet regularly as they only come together during LVWATSAN related visits, and the MSF is not aware of its role and responsibilities (SNV, 2009). The MSF structure is designed to create a platform where community representatives are able to discuss with LGA officials about their preferences and ideas, though this does not happen, due to a lack of regular meetings. To ensure ownership and sustainability at the community level, this situation has to change, and the community voice has to be heard in BWS. The community is key to change in BWS, as they are the consumers of water and destroyers of the environment.

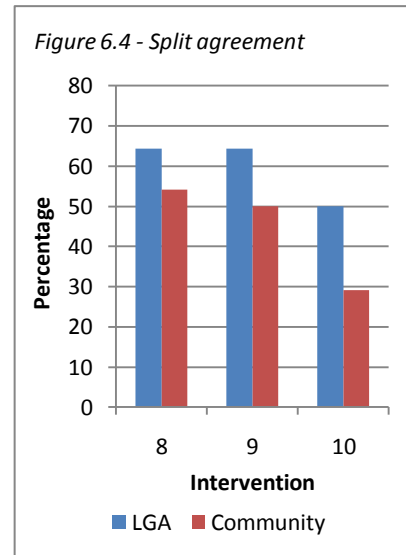
In addition, this intervention also addresses a broader problem that the community has a weak position in the LGA bodies. Especially the DC has limited accountability to the community, as also the following quote shows: *"You can't complain to the District Council, as you are regarded as a bad person, and you can be denied a stall table"* (Mr. Mirumbe, BTA, Development Planning Officer). The representation and involvement of the community is thus a source of problems. This is in line with the conclusions of Mastwijk (2009), although her research has been undertaken in other Northern districts in Tanzania.

*6. Create awareness on local economic development (LED) opportunities for income generation* - According to the participants working in this field, LED is an underdeveloped field in Bunda's water system (Mr. Machage and Mr. Werema, DC, Trade Officers; Mr. Mtaki, Technoserve, Business advisor; Mr. Maende, Garage Company). The previous chapter showed that there are major constraints (besides limited water supply), such as a lack of knowledge and entrepreneur skills, no conducive environment, and limited access to capital. Despite these constraints, LED can be a solution for some problems related to BWS, as also mentioned by responsible stakeholders. Especially the District Trade Officers see opportunities in this field, though do not know how to unleash this potential. The BTA is also establishing a solid waste management service, which facilitates for private involvement. Therefore, it should be noted that awareness raising as such, which is the actual intervention, is only necessary for a smaller part of BWS. In fact, interventions related to LED should focus on how to utilize PPP structures (national policy); creating a conducive environment and establishing a proper private solid waste management system. The DC is also establishing an Entrepreneurship Training Centre, which could be an entrance point for the CBC. During the interviews it turned out that there are some attempts to use LED within BWS (solid waste management) and in Bunda as a whole. The CBC has not covered any of this during the SAI.

*7. Facilitate a multi-stakeholder process for the development of a Master Plan* - During the SAI, it was stated that the local government of Bunda does not have a Master Plan guiding the development of the town. This turned out not to be correct, as a Master Plan exists and provides detailed information about the future development of the town. However, the content of the plan is unknown and not utilized, even in case one knows that it is available, as also this quote of the Community Development Officer illustrates (Mrs. Mshora, DC, Com. Dev. Officer): *"There is a Master Plan, I think there is"*. Even on LGA level, the Master Plan is not embedded in the organization and linked with the activities of the organization. CD should not primarily focus on development of the Master Plan, but make sure that the Master Plan becomes an important 'institution' in BWS. Moreover, the ambiguity about the existence of the Master Plan shows that communication and joint planning between different departments is limited (intervention 9, 10). In turn, it should be doubted whether this Master Plan is designed, including stakeholders of different departments. Interventions aimed at promoting multi-stakeholder processes in all contexts, should be focused on.

*8. Develop accountability mechanisms for Council, Township and other key institutions* - Accountability mechanisms are often emphasized from the perspective of the community. The government has to be accountable to its folk and the people have a right to ask the government to be accountable. It is therefore interesting that the people working within the LGA, more than their counterparts do, admit that accountability mechanisms should be developed (see figure 6.4). However, they still do not really recognize a lack of accountability within their own organization as a problem, but it is interesting that the community is less critical to this aspect.

9. *Develop a coordination mechanism through a multi-stakeholder process* - This intervention touches upon the limited coordination among the many different stakeholders involved in BWS. During the SAI, this lack of coordination already came out, but it became even clearer by experiencing the backward position of CBOs/NGOs, and the conflicts between the DC and BTA. This assumes that coordination hampers due to power structures between different stakeholders. The already established MSF, in fact a coordination body, has a narrowed interpretation of its role and responsibilities. The MSF is not accepted as such within BWS (SNV, 2009). Coordination mechanisms are thus in place, and the Master Plan could also be able to guide BWS, but those institutions are not functioning as such. In turn, it should be doubted whether a new coordination mechanism would be accepted, when the already established structures are not recognized by the more powerful stakeholders. Especially the position of the DC requests for attentions, as it is the stakeholder with flowing financial resources, links to the national government and limited performance indicators. The power structures should be addressed first, in order to enable other interventions to take place (Baser & Morgan, 2008).



10. *Strengthen communication among institutions, departments and communities* - This intervention is touched by almost all stakeholders during the interviews, though it did not receive a grade as such. This is probably because the opposite is also not true. There is communication already, and it is possible to approach different stakeholders. However, communication already present has to be strengthened in order to make BWS flourish and act as one organization to improve the situation regarding water and sanitation in Bunda.

#### Concluding remarks

The evaluation above shows that the interventions designed by the CBC are variously agreed upon by the stakeholders of BWS. There are two reasons why this perception of 'insiders' (BWS) and 'outsiders' (CBC) conflicts. Firstly, an incorrect diagnosis of the exact problem. There are some interventions that touch an issue, but not in its heart. As explained above, the fourth and seventh intervention are examples of an incorrect diagnosis of the exact problem. Secondly, the CBC has not been able to cover all issues that are relevant for BWS. The CBC attempted to get an insider perspective of BWS, following the SAI methodology. This would enable them to cover all relevant issues of the systemic capacity of BWS. However, there were still issues not covered by the CBC, which appeared to be of relevance during the second research phase:

- Many CBOs and NGOs are working in Bunda's water system. The DC avoids contacts and discussions with them and there is no aligning of policies and strategies of the involved stakeholders. It is generally acknowledged that this could be a clue for the improvement of the overall sensitization of issues to be tackled. The government bodies could even profit from the work of the CBOs and NGOs
- The devastating power of the DC within BWS is constraining many improvements in BWS. Even accountable stakeholders (BTA, NGOs) who want to develop are often held back by the (financial) power of the DC.
- Local economic development is regarded as an undeveloped field some stakeholders of BWS. LED for solid waste management is already under exploitation and an Entrepreneurship Training Centre is being installed. This could be an entrance point for the CBC to start interventions related to LED, as it is stressed to work in line with already existing initiatives (Blokland et al., 2009)

Overall, the conclusion comes up that the CBC has been able to cover many issues important for improving Bunda's water system, though also left out some important elements. The design of interventions is not in all situations appropriate (incorrect diagnosis or missing ingredients), probably leading to problems in the remaining of the CD Process.

#### 6.1.2 Long-term engagement

The other CSF at the side of the CBC is *long-term engagement*. As with all learning processes, it is emphasized that capacity development needs a long time-span, enabling for re-intervening; applying to new situations and increase actual learning and developing learning processes (Nelson & Tejasvi, 2009). This CSF does not so much influence the effective implementa-

tion of CD, as it does direct the outcome and impact of the CD process as a whole. The systemic perspective towards CD underlines this by aiming for a CD process where there is a continuous interplay between intervening, evaluating, adjusting, adapting, and again, intervening actions. This circle of actions is emphasized because of the difficulty of appointing the core problem and of designing the right intervention to an emerging problem. Through a more long-term involvement, participants in the CD process are able to learn and adapt on what works and what does not.

The CD Process within the LVWATSAN Programme has a fixed time span. It should preferably be finished before September 2010. This puts pressure on the abilities of the CBC to design a long-term CD process, let alone preparing for various action circles. Actually, six months after the SAI, the CD Process had to be finished. Within the LVWATSAN Programme, the CD organizations are not able to take up a long-term perspective and it is not clear whether the organizations are able to follow-up on this CD process out of their own resources. This takes us back to section 2.3, which marked upon the financial incentives in development cooperation, causing fixed time-spans and disabling a long-term engagement.

The most disappointing aspect of this whole situation is that the stakeholders within BWS end up with minor output of the CD Process. These stakeholders are captive of the organizations entering in to bring CD and there is no opportunity for them to make sure that the CBC will be engaged in a long-term change process. The stakeholders see all donor involvement as necessarily good and they will never question the design of donor programs. They assume development interventions just end up in benefitting experiences for them and the BWS as a whole, because donor organizations are necessarily good. Probably, the stakeholders will still be able to benefit from the CD Process within LVWATSAN. However, any gains from CD are likely to increase in case of a longer contribution of the CD organizations. Donor organizations should make sure that their CD design fits appropriately to its objectives and does no harm to the recipients.

The two CSFs elaborated above show that the design of the actual interventions is suitable, though should for sure receive extra attention. The design of the CD Process as a whole is worse, as the contribution is close to a quick-win strategy, while all literature points out that this will not be a long-lasting change process. The design of the LVWATSAN Programme puts pressure on the CD programme, not able to follow-up on the interventions. In turn, also the employees of the CBC came up with the conclusion that *“for Bunda no, I don’t see that CD will go to work”* (Mr. Maganga, SNV, WASH Advisor).

## **6.2 Critical success factors at the demand side - Bunda’s water system**

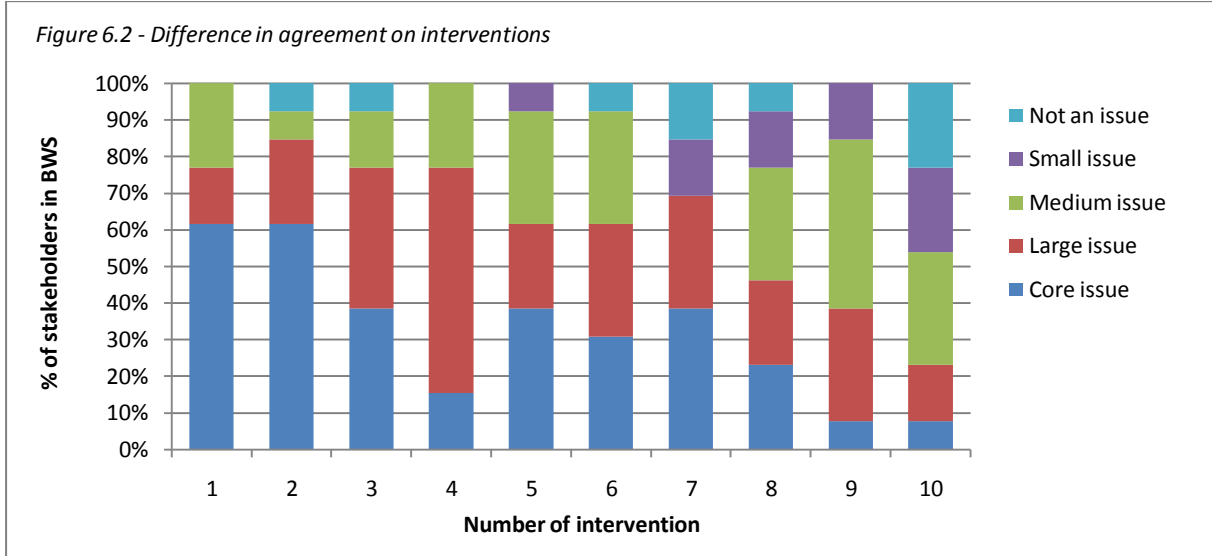
Capacity development is a process in which two parties are involved. The CBC, on the one hand, is the deliverer of the CD Process in Bunda. The Consortium Partners are at the supply side of the process, assisting BWS to develop its capacities. BWS, on the other hand, is the recipient in the CD Process at stake here. There is some sort of interplay between these two ‘sides’ of the CD process, because the CBC and BWS both influence the extent to which the CD Process will contribute to the systemic capacity of BWS. There are three critical success factors relevant at the level of BWS; joint agreement, ownership and demand-drivenness, the presence of change agents.

### **6.2.1 Joint agreement**

BWS consists of different stakeholders. To intervene in such a large system, it is stressed that the different stakeholders should all agree on specific interventions to be taken. However, beforehand, there should also be coherence about the indication of the systemic capacity of BWS, its strengths and weaknesses. Participatory diagnostics of ‘problems and solutions’ is stressed to make sure that stakeholders jointly agree on the direction of the CD Process.

In general, it could be argued that there are a few capacity ‘issues’ in BWS acknowledged by almost all stakeholders. There is report of limited ignorance in the field of environmental degradation among LGA officers and of limited knowledge about environmental effects of particular behavior among community members. Stakeholders mention opportunities that lay in the high water table and large amount of water present in the region. The (financial) contribution of donors to improve BWS is an opportunity, just as the limited knowledge in the lower cadres of BUWSA is constraining. However, there is also confusion among the stakeholders. During the interviews, it came out that stakeholders have different opinions about the systemic capacity of BWS, sometimes bringing up conflicting statements.

This, in turn, leads to different perceptions about which CD interventions should be taken to improve the systemic capacity of BWS. To test this difference in agreement, the data of the semi-quantitative tool are very helpful, because the stakeholders wrote down to what extent they agreed on specific interventions. Figure 6.2 shows this difference in agreement per intervention. The grades given by each stakeholder are cumulated per intervention and shown in percentages. The first intervention thus touches upon a core issue, according to 62% of the participants.



1. Sensitize on the interrelatedness of (problems in the fields of) water, sanitation, solid waste management and health.
2. Enhance management and O&M of water supply system by training staff at different level
3. Strengthen demand for services especially for the poor and vulnerable
4. Strengthen institutional linkages and governance to ensure water system is serving all
5. Involve and engage community to ensure sustainability and ownership
6. Create awareness on local economic development opportunities for income generation
7. Facilitate a multi-stakeholder process for the development of a Master plan
8. Develop accountability mechanisms for Council, Township and other key institutions
9. Develop a coordination mechanism through a multi-stakeholder process
10. Strengthen communication among institutions, departments and communities

When it comes down to joint agreement, it is of most importance that the stakeholders give the same grade to an intervention or issue. The exact height of the grade is of minor importance in this context. The interventions that have high scores on joint agreement are:

- 1 - 60% grading 4, no 0 and 1
- 2 - 60% grading 4, 80% grading 3 or 4
- 4 - 60% grading 3, no 0 and 1
- To some extent 9 - 80% grading 2 and 3

On the other hand, there are interventions that are valued very differently by the stakeholders of BWS. Especially interventions 7, 8 and 10 have a very spurious grading pattern, and 7 is missing the grading 2. The remaining interventions (3, 5 and 6) have a grading pattern in between the previous ones, with differentiation though also some direction, the stakeholders partly agree though also disagree. The difference in agreement between the different interventions is high, leading to the conclusion that not all interventions are acknowledged as important by all stakeholders. In line with these data, it should be questioned whether some of the interventions should be undertaken. Effective CD will only take place when a majority of the stakeholders, preferably all (Baser & Morgan, 2008), are committed to the specific interventions and are owners of these interventions.

The latter is true for some of the interventions (especially 1, 2 and 4) and these should be put into practice in the CD Process. In addition, these interventions also touch upon systemic capacity issues acknowledged by a wide range of stakeholders (limited knowledge of community; availability of water in region; limited knowledge in BUWSA). Moreover, it is interesting and should be noted that the interventions that receive high grades in general also have a high joint agreement.

The opposite is true, as the interventions that receive low grading (7, 8 and 10) also have a spurious grading pattern. Finally, it is worth mentioning that none of the interventions receives low grading by all stakeholders. All designed interventions are thus to some extent relevant in the context of BWS.

### **6.2.2 Ownership & demand-driven**

The previous section already mentioned briefly the issue of ownership, though it is worth receiving extra attention, because it is a very influential factor in determining the quality of CD (Alley & Negretto, 1999; Burns, 2010). Where the previous section addressed the specific interventions, ownership is more about the attitude, motives and a constructive contribution to the process. The stakeholders in BWS have to be owner of the CD Process in order to make the process effective. Making people owner of a process is difficult, though in a demand-driven process, it is much more likely that local stakeholders are owner of the process, because they requested for it themselves.

Although ownership is still a badly defined concept, many people have an image of what it means and what makes someone owner and someone else not. Being owner of a process or resource makes you feeling responsible and accountable to take care, protect and defend. Ownership for CD has to be found at the local level, where the systemic capacity of BWS will be strengthened. Ownership of the CD process means; agreeing that this process is necessary; feeling responsible for the efforts undertaken; and willing to actively join in this change process. It is about feeling that you are part of the system that is responsible and has to change to improve.

The degree of ownership for the CD process differs per stakeholder. Almost all stakeholders acknowledge that there are severe problems within BWS, which can be intervened through a CD process. Some of these problems they even feel responsible for, or they admit that such a problem is formally in their area of responsibility and that they would be able to bring about a change. However, the stakeholders feeling responsible for BWS as a whole and willing to change this are few. Most of the stakeholders are not willing to really change the situation within BWS, like also SNV's analysis shows - *In the case of organizational development. I don't see who is owner of the changes* (Mr. Maganga, SNV, WASH Advisor). The few stakeholders willing (especially BTA), do not always know how, or even worse, they are held back by people who are less willing to change (DC). Ownership is a necessary condition for successful implementation of a CD process, but in Bunda, it is in general lacking.

Furthermore, would ownership not imply that there is already much going on in BWS? If the stakeholders are really owners of the CD process, they would have an attitude that sees problems and wants to change regarding these issues. Ownership thus builds on people's intrinsic motivation to change and engage. If so, there would already be a capacity development process from within the organization, rather than outsiders entering in to undertake a CD programme. In this sense, it is worth mentioning that BUWSA undergone change since the new MD entered in and he is regarded as someone with a large degree of ownership. However, on the other side, it should be noted that the general lack of knowledge and skills available to run the governmental body at the local level, due to the hampering decentralization policy, makes it difficult to take up a process of change from within BWS, as it is already difficult to keep it running.

Ownership is close to demand-drivenness. It is not the fact that the local stakeholders demanded this CD process. In fact, UN-HABITAT designed the whole process based on water and sanitation figures of the region. It is for sure true that there is space for improvement in BWS, though beforehand, it was not known whether the stakeholders are able to be the driver of this improvement. The design and implementation of LVWATSAN are rather top-down and far from demand-driven. And the fact that the local actors do agree on the interventions does not make the process demand-driven. Despite the efforts to make BWS owner of the process, it should still be criticized that UN-HABITAT is not following demand-driven principles.

### **6.2.3 Change agents**

In recent years, change management wisdom is also dripping into the CD practice in development cooperation (Zinke, 2006; Baser & Morgan, 2008). Organizational change management thinkers stress the idea of change agents. The idea of a change agent is closely related to the idea of ownership. A change agent initiates a change process and is a source of energy, pulling other stakeholders together striving for the common goal. A change agent is also owner of the process, though not everyone who has ownership is a change agent.

In line with figure 5.2, change agents in BWS are to be found at the Bunda Township Authority. All participants of the BTA could probably be a change agent. In addition, the MD of BUWSA, Mr. Swai is regarded as a change agent, as is also indicated by UN-HABITAT (2008) and NWSC (2009). Out of these four stakeholders, especially the Town Executive Officer (Mr. Mabanga) seems to be a change agent, because he has much in-depth knowledge regarding BWS, is still eager to learn more, is able to convince others on important issues and has an influential position. For the CD Process it is especially interesting that all BTA participants at least have a large degree of ownership. The BTA can be regarded as a point to tap in, a leverage point into BWS. When the BTA is turning into a Town Council, it is even more interesting to keep close contact with this stakeholder within BWS.

Remarkably, the BTA is almost not covered during the SAI, because it does not really have an influential position. UN-HABITAT focuses on the DC as the driver of the LVWATSAN Programme, which is understandable because the BTA is only established in 2006, when LVWATSAN was already running. The DC received the most attention during the SAI, but sometimes seems closer to being a problem than a solution. In development terms, the DC could be regarded as a gatekeeper, constraining the BTA to perform their duties, while its own organization struggles with an improper attitude towards their work and financial misuse.

After all, the above points out that the 'CSFs from below' are not all taken into account during the CD Process. The interventions designed by the CBC are not all jointly agreed upon, but what is more, ownership for the CD Process is only partially present among the stakeholders of BWS. This will influence the CD Process in a negative way, as a lack of ownership tends to decrease the impact of CD (Blokland et al. 2009). Out of all stakeholders of BWS, there are a few change agents to be found, though it is questionable whether they have enough influence to bring about change in the whole BWS.

## 7. Discussion - capacity development

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“We are not expecting that you push UN-HABITAT, but at least impress upon them that they are dragging us back.”

*Mr. Joshua Mirumbe, Township Development Planning Officer*

One of the most confronting and revealing quotations is the one introducing this chapter. Mr. Mirumbe, with a Master’s degree in Development Studies was very critical on the contribution of UN-HABITAT in Bunda. In fact, he felt disappointed that the implementation of LVWATSAN is going very slowly, and which does not match with the expectations brought to Bunda by UN-HABITAT. This issue addressed by Mr. Mirumbe receives attention in this discussion chapter (7.1). In the remaining section (7.2), the systemic perspective towards CD will be discussed to the extent it is has been useful for this research.

### 7.1 UN-HABITAT’s Lake Victoria Water and Sanitation Programme

UN-HABITAT is a multi-lateral organization with global presence, though also local acting. On both levels, they are a relevant player, as they are a main distributor of financial assistance. Financial aid flows are brought from global scale to a town as Bunda. There is a large scope to overcome to work at these both levels and the question comes up whether UN-HABITAT is able to perform these both duties as preferred. During the internship and most through participating in the SAI, it looked like UN-HABITAT is a very large organization that has an important financial contribution, but struggles with providing substantial assistance in terms of CD. And there are numerous scholars and reports arguing that financial assistance without CD has limited impact. Sustainability of the work of UN-HABITAT in Bunda should be questioned.

Bunda is subordinated by UN-HABITAT because of different reasons. First, UN-HABITAT assigned for investments in the piped water network in Bunda. This is done through the new water scheme, a joint programme of the GoT, WB and UN-HABITAT. This project is still running. The GoT and WB did their contribution by providing storage tanks, pumps and booster stations. UN-HABITAT has to provide the remaining pipes to connect the boosters with the storage tanks. UN-HABITAT is running out of credit and does not have resources so far to provide these pipes. This is inappropriate management of UN-HABITAT. However, even when the pipes are installed and the amount of water pumped from Lake Victoria is four times more, pipes to connect customers to the storage tanks still need to be installed and paid for by the customers themselves. Let alone whether it is good that customers also contribute to these costs, UN-HABITAT will get the credits for the increased amount of water pumped, while it remains unknown which percentage of the community will also receive water through this new network.

Besides the investments in hardware, UN-HABITAT is also investing in software improvements through CD. This is outsourced to the CBC. However, the UN-HABITAT remains the funder and planner of the CD Process. They designed it to be finished in September 2010. During the SAI (March 2010), it was already discussed that this design made it almost impossible to effectively intervene in all ten towns which are part of LVWATSAN. By then, it was not yet clear whether the CBC was able to finish the CD Process later than September 2010, or whether they were able to expand it out of their own funds. Let alone the possibilities of expanding, the planning of the CD Process by UN-HABITAT remains inappropriate, finally leading to limited impact of CD at the local level.

The above examples of ‘mismanagement’ by UN-HABITAT are in line with the statements made in section 2.3, which mentioned some difficulties of applying CD in development cooperation. Especially concerning CD, UN-HABITAT encounters a contradiction between long-term engagement at the local level and results-oriented approaches of donors, which often have fixed time schedules. The fieldwork in Bunda showed the lasting effect of the donors’ desire to see the impacts of their contributions. The decreasing aid flows, due to the global financial crisis, are also felt in Bunda because UN-HABITAT is not able to fund LVWATSAN as expected. It is therefore that the power that donors now have to change their aid flows should be decreased.

### Stakeholders

In discussions like these, the question comes up whether the term 'stakeholder' does apply to all situations in development cooperation. In this thesis, the term is used to describe the actors in BWS. UN-HABITAT is also labeled as a stakeholder. However, it should be questioned whether all stakeholders in this system hold the same stake. As far as LVWATSAN in Bunda is concerned, the stake of UN-HABITAT is mainly to see results, preferably in the amounts of water pumped, smaller prevalence of

diseases and the amount of investments made. UN-HABITAT has to make sure that their whole LVWATSAN Programme is achieving results, rather than the specific situation of Bunda. The strive for improvements in hardware and results is perceived as their main duty and it has to be finished within a fixed time span. The stake of UN-HABITAT is therefore different than the stake held by the actors in Bunda. Community representatives, government officials, NGOs, CBOs, UN-HABITAT, they all hold a different stake in the context of BWS. To satisfy every stakeholder in such a situation is very difficult and rather impossible. The duty bearers are key to satisfying all stakeholders, as they are the ones that bear a duty and are in the position to satisfy the claim holders (see figure 7.1). The duty bearers within LVWATSAN are UN-HABITAT, and on their behalf the CBC. The local stakeholders in BWS are the claim holders and expect assistance from the duty bearers.

This is where the shoe pinches. UN-HABITAT is the duty bearer but they did not manage to perform this duty as may be expected from an organization as UN-HABITAT. The claim holders are dragged back in different ways and do not have much force in this arena, because they hold the claim but are not able to influence UN-HABITAT, because they bear a duty, rather than that they are partners. It is therefore that van Oosten (2010) argues that an accountability holder could interfere in this process, by holding the duty bearer accountable to perform in a way that does no harm to the claim holders. This accountability holder is not present in the LVWATSAN Programme, although Mr. Mirumbe actually asked the CBC to act as if they have to keep UN-HABITAT accountable.

All organizations working in development cooperation should continuously be aware of their position as duty bearer and act as such. Moreover, the lack of accountability holders in development cooperation should be discussed. In line with the belief that development has to take place demand-driven, the question should come up whether it is fair that the claim holders do have such a limited voice in development processes. It depends on the efforts of the duty bearer to be accountable and they should this task with care. The powerful position of donor organizations in development cooperation is critically addressed since the start of development work, but a formal accountability structure, strengthening the position of the 'recipients' still has to be invented.

## 7.2 Systemic perspective

The systemic perspective (SP) towards CD has been introduced to me during the SAI, during the fourth internship week. on systemic thinking. The SP is based on another way of approaching reality, thinking in systems, interconnections, complexity, non-linearity and emergence. Taking this as starting point, it emphasizes the forces in reality as being autonomous, therefore decreasing the space people have to engineer processes in a preferred way. The systemic perspective is an approach that keeps pretensions of interventions low, because processes in large systems are hard to manage, especially with pre-designed solutions. Learning, adapting and managing through the process is the credo of the systemic perspective.

Development cooperation practice is able to benefit from this systemic perspective towards CD. Firstly because it keeps pretensions low. The impact of every invested dollar is expected to be rather high, while 50 years of development work are closer to showing the opposite. Secondly, the SP emphasizes long-term engagement as a guiding principle. This does not only apply to CD processes, but should be taken into account in all development work. It is maybe not coincidence that systemic principles receive renewed attention in development cooperation. Hopefully, positive lessons will be learned from this line of reasoning.

Figure 7.1 - Different types of stakeholders



Source: van Oosten, 2010



Next to all valuable recommendations for development cooperation, an important question is not addressed in this discussion so far: what has been the value of the systemic perspective for this research? This SP is brought up in the theoretical framework as a valuable approach to CD. The introduction to systemic thinking influenced my thinking about CD and therefore this research. The research is built on notions extracted from the systemic perspective. This is shown in the systemic interpretation of capacity and in approaching BWS as a whole. This integrated approach to the capacity of BWS is valuable, because it gave the most complete insider perspective possible, enabling to better judge the design of the CD Process and investigating on the CSFs.

During the process of thesis writing, it has been most difficult to deal with the subject of 'representativeness'. This is the point where the values of traditional science and methods used in the field show the largest divide. Although not all scholars would probably argue that this thesis managed to fill this gap, there are reasons to believe that issues that come up during a research, only mentioned by one participant are relevant. Burns (2009) argues also that representativeness should not be key to action research, but *resonance*. Lindsay (2010) agrees on this by stating: *"Burns makes an important point when he challenges the importance placed on representativeness in research and talks instead of resonance where the issue under investigation has resonance for all stakeholders involved in the research. (...) It is resonance, not mere representativeness, which will lead to action, as the shared experiences will work to drive action forward.* This approach differs from conventional wisdom, though most practitioners in the development field will accept it as valuable, and Burns challenges development scholars to fill this methodological gap.

The systemic perspective towards CD will find much resonance among development practitioners, as also all members of the CBC were positive about it. During the SAI, the specific methodology was really something that brought all members of the CBC together. The SP is and will be an approach that seeks for opportunities and solutions on-the-way. This is rather conflicting with the conventional design of development practice but if we have to believe William Easterly, and we should, then the SP stands on others that managed to bring poverty to an end: *Historically, poverty has never been ended by central planners. It is only ended by "searchers", who explore solutions by trial and error, have a way to get feedback on the ones that work, and then expand the ones that work. All of this in an unplanned, spontaneous way. Examples of searchers are firms in private markets, democratically accountable politicians and front-line aid workers who adapt solutions to local demand* (Easterly, 2005).

## 8. Synthesis and conclusions

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*“Any type of development depends on how you define that development.”*

*Mr. William Mabanga, Bunda Town Executive Officer*

Capacity development (CD) is widely accepted as a useful development strategy. It is the missing ingredient so far, and cannot be overemphasized in development practice. It builds on the idea that in all change processes, people are primarily involved as important actors. It is these actors that should be capacitated to be better perform their duties. This will enable them to have a lasting, sustainable effect in their realm of activities. CD breaks with former approaches that tend to over-emphasize investments in hardware and contributions made by ‘outsiders’, development organizations intervening but not ensuring that processes go on as preferred after they have left. However, also CD is not the new invented wheel that solves all problems. It is therefore that this research argues that a few principles are key to effective CD: long-term engagement, an appropriate design of the CD process, the presence of change agents and ownership of such a CD process (see section 3.2 for more information regarding these principles). This research investigates whether the CD Process, taking place in Bunda, Tanzania is properly designed, and if so, will be able to contribute to the capacity of BWS. It does this through answering the research question below:

*What is the capacity of the Bunda’s water system, and to what extent is the Capacity Development Process, within the LVWATSAN Programme, able to contribute to an improvement of Bunda’s water system?*

In the methodological chapter (3), it is explained that there are two sub-questions answered separately. First, the capacity of BWS is assessed and secondly, the CD Process is discussed to the extent it will be able to contribute to an improvement of the capacity of BWS. The term BWS refers to a systemic interpretation of capacity (see Box 1.1 and section 2.2, 3.2 and 3.5). BWS consists of many different stakeholders (see figure 5.1) that all have their roles and responsibilities in ensuring a sustainable water circle and in improving water supply and related issues such as sanitation and environmental conservation. It is argued that systemic capacity comes about in the interrelationships between all those different stakeholders; in the system in which these actors are related. It is possible to improve the capacities of specific stakeholders, but especially when the system is approached as a whole, change will occur as all stakeholders are striving towards shared goals. Systemic capacity is emphasized because the total is more than the sum of its parts (see section 2.2 about this systemic perspective towards CD).

As far as the capacity of BWS is concerned, the research brought up various strengths and weaknesses, threats and opportunities. The analysis provided in chapter 5 shows that many things can be said about this systemic capacity of BWS, which can not be repeated or summarized here. Figure 5.2 gives a very valuable summary. This confrontationmatrix shows the different strengths and weaknesses and confronts the different SWOT’s with each other. In turn, some possible directions for CD interventions are derived from this matrix. These CD interventions could very probably lead to an improvement of the capacity of BWS. As far as the BWS is concerned, it should be noted that the weakness is mainly to be found in the relations between the different stakeholders. The different stakeholders in the system do hardly collaborate, disabling the system to improve its systemic capacity.

The capacity of BWS is limited and there is space to improve through CD, as is also highlighted in the confrontationmatrix. However, in order for CD to be effective, some ‘critical success factors’ should be taken into account. Whether the CD Process is able to contribute to an improvement of BWS (sub-question 2) depends on these critical success factors (CSFs). Some of these CSFs are more in the realm of the CD organizations; a long-term engagement and an appropriate design of process and interventions. Other CSFs are to be found at the level of BWS; jointly agreement on process and interventions by all stakeholders; ownership of the process as a whole and there should be change agents that can lead this process (see section 3.3 for a lasting explanation of these CSFs).

As far as the design of the CD Process is concerned, there is bad financial planning from UN-HABITAT, which disables the CD organizations to engage in a long-term process. Despite the fact that the designed CD interventions are rather suitable for BWS, sustainable change and learning will presumably not take place, because it requests a long-term engagement from CD

organizations in BWS. Moreover, the CSFs for BWS are not all in place, as ownership for this CD Process is limited among the stakeholders. The degree of ownership differs rather much between different stakeholders of BWS, just as their perception of which interventions should be implemented. It should be noted as positive that some stakeholders are real change agents, as they seem accountable to this CD Process and agree on the interventions. It is only unclear whether these change agents are able to pull the other stakeholders together in this change process. After all, this thesis concludes in line with this quote already made in last May by Mr. Maganga (SNV, Wash Advisor): *“For Bunda no, I don’t see that CD will going to work.”*

This statement underlines once more the difficulty of realizing an effective capacity development process, in which change is taking place. Taking this difficulty as the starting point of this research, it provided an example of a well-intended CD Process that struggles to make its objectives come true. Effective CD is dependent on many, sometimes intangible, variables. It is therefore very good that the systemic perspective towards CD takes into account this complex situation in which CD is taking place, and decreases the expectations of the presumed impact CD can have. Furthermore, this systemic perspective offers an alternative by focusing on long-term CD processes, enabling for evaluating and adapting through the process. If development organizations are able to apply this principle thoroughly in their CD practices, a world would be won.

Moreover, it should be stressed here that, unlike in Bunda, CD processes should only take place when the recipients own this process themselves and are willing to engage in such a CD process. This is often true when CD is a demand-drivenness process. However, just as LVWATSAN, many development programs are still not demand-driven. But sustainable change is only to take place when those receiving CD are willing to change. Or in the words of the Latvian national poet Jānis Pliekšāns, already written in 1892: *“Change offers opportunities to those who embrace it, but destroys those who deny it.”*

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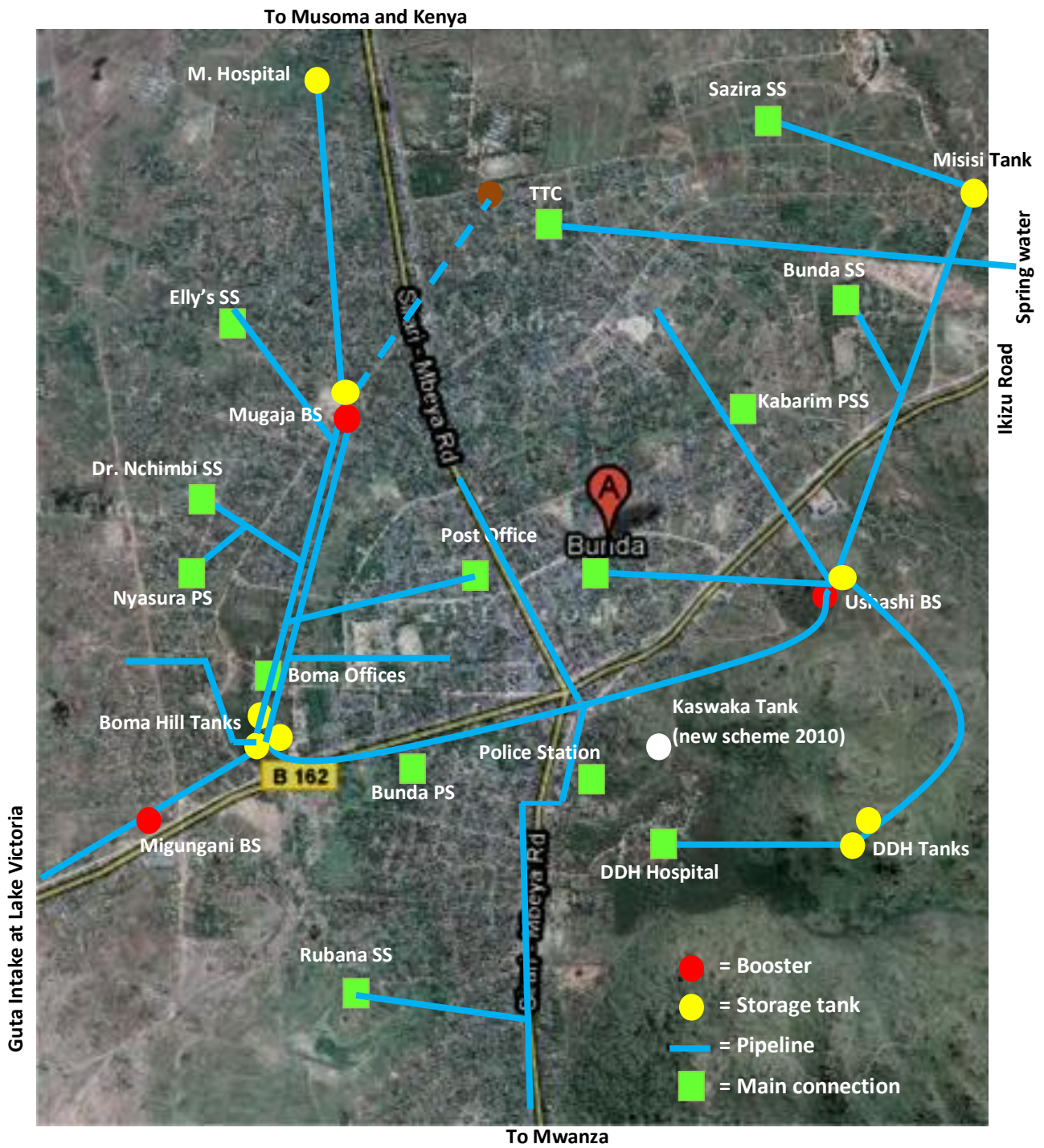
# Annexes

## A: List of interviewed people, including their organization and function

Name	Organization	Function
Mr. Phinias J. Alloo	BUWSA	Technician
<b>Mr. Isaac Alex</b>	Township Authority	Township International Cooperation (TIC)
Mr. Peter Bwanana	Vijana Furniture	Water kiosk operator
<b>Mr. Flavian N. Chacha</b>	District Council	Councilor, MSF Chairman
<b>Mrs. Helena Gulinja</b>	Water Board	women representative, MSF member
Miss. Rehema Kazigo	KADEFU	Manager Satellite Office
<b>Mr. Stanley L. Kuridika</b>	Lubana Corridor	Administrative Officer
<b>Mr. William J. Mabanga</b>	Township Authority	Township Executive Officer (TEO)
Mr. Charles Machage	District Council	District Trade Officer (DTO)
Mr. Eliud Maende	Maende Garage Company	Managing Director, Solid waste collector
<b>Mr. Masaka Maganga</b>	SNV	WASH Advisor
<b>Mr. Swaleh J. Malima</b>	Market	Water kiosk operator
Mrs. Verena Maro	Bunda Youth & Women Dev.	Director
Mr. David Masalu	Lubana Corridor	Project Coordinator
<b>Mr. Joshua C. Mirumbe</b>	Township Authority	Township Development Planning Officer (TDPO)
Mrs. Charisiku Mshora	District Council	Community Development Officer, MSF (CDO)
Mr. Sunday Mtaki	Technoserve	Business advisor
<b>Mr. Joram Mulla</b>	Construction company	MSF Secretary, Water Board chairman
Mr. Abel. K. Mwita	Lubana Corridor	Employee
Mr. Dickson N'gorongo	Water Board	business representative
Mr. Joseph O. Opata	BUWSA	Senior Technician
Mrs. Dinah L.T.K. Rweyemamu	District Council	Head of Dept. Lands, Natural Resources and Environment, PIU member
<b>Mr. Idd. M. Swai</b>	BUWSA	Managing Director
Mrs. Ndaru Tagiri	Bunda Youth & Women Dev.	Accountant
<b>Mr. Jumanne Tubert</b>	BUWSA	Technical Manager
Mr. Samuel Werema	District Council	Second Trade Officer (2 <sup>nd</sup> DTO)

*In bold: interviewees who also participated during the systemic action inquiry*

**B: Bunda Town Main Distribution Network Map**



**C: Capacity Development Plan designed by the CBC, March 11, 2009.**

Capacity development interventions	Responding to issues	To whom (Actors)
<b>HEALTH ASPECTS</b>		
<b>Awareness creation and sensitisation on the impact of poor SWM on health.</b>	<ul style="list-style-type: none"> <li>- Irregular and spaced waste collection at the market, leading to foul smell and disease vectors.</li> <li>- No functional incinerator at DDH.</li> <li>- Pond with waste water can contaminate the groundwater</li> <li>- Lack of operational resources in Health Offices</li> <li>- Not functioning toilet in market</li> <li>- Contents of pit-latrines, for those who can afford it are dumped in Rubana River or the Lake.</li> <li>- Unsafe drinking water and lack of clean toilets lead to cholera, which leads to the women's business to be forbidden. Then women have no income, can only afford surface water, and are forced into prostitution by lack of other employment.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>District Council</b></li> <li>- <b>Township Authority</b></li> <li>- <b>MSF</b></li> <li>- <b>Exhauster Service Providers</b></li> </ul>
<b>Capacity building and Training on Poor SWM and WAT-SAN impact on health</b>	<ul style="list-style-type: none"> <li>- No functional incinerator at DDH.</li> <li>- Pond with waste water can contaminate the groundwater</li> <li>- Capacities of PHO can be questioned</li> <li>- Not functioning toilet in market</li> <li>- Market women get diseases because of the lack of toilet</li> <li>- Flying toilets in the market</li> <li>- The sanitary situation in the dispensaries is hazardous. Sanitation systems at the hospital is very poor.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>DDH Administrators</b></li> <li>- <b>Public Health and environment officers.</b></li> </ul>
<b>Capacity building and training on emergency response</b>	<ul style="list-style-type: none"> <li>- High incidence of water-borne diseases, e.g. cholera outbreaks resulted in deaths Many diseases: diarrhea, typhoid, cholera, malaria.</li> <li>- Currently there is cholera in town, the small food business (snacks) is forbidden.</li> </ul>	-
<b>Awareness creation on appropriate hygiene and sanitation practices and technological options at household and community level.</b>	<ul style="list-style-type: none"> <li>- Lack of awareness that poor hygiene influences public health, not just oneself.</li> <li>- Flying toilets in the market</li> <li>- Dug wells are close to the toilets, leading to pollution of the water.</li> </ul>	<b>Social groups</b> <b>MSF</b>

Capacity development interventions	Responding to issues	To whom (Actors)
<b>ENVIRONMENT</b>		
<b>Awareness creation and sensitisation on environmental conservation and inter-linkages</b>	<ul style="list-style-type: none"> <li>- Contents of pit-latrines, for those who can afford it are dumped in Rubana river or the Lake.</li> <li>- The emptying place is one corner of the dumpsite, where also the Migungani cemetery is.</li> <li>- The emptying place is one corner of the dumpsite, where also the Migungani cemetery is.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>District Council</b></li> <li>- <b>Township Authority</b></li> <li>- <b>MSF</b></li> <li>- <b>Exhauster Service Providers</b></li> <li>- <b>Public Health and environment officers.</b></li> <li>- <b>MSF</b></li> <li>- <b>Social Groups</b></li> </ul>
<b>Training in Programme planning, design and implementation</b>	<ul style="list-style-type: none"> <li>- Uboreshaji Kaya Group of women The group members need more training to enable them to do the environmental campaign they are planning</li> </ul>	- <b>Interested Social groups</b>

Capacity development interventions	Responding to issues	To whom (Actors)
<b>GENDER, PRO POOR AND VULNERABILITY</b>		
<p>Awareness training on gender and power relations at the lowest level, including the needs and capacities of the handicapped and other vulnerable groups. Gender budgeting and pro-poor socio-economic aspects of WATSAN.</p> <p>Awareness creation for objectives leading to outcome (strategic planning). Planning for pro-poor design and regulations Gender budgeting</p> <p>Training of Social Groups in promoting awareness on hygiene, health, sanitation and water, and the environment amongst their communities</p> <p>Awareness of all stakeholders on the relation between cleanliness, hygiene and health, and the socio-economic results of such hygiene management. Poor water and sanitation leads to poverty.</p> <p>Local economic development training at the lowest level, including poor women and vulnerable groups.</p> <p>Training in simple short term ways of making springs and other water sources more user-friendly and safer.</p>	<ul style="list-style-type: none"> <li>- No budget for handicapped: those who make the decisions are not aware of the position of handicapped people, even though all of us one day may be handicapped.</li> <li>- Microcredit is inaccessible to the poor</li> <li>- Uboreshaji Kaya Group of women The group members need more training to enable them to do the environmental campaign they are planning.</li> <li>- Currently there is cholera in town, the small food business (snacks) is forbidden.</li> <li>- Inadequate water treatment at household level</li> <li>- Poor people can't finance energy for boiling water</li> <li>- Market women get diseases because of the lack of toilet</li> <li>- The use of faraway toilets is dangerous for albinos especially at night.</li> <li>- Toilets are a big issue here, very few people can afford a sustainable toilet.</li> <li>- Albino women have to walk far in search for water, and their skin gets burnt. In dry season women have to spend a lot of time fetching water.</li> <li>- No access to clean water for widows</li> <li>- Unsafe drinking water and lack of clean toilets lead to cholera, which leads to the women's business to be forbidden. Then women have no income, can only afford surface water, and are forced into prostitution by lack of other employment.</li> <li>- Need for more widows groups</li> <li>- Grandmothers have many children to look after, and small income</li> <li>- Use of unprotected springs.</li> <li>- For those handicapped who live alone, the water from the wells is difficult to lift, taps would be much better.</li> </ul>	<p>BUWSA, Township Authority, MSF, DC, PIU</p> <p>BUWSA, Township Authority, MSF, DC, PIU</p> <p>Social Groups, NGOs and CBOs, UNH, MSF</p> <p>BUWSA, Township Authority, MSF, DC, PIU</p>

Capacity development interventions	Responding to issues	To whom (Actors)
<b>PLANNING AND COORDINATION</b>		
<ul style="list-style-type: none"> <li>- Awareness creation on roles and responsibilities</li> <li>- Training on conflict management</li> <li>- Awareness creation on LED</li> </ul>	<ul style="list-style-type: none"> <li>- Narrowed interpretation and perception of MSF roles and responsibilities</li> <li>- Direct involvement of the DC in the market, undermines the authority of the Council</li> </ul>	MSF, Council; DC
<ul style="list-style-type: none"> <li>- Facilitate strategic planning</li> </ul>	<ul style="list-style-type: none"> <li>- Health Officers responding to symptoms rather than to the root causes</li> <li>- Lack of operational resources in Health Offices</li> </ul>	Council Health Management Team
<ul style="list-style-type: none"> <li>- Facilitate the development of a Multistakeholder Process for the development of a Master plan.</li> </ul>	<ul style="list-style-type: none"> <li>- No Master/Strategic Development Plan</li> <li>- There is no clear direction of utility with respect to development of the town ship of Bunda. This is hindering the collaboration of BUWSA with these authorities</li> <li>- Conflict between Migungani agro-pastoralists and the Council about the dumpsite location</li> </ul>	All
<ul style="list-style-type: none"> <li>- Awareness creation on correct WaSH practices</li> </ul>	<ul style="list-style-type: none"> <li>- Poor WaSH practices and knowledge at all levels of community</li> <li>- There is no course for hygiene and sanitation but interest exists @ TTC</li> <li>- Dug wells are close to the toilets, leading to pollution of the water.</li> <li>- Currently there is cholera in town, the small food business (snacks) is forbidden.</li> </ul>	All –households and Institutions
<ul style="list-style-type: none"> <li>- Facilitate the development of a coordination mechanism through a dialogue process among all stakeholders.</li> <li>- Strengthen communication among institutions, departments and communities</li> <li>- Leadership development programmes</li> </ul>	<ul style="list-style-type: none"> <li>- Ineffective coordination and collaboration among District stakeholders</li> <li>- Poor planning, allocation and utilization of resources for water supply</li> <li>- No proposed interventions for market and bus stand in LVWATSAN, according to vice chair of market committee</li> <li>- Top-down governmental intervention leads to lack of ownership and failure of projects</li> <li>- Poor communication between MSF, UN-Habitat and Council</li> <li>- UN-Habitat is very slow with implementing the program</li> <li>- Delay in construction of new transmission line and water treatment plant as promised by UNHABITAT is holding the WSS rehabilitation plan and expansion</li> <li>- No information sharing between leadership and its constituency amongst traders</li> <li>- Lack of involvement of parents in infrastructural development of the school</li> </ul>	All

Capacity development interventions	Responding to issues	To whom (Actors)
<b>FINANCIAL MANAGEMENT AND ACCOUNTABILITY</b>		
<ul style="list-style-type: none"> <li>- Awareness creation on LED for income generation opportunities</li> <li>- Strengthen demand for services especially for the poor and vulnerable</li> <li>- Develop mechanisms to enforce contracts including on performance management</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of initiative to generate local revenues</li> <li>- Lack of financial resources for development activities</li> <li>- BUWSA is operating in extreme loss (Revenue is 6-7 m and expend 10-12m). They get subsidies from the district council to operate the system</li> <li>- Lack of operational resources in Health Offices</li> <li>- Microcredit is inaccessible to the poor</li> <li>- Distribution system in Bunda township is not properly maintained and extension has not been possible to other areas which are not served, as until now district council was allocating very little money for this activities</li> <li>- Not enough water available at Dr Nchimbi primary school</li> <li>- Most of the Government offices in Bunda are not paying water bills (in time) that are seriously affecting the collection efficiency of BUWSA.</li> <li>- Accountability at the DDH: lack of enforcement mechanisms on health officers to play their roles effectively e.g. supervising market place</li> </ul>	<p>MSF, Council; Community groups, BUWSA</p> <p>Community groups, Civic leaders; CBOs</p> <p>Council;</p>

Capacity development interventions	Responding to issues	To whom (Actors)
<b>PHYSICAL INFRASTRUCTURE</b>		
Support township to develop a sewerage system master plan	<ul style="list-style-type: none"> <li>- No sewerage system for waste and storm water in Bunda township</li> </ul>	District Council, BUWSA, MSF, PIU
Develop a clear market plan and adopt a water and sanitation system that provides for waterborne toilet	<ul style="list-style-type: none"> <li>- No functioning water and sanitation facilities in the market</li> </ul>	Market Committee, MSF, PIU, BUWSA
<ul style="list-style-type: none"> <li>▪ Training of the manager and operators and of the intake system on proper management</li> <li>▪ Put an O &amp; M plan for the for the intake</li> </ul>	<ul style="list-style-type: none"> <li>- Operation and maintenance of the existing intake /boasters' station as well as reservoir are not done properly. Infrastructure are in poor shape and the surrounding environment are not clean and secured</li> </ul>	District Council, BUWSA, MSF, PIU
<ul style="list-style-type: none"> <li>▪ Develop water supply solution that ensures that there is regular water supply in the Town and distribution network is able to reach unserved areas (B"ners model)</li> <li>▪ Planning for human and financial resources mobilisation for scaling up</li> </ul>	<ul style="list-style-type: none"> <li>- Water distribution system extension not done to reach unserved areas</li> <li>- Those who have a connection, have water only once a month.</li> </ul>	District Council, BUWSA,
<ul style="list-style-type: none"> <li>▪ Financial management and allocation plan to enhance allocations for water distribution</li> <li>▪ Capacity intervention to enable council to manage resources appropriately</li> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>- District council was allocating very little money for water distribution system</li> </ul>	District Council, BUWSA, MSF
Community Involvement and engagement to enhance sustainability and ownership	<ul style="list-style-type: none"> <li>- Lack of involvement of parents in infrastructural development of schools.</li> </ul>	MSF

Capacity development interventions	Responding to issues	To whom (Actors)
<b>LAWS, CONTRACTS AND GOVERNANCE</b>		
Resource mobilization and financial management support to key institutions and CBOs (joint review of context, stream analysis, willingness to pay surveys, strategy development, accompaniment and exposure to alternatives).	- <i>Local institutions unable to raise revenue</i>	D
Capacity support focusing on financing models for infrastructure development and maintenance (beyond PPPs).	- <i>Most of the Government offices in Bunda are not paying water bills (in time) that are seriously affecting the collection efficiency of BUWSA.</i>	
Support development and implementation of local accountability mechanisms for Council, the Township Authority, DDH and other key institutions.	- <i>Poor communication amongst MSF, UN-Habitat and Council</i> - <i>Accountability at the DDH: lack of performance enforcement mechanisms on health officers to play their roles effectively e.g. supervising market place</i>	
Develop a micro-credit for water and sanitation framework consistent with the socio-economic conditions for Bunda.	- <i>Microcredit is inaccessible to the poor</i>	

Capacity development interventions	Responding to issues	To whom (Actors)
<b>SANITATION SYSTEM</b>		
Enhancement of capacity of Bunda Township authority for solid waste management by developing a comprehensive solid waste management master plan including training of staff and stakeholders and awareness building campaigns	- Irregular and spaced waste collection at the market, leading to foul smell and disease vectors. - No plan for solid waste management – dumpsite -	<b>TA, MSF, PIU, DC</b>
Development of integrated waste management system for Bunda together with the stakeholders for proper disposal of domestic wastewater and storm water by selection of proper technologies	- Pond with waste water can contaminate the groundwater - Dug wells are close to the toilets, leading to pollution of the water - Contents of pit-latrines, for those who can afford it are dumped in Rubana river or the Lake - Inappropriate sanitation technology: e.g. flush toilets not appropriate in schools	<b>TA, MSF, PIU, Social Groups</b>
Enhancing the local capacity for proper O&M of sanitation system (Latrines) by providing training to local technician  Development of the private sector or making available loans for exhausters for cleaning pit latrines	- Lack of operation and maintenance of sanitation system - Not functioning toilet in market - There are no septic tanks or pit latrine emptying services available in Bunda. - Hospital and others rely on a company from Musoma for that	<b>TA, MSF, PIU, Private Sector, UNH</b>
Strengthening the coordination between different stakeholders and prepare strategies to improve sanitation system at DDH Hospital	- No functional incinerator - Waste collection point not properly managed, supervised and allocated or at DDH.	<b>TA, DDH, MSF, PIU</b>

Capacity development interventions	Responding to issues	To whom (Actors)
<b>URBAN PLANNING AND DEVELOPMENT</b>		
<p>Support development of Bunda Township Authority (BTA) Master Plan/Strategic Development Plan.</p> <p>a) Initiate Council-citizen engagement on Town's development vision &amp; process.</p> <p>b) Review, adapt and compile planning policies, regulations and implementation guidelines</p> <p>c) Implement Master Plan and associated regulations.</p> <p>d) Support development of design guides for key infrastructure and services consistent with best practices and vulnerable people's needs (e.g. housing designs, construction material, shop designs...).</p> <p>e) Connect BTA with relevant professional bodies.</p> <p>Resource Mobilization for Master Plan, Infrastructure Development and maintenance.</p> <p>Review relationship between the Bunda District Council and BTA to develop and implement a tailor-made capacity development plan.</p> <p>Strengthening institutional capacity in urban planning and development.</p> <p>-----</p> <p>-----</p> <p>-----</p>	<ul style="list-style-type: none"> <li>- <i>No Master Plan for Bunda.</i></li> <li>- <i>Planning regulations not followed</i> – houses on road near market, squatter layout of Saranga</li> <li>- No plan for solid waste management – dumpsite</li> <li>- Waste collection point not properly managed, supervised and allocated</li> <li>- There is no sewerage system for waste and storm water in Bunda township</li> <li>- <i>Conflict between agro-pastoralists and the District Council on use of peri-urban land</i> e.g. Migungani village about the dumpsite location</li> <li>- No plan for sewerage - disposal site</li> <li>- <i>No design standards to address the needs of the vulnerable.</i></li> <li>- There are no toilets adapted for handicapped people, and the regular ones are too dirty for their hands and legs.</li> <li>- The use of faraway toilets is dangerous for albinos especially at night.</li>   <li>- <i>Inadequate financial resources for urban development.</i></li> <li>- Lack of financial resources for development activities</li>   <li>- There is no clear direction of authority with respect to development of the town ship of Bunda. This is hindering the collaboration of BUWSA with these authorities.</li>   <li>- Poor planning, allocation and utilization of resources for water supply</li>   <li>- The emptying place is one corner of the dumpsite, where also the Migungani cemetery is.</li> <li>- Lack of initiative for alternative water and sanitation systems</li> <li>- Albino women have to walk far in search of water and their skin gets burnt. They need to walk in the dark, but that is dangerous for them, because some people want to kill them based on superstition beliefs.</li> <li>- In dry season women have to spend a lot of time fetching water</li> <li>- No proposed interventions for market and bus stand in LVWATSAN, according to vice chair of market committee</li> <li>- Muddy school ground, need for drainage</li> </ul>	<p>MSF, BTA, BDC, CBOs and ordinary residents.</p>



Capacity development interventions	Responding to issues	To whom (Actors)
<b>WATER SUPPLY SYSTEM</b>		
Enhance management, operation and maintenance of water supply system by training staff at different levels, developing standard procedures for each component and making sure that adequate financial resources are allocated.	<ul style="list-style-type: none"> <li>- Lack of operation and maintenance</li> <li>- Operation and maintenance of the existing intake /boasters' station as well as reservoir are not done properly. Infrastructure are in poor shape and the surrounding environment are not clean and inse-cured</li> <li>- Distribution system in Bunda township is not properly maintained and extension has not been possible to other areas which are not served, as until now district council was allocating very little money for this activities</li> </ul>	<b>BUWSA, MSF, PIU</b>
Strategic planning and implementation of short and long term water loss management measures	<ul style="list-style-type: none"> <li>- High water losses in distribution system (UFW 55%)</li> <li>- BUWSA is operating at an extreme loss</li> <li>- Those who have a connection, have water only once a month.</li> <li>- In dry season women have to spend a lot of time fetching water</li> </ul>	<b>BUWSA, MSF, PIU</b>
Strengthening the linkages between different stakeholders working in water and sanitation sector by improving regulations and better coordination of activities	<ul style="list-style-type: none"> <li>- There is no clear direction of authority with respect to development of the town ship of Bunda. This is hindering the collaboration of BUWSA with these authorities.</li> </ul>	<b>BUWSAQ, TA, DC, MSF, PIU</b>
Development implementation of integrated water supply master plan and monitoring of water supply service provision in close collaboration with stakeholders	<ul style="list-style-type: none"> <li>- Poor planning, allocation and utilization of resources for water supply</li> <li>- Dug wells are close to the toilets, leading to pollution of the water</li> <li>- Lack of initiative for alternative water sources</li> <li>- There is hardly any water treatment in the current system</li> <li>- Use of unprotected springs</li> </ul>	<b>BUWSA, MSF, PIU, TA, MSF, DC</b>
Strengthening institutional linkages and improving governance to ensure that water supply system is serving all	<ul style="list-style-type: none"> <li>- TTC Bunda is waiting to get connected to Bunda Water Supply system</li> <li>- No access to clean water for widows</li> <li>- Water pump in market not functioning – no water at the fish market</li> <li>- Not enough water at schools.</li> </ul>	<b>BUESA</b>

## **D: Systemic Action Research methodology - LVWATSAN capacity building programme**

### **Introduction**

The Lake Victoria Water and Sanitation capacity building programme is using an inquiry based methodology which is rooted in systemic thinking.

This approach works with the whole system to unlock complex problems. The aim of the inquiry process is to build pictures of issues, actors (people and organisations) and the inter-relationships between them. Here we seek to develop insight into problems, why they emerge, how they are maintained, and how they become entrenched. While we can never see the whole system we can usually reveal the most important relationships. Once we can see the ways in which different parts of the system influence each other it is easier to think about sustainable responses to those issues.

Many capacity development interventions are based on defining problems in terms of deficits, highlighting “lack of skills, information, and understanding”. This is problematic for precisely the same reasons as identifying infrastructure deficits. These so often lead to the implementation of white elephants because they pre-suppose solutions which may be neither appropriate, implementable or sustainable within the specific context. Action inquiry based methods do not rely on assumptions about “what isn’t” but rather try to establish “what is” as a platform for generating solutions. Capacity responses therefore (a) engage people on real issues that they see (b) work to foster action on these (c) challenge assumptions which restrict the possibilities for action (d) nurtures many lines of response in a way that allows for complex dynamics to appear and inform solutions.

This approach is also based on a belief that not only is it right for local people to determine solutions to their own problems, but that unless they understand and own the process, any gains from capacity building are likely to be very short lived. The LVWATSAN capacity programme is designed to ensure a tailor made capacity building response that it is co-constructed by those people who will benefit from it.

The process involves six key elements:

Multi-stakeholder inquiry

Detailed note-taking and photographing

Flip-charting of issues identified by stakeholders

Construction of issue maps

Identification of capacity building needs and development of capacity building plans

Validation of issues and further development of plans

This document provides guidance on how to carry out each of these processes and how to connect them. It is based both on the experience of systemic action research projects elsewhere and on the learning from the first inception stage inquiries in Kenya and Uganda.

### **1 Multi-stakeholder enquiry**

Identifying Stakeholders?

The purpose of our inquiry is to get a deep understanding of the key water and sanitation issues facing the populations of the towns and their dynamics. Our aim should be to identify issues and to find out everything we can about **what** is happening, **how** it is happening, **why** it is happening, **where**, and **with whom**. We do this through inquiry with **stakeholders**. Once we have engaged stakeholders, issues emerge and these enable us to identify new stakeholders. Thus the process involves a constant interplay between the stakeholders and issues. So to clarify:

At the start of the process we need to brainstorm a range of **known stakeholders** who relate to the core question driving our inquiry. Typically it will be important to start with (a) people who we think might have an overview (however partial) - such as a Multi Stakeholder Forum (b) people on the ground who are directly affected by the issues.

Then we need to identify new **stakeholders who emerge** from our inquiries. For example a discussion with the town clerk might identify the local health centre as a crucial location for inquiry. This might in turn identify a neighbourhood where there is a high concentration of illness resulting from poor sanitation where we might want to inquire further with resi-

dents. Alternatively it might take us down a route of exploring why the health centre is unable to do any preventative public health work.

Frequently we discover important sites for inquiry simply by walking around. We may discover unknown local CBO's from street signs, uncover domestic practices or paradoxical consumer behaviour; we may see how close toilets are to the washing up of dishes and preparation of foodstuffs and so on. The experience of almost all of the towns that we have worked in is that we can organise all but a few meetings or group discussions at very short notice. This has a number of important advantages. Firstly, it can limit the pre-prepared responses and the extent to which groups can be controlled by dominant voices. Secondly, it allows us to respond rapidly to issues that have emerged perhaps hours or days before. Teams should be prepared to be flexible and opportunistic. This may mean splitting, so some thought should be given to transport and translation options which allow for splitting which may emerge.

### **Construction of inquiry teams**

The construction of inquiry teams is important. There needs to be at least one native speaker in each group – ideally two. Where possible, teams should ensure that they have female translators. It is crucial that translators are briefed not to summarise or interpret what has been said. They must translate literally what they have heard, so that the inquiry team hear the issues as they are expressed. If this means slowing down the discussion this is fine, and this can be explained to the people that we are inquiring with.

Expertise should be distributed as evenly as possible between teams. Each team should have a core of at least two (preferably three) permanent members of which at least two should be fairly experienced. Hoppers (people with specialist expertise who move between groups) should be kept to a minimum. Hoppers need to be briefed systematically by the team that they will be a part of. It is also important that hoppers do not drive the agenda of the team as a whole. If there is specific information that they need to seek, this needs to be discussed in advance with the team leader who can make arrangements for inquiry to be carried out in parallel.

### **Techniques of inquiry**

Inquiry can take many forms. In the early part of the programme it will comprise of individual and group discussions, interviews and information gathering. Later on in the programme it should involve collective sense making and learning from action.

Inquiry questioning and inquiry group facilitation is not like interview questioning or focus group facilitation. These are more oriented to getting answers to predetermined questions whereas the priority for inquiry based questioning is to get people to tell their stories and guide their story telling towards issues that relate to core inquiry questions. Typical interview or focus group questioning seeks validation of an analysis that is already pre-constructed and based on researcher assumptions.

There will be factual and other specific information that is required. Some of this is necessary to elicit at the beginning in order to properly understand the context before people tell their stories. Much of this will emerge within the stories (and can be probed as people talk), and the remainder can be asked at the end of the process. A balance needs to be struck here. Inquiries are not a space for people to go off on tangents which have no bearing on the issues, however we frequently find that when people are allowed space to tell their stories, they reveal new and important issues.

When we are inquiring we should be alert to the following:

- What is the factual information that we need? This may for example be technical, legal, behavioural or financial information.
- What issues are important to the people that we are talking to? In discerning this we need to find out what people feel, what issues and analysis “resonate” with them, and what they feel passionate about.
- Have issues been mentioned which need to be probed? Sometimes it is necessary to keep pulling the conversation back to a question until it is answered.
- What do we observe? What can we see in front of us that is significant? For example, it was not insignificant that there was no water in the toilets at the offices of the council of one of the towns that we visited. They had not paid their water bills so had been disconnected. A file in the offices of the micro credit organisation was labelled AIDS/HIV – does this open up lines for inquiry?
- What conflicts, or conflicts of interest are there?
- What differences in perception are there in relation to others we have inquired with?

- What underlying assumptions seem to be guiding the opinions, behaviours and actions of the group, to what extent are they contestable?
- Were there possible opportunities emerging from the conversation which could be explored further?

In a typical research study we would do this analysis after the event. Experienced action research facilitators will do as much as possible in the moment, so that promising lines of inquiry can be pursued as they emerge. It is important to trust both our judgement and our intuition as we do this. Sometimes we pick up on things sub-consciously which are very important. Taking time to pause after the conversation, or taking a moment for reflection during the conversation, can quickly identify statements that are assumptions, data which contradicts other statements and so on. But it is not possible to see everything at the time so we need to ensure that analysis takes place after each day's inquiry. This may lead us to go back to certain stakeholders and probe further, or indicate the need for a different inquiry.

In observing situations it is crucial to think about who and what is not present as well as what is present.

## **2 Detailed note taking and photographing**

Photographs of context, and visual evidence of issues is important. Judgement needs to be exercised when taking photographs. It is mostly OK to take pictures in public spaces, but we should always ask permission in private places (including work places).

Detailed notes need to be taken of each meeting. While some favour the identification of a single note taker, my view is that a diversity of note takers will ensure that more or less everything is captured. Action researchers should practise the discipline of taking notes at the same time as facilitating discussion.

It is very important to catch issues as far as possible in the words of those that say them. When summarising a narrative it is too easy to inadvertently place a "researcher" interpretation on it. We also frequently screen out the detail and are left with a headline issues without the detail to follow through later.

We would expect a considerable quantity of notes at the end of a process. Typically a one and a half hour discussion might generate more than ten pages of notes.

## **3 Flip-charting of issues identified by stakeholders**

This stage is essentially designed to aid the transition from notes focused around stakeholders to maps focused on issues. When we carry out our inquiry we meet stakeholders and explore the issues that they are concerned with, or have a perspective on. Our notes will at this stage be held in relationship to these stakeholders. By flip charting these we:

- (a) get a whole team perspective on the issues emerging from stakeholders. Sometimes team members will have captured different things or have different interpretation. This stage is akin to putting the different pieces of the jigsaw together so that as much of the story as it is possible to tell is told.
- (b) allow the team to identify issues which have relationships to more than one stakeholder. Teams should take a flip chart sheet for each stakeholder and outline all of the issues that emerged from their various inquiries. Once this is done they should look for patterns and causal chains which run between the stakeholders.

Team members should first read their notes in detail and then start to flip chart them. Ideally there should be a single scribe. This models from the start the principle what whatever goes onto any of the collective representations of the data is agreed by all of the team that is present.

For teams that are experienced and confident in their judgement and intuition this stage can be missed out, as the information is available direct from note books. In this case teams can go directly from their notebooks, to a discussion on the emergent issues and the construction of issue maps. Again one person should be principally in charge of writing. This firstly constrains them from writing things that are not agreed by the group; and secondly makes them hesitant to write things down when the group is not clear about its position. The dialogue that results enables intuition and reflection to formulate and aggregate ideas into hierarchies of importance. The leading issue becomes clear as discussion proceeds, with sub issues finding their natural place.

## 4 Construction of issue maps

Identifying the issues for the maps

When we are mapping issues we are essentially looking for two things:

- Cause- effect relationships
- Patterns

We are also looking for information and insight which might help to explain how and why these exist. For example we might be looking at a set of social norms which seem to dictate behaviour. Within these patterns we are looking for opportunity points where we might take some action; bring people together who don't normally come together challenge embedded assumptions and so on:

Examples of a simple cause-effect relationship would be:

Introduction of a water point threatens the livelihood of water vendors and leads to vandalism

But frequently issues are comprised of multiple interacting cause-effect relationships

Poor hygiene conditions result from poor drainage. People are building onto the sides of the road affecting the main drains, and there is no effective means of enforcement from the city council. It is impossible to build tributary drains because land prices are high as a result of growth in the town and as a consequence people won't give up land for shared facilities. Because land prices are high small plots of land are sold frequently and the land gets more and more fragmented. As a result insanitary conditions get worse because there is no space for new pit latrines. This leads to flying toilets. There is no effective solid waste management system to mitigate these problems.

Cause-effect relationships would appear to denote simple linear relationships, but as we can see from the example above, multiple linear relationships can create a highly complex system dynamics which serve to re-enforce problems.

Examples of patterns that we notice might be:

- It appears that girls between the ages of 12 and 15 are least likely to be attending school
- There is a strong relationship between poor sanitary conditions and land issues across three towns.
- People are buying dirty water at a higher price than they could pay for clean water

Having identified the pattern and the issue which underpins it, we can map the inter-relationships around it.

It is crucial that we map what people say, not our own constructs. A drainage engineer, for example, might be shocked at the state of the drains and map this as an issue, but in reality, it may barely get a mention because people see other things as being more worthy of attention. This does not stop us as researchers adding our own reflections as inquiry questions, but these should not be confused with "data" from the field.

### Creating the maps

It is essential to be disciplined about the making of the maps. In particular it is important to follow a clear set of agreed colours and symbols. In this case I suggest that we stick with the following:

#### BLUE – Actors and locations

eg. boys, girls, UNHABITAT, schools, homes, shops, borehole, kiosk

#### GREEN – Points of fact or descriptions of what is happening

eg. there are 50 children at the orphanage,  
water costs 50,000 shillings to connect.

The orphans go to the solid waste bank and sort it, collecting the straws for making crafts and the remainder for making Charcoal Briquettes

#### RED – Issues and observations which underpin issues

eg. Contractual delays

Technological solutions aren't taking women's needs into account.

There are few water points because there is little land available

People are choosing to pay more for less clean water

Issues will usually derive from an observation. For example we may notice that there are only five public water kiosks in the town.

It is likely that you will identify main issues and sub issues which should both be in red marker pen. The main issues should be identified in the centre of the map and sub issues should come off as spurs (see example map below). Sub-issues should not be listed as bullets below main issues. This restricts the extension of the map.

Underneath these issues you should write quotes, more detailed explanations of the dynamics of an issues, and short stories. These should be written in normal pens eg. (ball point pens etc)

**BLACK - Inquiry Questions**

- eg. Could the orphanage be a local capacity builder?
- Do we need find out more about this land issue?
- Is there evidence that the vendors are sabotaging water points?

Link issues with a RED line \_\_\_\_\_

Link Actors with a BLUE line \_\_\_\_\_

Link inquiry questions to issues or actors with a BLACK line \_\_\_\_\_

The links between actors are essentially there to denote the strength of relationships. Normally these will highlight either a particularly strong relationship or a weak relationship that you would expect to be there. You will not need to show most relationships.

In addition you may want to mark a relationship line with a \* to denote points of conflict, major areas of disagreement, or blockages in the system (eg. resulting from example of vested interests). Similarly you might mark a relationship with a question mark to denote a possibility.

**Identifying issues around which the maps are formed**

The primary focus of the maps should be **issues**. This is because:

- (1) Issues relate to many stakeholders across the maps and capacity building responses may involve many actors in relation to an issue. Locating issues under each stakeholder will lead to substantial repetition and confusion on the maps.
- (2) The aim of the maps is to understand the complex dynamics of the system, so that we can understand how issues are related to something else that happens in the system. It is only then that we can understand what sort of interventions might be most effective to resolve issues and open up new opportunities.

Below is a simplified issue map loosely drawn from issues which emerged in the Nyendo Market inquiry:



This map is drawn from the analysis which was done by the team after the Nyendo visit, but I have added emerging inquiry questions which occurred to me as I constructed the map. This is illustrative of the fact that maps should be seen as dynamic and constantly evolving. In the case above by juxtaposing the different issues and actors I realised that an opportunity for the women might lie in the space opened up by the lorry drivers and the fisherman's separate request to operate one each of the toilet blocks. Might the women traders also want to operate a women only toilet? This exposed an interesting assumption (which could be examined across the whole programme leading to a more strategic inquiry) that all public toilets had to be for both genders. In the case of Nynedo where there are four toilet blocks in separate corners of the site, is there a reason why one shouldn't be for women only?

Here we have not attempted to place all of the issues on a single large map. This allows us to focus on the issues and their inter-relationships. It also allows us to juxtapose similar issues from other towns. Having seen how the different maps evolved during the Ugandan inception phase I think that this will be the most effective way to identify issues and corresponding capacity development activities. Issues and relationships should be discussed by the whole team as they are placed on the map. A map scribe who has clear and neat handwriting to actually write on the map should be identified at the beginning of each session. This is a role that could be rotated. Supporting quotes and stories should be talked to in the group but can be added in biro or fine pens by individuals. Similarly it should not be problematic for individuals to place factual and technical information (green) on the map once the core relationships have been laid mapped.

**Supporting information**

As indicated above in section two, to support the maps with more detail we also need to have a selection of stories and photographs. Wherever possible lots of photographs should be taken to illustrate the context and the issues. eg. pictures of toilets/ latrines, washing up, broken water pumps, queues, how things are located.

Maps should also be supported by more detailed stories where necessary. These would typically be between a page and half a page long (longer if necessary). They might recount a chain of interlinking issues which result in water failure, or tell the story of how individual people have been affected by water issues. For example there is the story of a man who put in his money, and lost his business to support a micro credit scheme which didn't work because of contracting issues and the story of a woman who had to carry heavy jerry cans with a child on her back.

## 5 Identification of capacity building needs and development of capacity building plans

We can identify two types of capacity building process. The programme will want to embrace both.

	<b>Quick wins where solutions are clear</b>	<b>Unlocking of deeper problems where solutions are not clear</b>
<b>Types of issues to be addressed</b>	Issues where there is a relatively linear relationship between problem and solution	Complex interconnected issues, where multiple factors play into the creation of an outcome and where root causes and underlying patterns need to be identified and addressed.
<b>Focus</b>	Individual capacity	Community and system capacity. Relationships between stakeholders.
<b>Approach</b>	Information, training and skills development as capacity development	Inquiry and multi stakeholder processes as capacity development

Column one describes **relatively straightforward responses to identified stakeholder needs**. These many involve one or more stakeholder, and will normally relate to information, awareness or skills development. For example we might want to offer training in contractual management, water catchment management, artisan skills for maintaining infrastructure, or gender awareness.

Column Two describes **capacity development processes which support stakeholders to develop solutions to problems**:

(a) **Complex problems that involve multiple stakeholders**. An example might be that school toilets aren't being used by girls and that as a result girls aren't going to school during menstruation or (as above) that poor drainage is a result of complex land issues, or that UN Habitat programmes are not reaching the poor, or that people are buying dirty water at 200 shillings per jerry can when they can get clean water for 100 shillings.

(b) **Opportunities that lie in the relationships between stakeholders** and raise questions at the level of the system. For example in Nyendo, market lorry drivers and fishermen want to operate the toilets. Here there are a range of questions which we can imagine even before inquiry has begun:

- Why is it that they want to run their own toilets, and are there others that equally might run the toilets?
- What are the implications for women if these toilets are run by male lorry drivers
- If the more profitable ones are sold how does this affect the council's ability to provide generic toilets for market users and traders?
- Have they thought about who will maintain the toilets?
- Is there any scope for the fishermen and the lorry drivers to work together?
- Might this provide opportunities for female traders?
- How will they ensure that people pay given that operators have already been victims of violence?

(c) A third element which requires us to understand the whole system relates to the **modification of existing infrastructure** (where opportunities arise) and the **development of plans for new infrastructure investment** (such as in Bugembe). Work on this arena needs to combine a social needs analysis, with an understanding of the technical options available to the particular context, with an appreciation of the impact of social norms, politics, possible unintended consequences of solutions and so on.

Generating capacity building activities in **both** columns should start with the issue maps.

If we try to derive activities directly from stakeholder flip charts then we are likely to generate a list of 100 or more de-contextualised issues and sub issues. This will (a) produce an atomised perspective on the issues (b) it will be too cumbersome to manage and (c), it will be too expensive to deliver. To make such a list manageable it would have to be clustered. The only clustering that could be done at this stage would be around types of intervention. We might for example discover through our long list that there were 10 instances in a town where there was a need for gender training, but bringing 10 people into a generic course may have minimal impact on the issues that we are engaging with. Whereas bringing female market traders together with the lorry drivers and fishermen who want to take over the running of the toilets in Nyendo might provide an opportunity for a highly targeted gender awareness programme.

If we take the Land issue identified in Bugembe we might identify a number of possible interventions. Key dimensions of the issue included the following



- The council is landless. So it allocate public land for certain public use; as a result . .
- There is no space for latrines or garbage dumps; This means that garbage is piling up, pit latrine toilets remain in use despite laws that demand that water bourne sewerage systems should be built in urban settings, and that the proliferation of closely packed pit latrines is contaminating ground water sources.
- The new town council intends to absorb Wanyanga (upper areas) and moves to do this are in advanced stages. Absorption is likely. This will give the council a lot of public land. However, this will all be in one side of town, and may result in all public services being provided in this richer area.
- Ownership, allotment and titling of land (there are multiple titles for the same piece of land). The traditional Kyabazinga Kingdom, the church and the Muslim faith all own tracts of land. The council, these institutions and individuals claim to legally own the same tracts in some cases.

Possible interventions here might be as follows:

- 1) Form Land ownership and management enquiry group of council, Kyabazinga, Church of Uganda, Catholic Church, Muslims on (public) land availability and management
- 2) Enquire into ways in which public sanitation services could be effectively provided, and stimulate action; The following are possibilities
  - a. Slaughter slab waste disposal in the Kyabazinga owned market place
  - b. Public toilets in key market locations
  - c. Land improvement for public use, including drainage, rubbish collection points, potential sewer lagoon sites
- 3) Capacity development work to enable respective groups to undertake what they are willing to do
- 4) Capacity development work to foster the continuation of a multi stakeholder process that enables the evidence coming from the action at (3) to inform new action and higher policy
- 5) Development of business skills to secure a commercially self standing way of collecting, processing and recycling waste, in conjunction with the Jinja dumpsite.
- 6) Brokering a deal between the National Water and Sewerage Company and the public land owning actors to develop a town water bourne sewer system

As an interlinked package this is likely to have a far greater impact and as a result it is easier to prioritise interventions where there are significant resource constraints.

In this way if we focus on between two and say six key issues for the town then we can derive capacity building activities which relate to both columns.

This process should be carried out by town groups who can see the interconnections between issues, reviewed by expert groups and finalised by town groups.

## **6 Validation of issues and further development of plans**

If this programme is to be meaningfully engaged with by stakeholders, and if it is to be sustainable, then there has to be some ownership of both the analysis of the issues and the interventions that follow. In my view a presentation to the relatively weak MSF's will not be enough.

I propose that we carry out a one day event in each of the towns where we explore with stakeholders across the whole system the maps that we have developed. This will validate the relationships that have uncovered; attract new stories and information; give us more detail on the implications for actions as seen by stakeholders, and provide legitimation and ownership for the programme itself. There was clear feedback from all of the impromptu dialogues around the maps that stakeholders saw even an embryonic version of this process as a significant capacity building process in itself.

All of this will provide a strong foundation for an exciting tailor made programme that is both relevant and sustainable.

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